NAPCS Implementation in the Economic Census

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What is NAPCS?

North American Product Classification System

- A classification to organize products, the outputs of establishments classified in NAICS, based on how products are used and used in relationship to each other

- A comprehensive system covering all products transacted in the economy

- A system to collect, tabulate, analyze, and disseminate demand based statistics

- A new common language used among all U.S. Federal statistical agencies

How Is NAPCS Being Developed?

- In development cooperatively with Canada and Mexico for over 10 years

- Developed in phases, starting with service industry products

- Continued with distributive trades, manufacturing, agriculture, utilities, construction, and mining

- Final task will be integrated demand based hierarchical structure

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What will NAPCS be used for?

- Presentation of total product production regardless of producing industry

- Assist input/output analysis

- Demand-based market analysis

Example NAPCS Structure*

1. Food, beverage and tobacco products
2. Clothing, footwear, personal accessories and related products
3. Housing and related products
4. Home furniture, furnishings and accessories
5. Home operation products
6. Home entertainment and recreation products
7. Household pets and related products
8. Automobiles, light duty trucks and local passenger transportation service
9. Leisure and long-distance travel, tourism, and accommodation products
10. Education products
11. Health care for persons
12. Personal care and related products
13. Funeral products and related products
14. Personal financial and related products, n.e.c.
15. Personal legal and related products

16. Household and personal products, n.e.c.
17. Public, community and social services
18. Apartment and nonresidential constructions and related products
19. Capital equipment and related products
20. Intellectual property and related products
21. Labor supply and related products
22. Non-residential natural gas, steam and electricity utility services
23. Non-residential water, sewer, and environmental services
24. Materials, supplies, and inputs to production
25. Goods transportation services and related products
26. Other service inputs to production (except manufacturing services)
27. Manufacturing and related services
28. Public administration services

For example purposes and discussion only – the final negotiated structure will most likely differ from this presentation

NAPCS Implementation in the Economic Census

Why the Economic Census?

- Costly and complex program provides good opportunity for savings
- Re-engineering effort underway
- Disparate data products hinder economy-wide analysis
- Foundation for business register coding, sampling frame, and benchmark data for other estimates
- Timing is good to begin planning for change in 2017 and beyond

Current Conditions

- Product data collected and published in a variety of formats by subject matter area
- Varying imputation methods for non-mail, non-response cases by subject matter area
- No consistent product coding across the economic census – same product can have different codes
- No comprehensive identification of products that are the same but have different codes
- Information is available but not optimal

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- Same product code regardless of producer – product code not defined by producing industry
- Allows industry assignment by product, process, or other methods as appropriate
- Does not define "primary" or "secondary" products – largest contributing industries can be identified quantitatively
- Transparent to users
- Agrees with the principles of NAICS and NAPCS
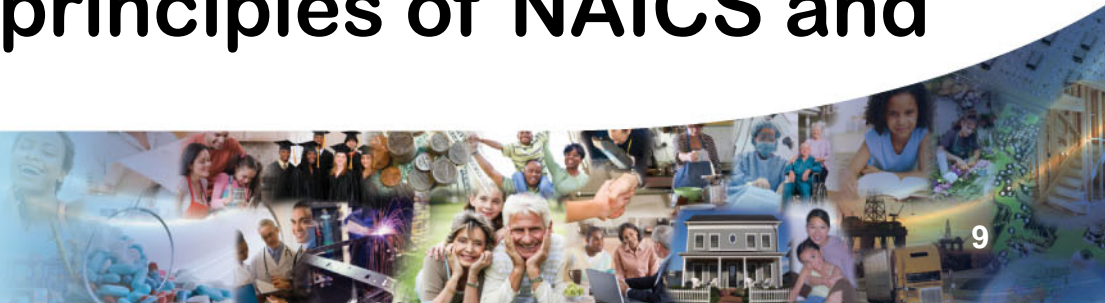
Core Requirements for Census

- Ability to collect all products from all industries as needed – services provided by manufacturing establishments and goods produced by services establishments

- Consistent methods and practices

- Consistent variables and presentation formats

- Economic Census as a program rather than a collection of separate censuses that have developed organically
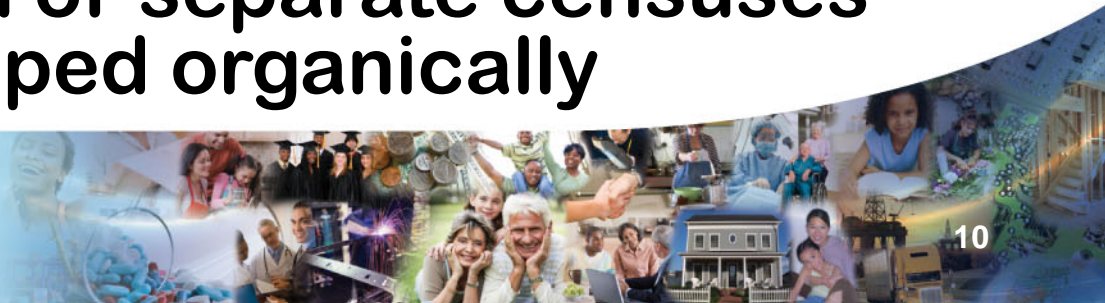
Cooperation Across Agencies

- Implementation will require cooperation in:

  – Development of targeted products for data collection

  – Sharing of industry code assignment criteria

  – Alignment of existing data series to demand-based product structure

External Challenges

- Change will impact data collection and data users

- Budget constraints at Census argue against the status quo but change in the Economic Census imposes costs on users

- Current aggregates for primary and secondary products are eliminated

- Loss of specialization and coverage ratios as currently formulated

Caveats

- Any change will be expensive for Census - full metadata change vs. incremental updates, touches almost all aspects of data collection, tabulation, and dissemination

- Changes will be expensive for data users in terms of time series breaks and systems that use Census data (e.g., all input to the I/O will be renumbered and/or redefined)

- Users often require a formalized set of primary products and secondary products to work within existing processing methods and systems or for other purposes. A comprehensive presentation of industries with the products that are produced and a presentation of product by contributing industry should allow an approximation to be developed by users.

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Geography	Year	NAICS Industry	NAICS Industry Title	Product/ Services Code	Product Code Description	Number of Establishments With the Product	Total Sales, Shipments, Receipts, Revenue, or Business Done of Establishments With the Product ($1,000)	Product Value of Sales, Shipments, Receipts, Revenue, or Business Done ($1,000)	Product Value of Sales, Shipments, Receipts, Revenue, or Business Done as % of Industry Sales, Shipments, Receipts, Revenue, or Business Done	Product Value of Sales, Shipments, Receipts, Revenue, or Business Done as % of Total Sales, Shipments, Receipts, Revenue, or Business Done of Establishments With the Product	Number of Establishments With the Product as % of Industry Establishments	QUALITY MEASURE FOR PRODUCT ESTIMATE OR OTHER AS REQUIRED (Note: different columns may be needed following industry totals, product totals, establishment estimates, etc.)
U.S. Level	2007	311111	Dog and Cat Food Manufacturing	000000	Industry total	264	X	14,390,209	100	100	100	
U.S. Level	2007	311111	Dog and Cat Food Manufacturing	8.2.1.2	Dog Food	230	9,870,592	8,689,333	60.4	88	87.1	
U.S. Level	2007	311111	Dog and Cat Food Manufacturing	8.2.1.3	Cat Food	187	5,960,475	4,483,369	31.2	75.2	70.8	
U.S. Level	2007	311111	Dog and Cat Food Manufacturing	25.1.18.1	Chicken and Turkey Feed	D	D	11,491	<0.1	D	D	
U.S. Level	2007	311111	Dog and Cat Food Manufacturing	25.1.18.2	Cattle Feed	D	D	D	D	D	D	
U.S. Level	2007	311111	Dog and Cat Food Manufacturing	25.1.18.3	Swine Feed	D	D	D	D	D	D	
U.S. Level	2007	311111	Dog and Cat Food Manufacturing	25.1.18.4	Other Livestock and Poultry Feed	D	D	D	D	D	D	
U.S. Level	2007	311111	Dog and Cat Food Manufacturing	25.1.18.5	Specialty Feeds, n.e.c.	D	D	D	D	D	D	
U.S. Level	2007	311111	Dog and Cat Food Manufacturing	25.2.1.1	Resales of Animal Feed without further processing (wholesale)	46	9,376,000	976,622	6.8	1	17.4	
U.S. Level	2007	311111	Dog and Cat Food Manufacturing	28.1.1	Contract work for animal feed	D	D	D	D	D	D	
U.S. Level	2007	311111	Dog and Cat Food Manufacturing	20.6.1	Receipts for repair of commercial and industrial machinery	D	D	D	D	D	D	
U.S. Level	2007	311111	Dog and Cat Food Manufacturing	99.99.99	Other goods and services	8	1,024,205	6,976	<0.1	0.1	3	

Geography	Year	Product/ Services Code	Product Code Description	NAICS Industry	NAICS Industry Title	Number of Establishments With the Product	Total Sales, Shipments, Receipts, Revenue, or Business Done of Establishments With the Product ($1,000)	Product Value of Sales, Shipments, Receipts, Revenue, or Business Done ($1,000)	Industry Contribution to Total Product Value of Sales, Shipments, Receipts, Revenue, or Business Done (%)	QUALITY MEASURE FOR PRODUCT ESTIMATE OR OTHER AS REQUIRED (Note: different columns may be needed following industry totals, product totals, establishment estimates, etc.)
U.S. Level	2007	8.2.1.2	Dog Food	000000	All Contributing Industries			10,786,115	100	
U.S. Level	2007	8.2.1.2	Dog Food	311111	Dog and Cat Food Manufacturing	230	9,870,592	8,689,333	80.6	
U.S. Level	2007	8.2.1.2	Dog Food	311119	Other Animal Food Manufacturing	117	12,697,323	1,152,235	10.7	
U.S. Level	2007	8.2.1.2	Dog Food	311613	Rendering and Meat Byproduct Processing	8	11,254,320	687,159	6.4	
U.S. Level	2007	8.2.1.2	Dog Food	325411	Medicinal and Botanical Manufacturing	3	14,799,838	257,388	2.3	

Goals

- Consistent economy wide data set from the Economic Census

- New demand-based product presentations for market analysis

- Improved data for input/output analysis

- Better detail on the alignment of output, labor, and price deflators for national accounts