OFFICE OF MANAGEMENT AND BUDGET

Economic Classification Policy Committee: Standard Industrial Classification Replacement--The North American Industry Classification System Proposed Industry Classification Structure

AGENCY: Office of Management and Budget, Executive Office of the President.

ACTION: Notice of solicitation of comments on final recommendations for the North American Industry Classification System.

SUMMARY: Under Title 44 U.S.C. 3504, the Office of Management and Budget (OMB) is seeking public comment on the advisability of adopting the proposed North American Industry Classification System (NAICS), the industry classification system developed by OMB's Economic Classification Policy Committee to replace the current Standard Industrial Classification (SIC) system.

OMB has previously published six **Federal Register** notices seeking comment on the development of NAICS and its content. The March 31, 1993, **Federal Register** notice, pp. 16990-17004, announced the establishment of the Economic Classification Policy Committee (ECPC) to produce a new industrial classification system for 1997. OMB charged the ECPC with a "fresh slate" examination of economic classifications for statistical purposes, including industrial classifications, product classifications, and product code groupings. The July 26, 1994, **Federal Register** notice, pp. 38092-38096, solicited comments on the concepts for the new system and the decision to develop NAICS in cooperation with Statistics Canada and Mexico's Instituto Nacional de Estadística, Geografía e Informatíca (INEGI). That notice also included a request for the public to submit recommendations for industries to be included in the new system. The deadline for submitting proposals for new or revised industries was November 7, 1994.

After considering all proposals from the public, consulting with a large number of U.S. data users and industry groups, and undertaking extensive discussions with Statistics Canada and INEGI, a new industrial structure for NAICS was developed that would apply to all three North American countries. Four **Federal Register** notices subsequently were published seeking comment on various parts of the structure and industries of the NAICS system. The first of these four notices was published in the Federal Register, July 26, 1995, pp. 38436-38452, requesting comment on proposed industry structures for petroleum and coal product manufacturing, chemical manufacturing, and rubber and plastics manufacturing; for broadcasting and telecommunications; and for food services and drinking places and accommodations. The second **Federal Register** notice was published on February 6, 1996, pp. 4524-4578, requesting comment on proposed industry structures for crop production, animal production, forestry and logging; textile mills, textile product mills, apparel manufacturing, and leather and allied product manufacturing; food manufacturing and beverage and tobacco product manufacturing; fabricated metal product manufacturing; machinery manufacturing; electrical equipment, appliance and component manufacturing; and transportation equipment manufacturing. The third Federal

Register notice was published on May 28, 1996, pp. 26558-26668, requesting comment on proposed industry structures for health and social assistance; educational services; computers and electronics product manufacturing; furniture manufacturing; printing and related support activities; professional, technical and scientific services; performing arts, spectator sports and related industries; museums, historical sites and similar institutions; recreation, amusement and gambling; information; wood product manufacturing, except furniture; rental and leasing; repair and maintenance; management and support; transportation; mining; paper manufacturing; nonmetallic minerals manufacturing; primary metal manufacturing; miscellaneous manufacturing; and postal service and couriers.

Finally, the fourth of the industry-specific **Federal Register** notices (constituting the sixth notice concerning the NAICS overall development) was published on July 5, 1996, pp. 35384-35515, requesting comment on proposed industry structures for finance and insurance; wholesale trade; retail trade; construction; utilities; waste management and remediation services; real estate; lessors of other non-financial assets; personal and laundry services; and religious, grant making, civic, and other membership organizations. That notice also presented the entire classification system and requested comments on the proposed hierarchy and coding system of NAICS.

The final deadline for receipt of public comments on the structure and the industries included in NAICS was September 3, 1996. Statistics Canada and INEGI also sought comments on the proposed structures. Further discussions were held among the three countries to consider public comments received from all three countries. Changes incorporated into the new system based on these comments are shown and explained in the **SUPPLEMENTARY INFORMATION** section of this notice.

After this extensive process of development and discussions by the ECPC, with maximum possible public input as called for by its mandate, OMB is seeking comment on the advisability of accepting NAICS, with the changes published in this notice, as the industry classification system to be employed in relevant statistical collections by all U.S. statistical agencies. Statistics Canada and INEGI have accepted the new NAICS system, which will be used for industrial classification in the statistical programs of Canada and Mexico.

DATES: To ensure consideration of comments on the adoption and implementation of NAICS, comments must be in writing and should be submitted as soon as possible, but no later than December 20, 1996. This proposed industry system would become effective in the U.S. on January 1, 1997.

ADDRESSES: Correspondence about the adoption and implementation of NAICS as shown in this **Federal Register** notice should be sent to: Katherine K. Wallman, Chief Statistician, Office of Management and Budget, 10201 New Executive Office Building, Washington, D.C. 20503, telephone number: (202) 395-3093, FAX number: (202) 395-7245.

Inquiries about the content of industries or requests for electronic copies of the tables should be made to Carole Ambler, Coordinator, Economic Classification Policy

Committee, Bureau of the Census, Room 2633-3, Washington, DC 20233, telephone number: (301) 457-2668, FAX number: (301) 457-1343.

ELECTRONIC AVAILABILITY AND COMMENTS: This document is available on the Internet from the Census Bureau via WWW browser, ftp, and E-mail.

To obtain this document via WWW browser, connect to "http://www.census.gov" then select "Subjects A to Z", then select "N", then select "NAICS (North American Industry Classification System)." This WWW page contains previous NAICS **Federal Register** notices and related documents as well.

To obtain this document via ftp, login to ftp.census.gov as anonymous, and retrieve the files "naicsfr7.pdf," "naicsfr7 TBL1.pdf," and "naicsfr7 TBL2.pdf" from the "/pub/epcd/naics" directory. (That directory also contains previous NAICS **Federal Register** notices and related documents.)

To obtain this document via Internet E-mail, send a message to majordomo@census.gov with the body text as follows: "get gatekeeper naics.txt". Instructions for obtaining this and other NAICS documents will be delivered as a message attachment.

Comments may be sent via Internet E-mail to OMB at naics@a1.eop.gov (do not include any capital letters in the address). Comments received at this address by the date specified above will be included as part of the official record.

FOR FURTHER INFORMATION CONTACT: Paul Bugg, 10201 New Executive Office Bldg., Washington, DC 20503, E-mail address: bugg_p@a1.eop.gov, telephone number: (202) 395-3093, FAX number: (202) 395-7245. Inquiries about the content of industries or requests for electronic copies of the tables should be made to Carole Ambler, Coordinator, Economic Classification Policy Committee, Bureau of the Census, Room 2633-3, Washington, DC 20233, telephone number: (301) 457-2668, FAX number: (301) 457-1343.

SUPPLEMENTARY INFORMATION:

The development of NAICS began in 1992 with the establishment of the Economic Classification Policy Committee by OMB to study the desirability of developing a new industry classification system for the United States based on a single economic concept. A March 31, 1993, **Federal Register** notice, pp. 16990-17004, announced the establishment of the Economic Classification Policy Committee (ECPC) by OMB and set out its charter including a "fresh slate" examination of economic classifications for statistical purposes, including industrial classifications, product classifications, and product code groupings. In a July 26, 1994, **Federal Register** notice, pp. 38092-38096, OMB announced that NAICS was being developed in cooperation with Statistics Canada and INEGI and requested comments on that decision as well as requesting public comments on the structure of the system. That notice also included the concepts of the new system and the principles upon which it would be developed. Those are as follows:

- (1) NAICS will be erected on a production-oriented, or supply-based, conceptual framework. This means that producing units that use identical or similar production processes will be grouped together in NAICS.
- (2) The system will give special attention to developing production-oriented classifications for (a) new and emerging industries, (b) service industries in general, and (c) industries engaged in the production of advanced technologies.
- (3) Time series continuity will be maintained to the extent possible. However, changes in the economy and proposals from data users must be considered. In addition, adjustments will be required for sectors where Canada, Mexico, and the United States presently have incompatible industry classification definitions in order to produce a common industry system for all three North American countries.
- (4) The system will strive for compatibility with the 2-digit level of the International Standard Industrial Classification of All Economic Activities (ISIC, Rev. 3) of the United Nations.

The structure of NAICS was developed in a series of meetings among the three countries. NAICS is organized in a hierarchical structure, much like the existing U.S. SIC. The 1987 SIC employs a 4-digit coding system, in which the first two digits designate what in NAICS is known as a "subsector," the third digit designates the industry group, and the fourth digit designates the industry. For example, in the 1987 SIC, the two digits 26 designate the manufacture of "Paper and Allied Products," within which the digits 262 designate an industry group titled "Paper Mills," which contains one 4-digit industry, SIC 2621, also titled "Paper Mills."

The NAICS coding system must be expanded beyond the four digits used in the SIC for two reasons. First, the NAICS agreements among the ECPC, INEGI, and Statistics Canada permit each country to designate detailed industries, below the level of a NAICS industry, to meet national needs. The United States will have such national industry detail in many places in the new classification, and this national detail can only be accommodated by expanding the coding system to at least five characters. In the U.S. NAICS, the sixth digit designates the U.S. detailed national industries.

Second, it is desirable that the first character or characters in a coding system designate the sector (the NAICS term "industry sector" is replacing the term "division" used in the 1987 SIC). A modern economy is too complex to be described adequately if the first character of the coding system restricts the number of sectors to nine or ten. For example, the ECPC is recommending that NAICS have 20 industry sectors. Accordingly, the first two digits are used to designate the sector in NAICS.

The ECPC is recommending a six digit coding system in which the first two digits designate the NAICS sector, and the third, fourth, fifth, and sixth digits designate, respectively, the subsector, industry group, NAICS industry, and U.S. national industry (if any). Though the 1997 U.S. NAICS industries will now have six digits compared to four digits for 1987 SIC industries, there will not be a corresponding increase in the level of classification detail that the 1997 NAICS provides compared to

the 1987 SIC. As explained above, the two additional digits are simply the result of allowing for more sectors and for individual country-level detail.

Public proposals for individual industries from all three countries were considered for acceptance if the proposed industry was based on the production-oriented concept of the system.

In response to the July 26, 1994, notice, the ECPC received 125 public responses to the call for proposals for new and revised industries, plus 8 responses from 6 State government agencies, and 9 responses from 6 Federal Government agencies. These formal responses to the July 26, 1994, **Federal Register** notice contained several hundred proposals. Additional proposals and suggestions for change arose from the extensive ECPC public outreach program, which consisted of meetings and other communications with industry, data user, and data respondent groups. Other proposals for modifications such as changing industry definitions and clarifying boundaries, came from U.S. statistical agency personnel who worked on NAICS, reflecting accumulated public comments and criticism, over a number of years, of the U.S. SIC system. A number of proposals to eliminate U.S. industries, or to combine them with other industries, were also received.

Comments to the ECPC from all these sources ranged over many aspects of the 1987 SIC system. For example, approximately 20 percent of the formal letters received concerned ambiguities in the titles and definitions of the 1987 SIC industries, and incomplete or out of date product lists. Over 40 respondents requested more and better-defined product detail within existing industries, without necessarily requesting changes to industry boundaries. These requests and suggestions are being handled through the redesign of forms where product information is collected in the 1997 Economic Censuses.

Another group of responses to the notice were proposals for "a separate, market-oriented product grouping system" (**Federal Register**, July 26, 1994, p. 38095), to be put in place following the 1997 Economic Censuses. Some proposals that were submitted as industry proposals were, after analysis by the ECPC, found more appropriately to be market groupings, and have been held over for future action.

After accounting for the public responses in the above categories, a high proportion of the proposals for new industries made to the ECPC were accepted. When a proposal was not accepted, it was usually because: a) the resulting industry would have been too small in the U.S.; b) data indicated that the specialization ratio was low (the specialization ratio indicates to what extent the establishments in a given industry concentrate on the activities that define the industry); or c) the proposal did not meet the production-oriented criterion for forming an industry in NAICS.

Proposals were also received for changing or modifying the boundaries of existing industries, without necessarily creating a new industry. In addition, changes to 1987 SIC industry definitions were frequently required to bring about compatibility with the Canadian and Mexican classifications (as were corresponding changes in those countries' classification systems). Those changes are listed and described in the four **Federal Register** notices that described the proposed NAICS system. Some changes

that were required for international compatibility interacted with proposed changes from the U.S. public, and in some cases the two kinds of changes forced a broader rethinking of the entire portion of the structure. The results of the ECPC's examination of the U.S. classification system, and its work with INEGI and Statistics Canada to form a new North American system, are presented in the series of **Federal Register** notices listed above, culminating in the July 5, 1996, **Federal Register** notice, pp. 35384-35515, that contains the full NAICS system as originally proposed by the ECPC.

In response to the last four **Federal Register** notices containing various sections of the proposed classification system, which was summarized in the July 5, 1996, **Federal Register** notice, the ECPC received approximately 400 additional comments. Each comment was considered in preparing the revised structure that the ECPC is now recommending for adoption. In the discussion below in the Significant Comments or Changes section, these four **Federal Register** notices, as summarized in the July 5, 1996, notice, serve as the base proposal against which changes in response to comments are noted. The ECPC also consulted with INEGI and Statistics Canada regarding the comments received and discussions were held to incorporate the necessary changes into the new system.

A significant number of comments supported the development of NAICS, expressed the view that NAICS is a significant improvement over the SIC system, or supported the inclusion in NAICS of specific industries. Other comments included offers to help write the detailed descriptions of certain industries. There were also a number of comments remarking on the need to ensure time series comparability, in the transition from the SIC system to NAICS.

Approximately 10 percent of the comments received requested clarification of a concept or industry title -- for example, comments requesting further elaboration or explanation of some of the industries proposed; interpretation of the boundaries of some of the proposed industries; or requests for changes to titles of proposed industries. The ECPC subcommittees are communicating with these respondents via telephone, e-mail, or personal meetings to answer these kinds of questions. This process will continue over the next several months.

There were only a few comments regarding the proposed coding system. As discussed above, the NAICS codes requires additional digits beyond the four digits used in the SIC system. The first extra digit permits NAICS to have more than 10 sectors and to build the sector into the coding system; the final digit permits breaking out U.S. national industries, where it is important to do so, below the NAICS industry level. Four comments supported a 6-digit numeric system while three supported an alphanumeric system. Because there was no strong support for one system over the other, because both Canada and Mexico support the 6-digit system, and because implementing a 6-digit numeric system is easier and less expensive for the U.S. statistical system, the ECPC recommends the adoption of a 6-digit numeric system.

About one half of the comments received in response to the proposed system related to requests for changes. Many of these comments asked for additional

industries to be recognized, even though these requests were originally due on November 7, 1994. However, the ECPC did consider such requests. About 30 percent of these requests were accepted. Significant changes made as a result of these comments are discussed below. Changes were also made to the proposed structure based on further study and additional information about the proposed industries received by the ECPC subcommittees. Still other changes are the result of comments from Canadian and Mexican users of the new system. These too are noted below.

There also are a number of title changes to better describe the contents of the industries. Title changes are reflected in Table 1. Some revisions are made to the numerical codes for industries as published in the July 5, 1996, **Federal Register** notice. These changes were made to present a more logical sequencing of the industries in the coding system; to account for new industries and changes to industries as a result of the **Federal Register** comments; and to account for the new sector added to the structure. In addition, because there is not three country agreement for detailed industries in some of the sectors (construction, utilities, wholesale trade, retail trade, and public administration), the three countries have assigned different numbers to these sectors to signify that the industries are not comparable across the three countries.

The ECPC received a number of comments that suggested changes to NAICS that were not accepted. All of these suggestions were carefully considered. Some of the suggestions were modified at the request of the ECPC to better meet the objectives of NAICS. Others were suggestions for products that will be considered in the future development of a product system. Other suggestions for change could not be justified on a production basis, or could not be implemented in statistical programs, for a variety of reasons, and thus were not accepted. The ECPC is currently preparing a response for each of these suggestions, carefully explaining why they were not accepted.

Significant Comments or Changes:

Agriculture, Forestry, Fishing, and Hunting - Major industry associations objected to moving cotton ginning from agriculture to manufacturing. They argued that cotton ginning is not a manufacturing process, but rather a service to the agriculture sector. The ECPC agreed with the arguments and cotton ginning is moved to agriculture and shown as NAICS code 115111.

The Root, Tuber, and Peanut Farming industry group is deleted because the production process of that industry group can not be easily differentiated from that of the Vegetable and Melon Farming industry group. Potato farming is now included with Vegetable and Melon Farming as a U.S. national industry and peanut and sugar beet farming are U.S. national industries under Other Crop Farming.

At the request of Mexico, poultry hatcheries and other poultry production are elevated to NAICS five-digit industries. No change is implied for the U.S. national industry structure. U.S. national industries are added for Oilseed and Grain

Combination Farming, and Fruit and Tree Nut Combination Farming to account for those farms that carry out a range of activities. All other combination farming will be classified in All Other Crop Farming. These activities were not accounted for in the original structure as published in the July 5, 1996 **Federal Register** notice.

Manufacturing - A number of new U.S. national industries were created at the request of industry groups. All of these new industries are large, production based industries that cannot be recognized separately by either Canada or Mexico. These industries are Bottled Water Manufacturing; Secondary Smelting, Refining and Alloying of Copper; Nonferrous Metals (except Copper and Aluminum) Rolling, Drawing, and Extruding; Secondary Smelting, Refining and Alloying of Nonferrous Metals (except Copper and Aluminum); Printed Circuit/Electronics Assembly Manufacturing; and Light Truck and Utility Vehicle Manufacturing.

NAICS industry group 3116, Meat and Seafood Product Manufacturing, is split into two industry groups at the request of the province of Newfoundland. The production processes for meat and seafood products are significantly different, and the size of these industries in all three countries allow for the creation of two industry groups as follows: 3116, Meat Product Manufacturing, and 3117, Seafood Product Preparation and Packaging. NAICS 3117, Bakeries and Tortilla Manufacturing, is renumbered 3118.

U.S. NAICS 312142, Ethyl Alcohol Manufacturing, is moved to NAICS 32519, Other Organic Chemical Manufacturing, and a new U.S. NAICS industry, 325193 Ethyl Alcohol Manufacturing, is established. An error was made in placing ethyl alcohol for nonfood uses in the food industries.

The sequencing of subsector 315, Apparel Manufacturing, is changed. NAICS 3151 is revised to represent Apparel Knitting Mills; NAICS 3152 is Cut and Sew Apparel Manufacturing; and NAICS 3159 is Apparel Accessories and Other Apparel Manufacturing. The NAICS agreement is now at the industry group level and comparable data will be shown by all three countries for NAICS 3151, 3152, and 3159. The United States and Canada, however, are establishing comparable industries below the industry group level. These industries are: 31521, Cut and Sew Apparel Contractors; 31522, Men's and Boys' Cut and Sew Apparel Manufacturing; 31523, Women's and Girls' Cut and Sew Apparel Manufacturing; and 31529, Other Cut and Sew Apparel Manufacturing. The country-level six digit detail for Canada and the U.S. also is comparable where possible. Since the fabric for knit apparel garments is first knit and then may be cut and sewn, grouping apparel knitting mills before cut and sew manufacturers is a more logical grouping in the production process. Mexico requested that the NAICS distinction for contractors be dropped since that distinction was difficult for them to make, but it is retained as shown above for Canada and the U.S.

The Wood Product Manufacturing subsector is restructured. Specifically, NAICS 3212, Laminated Wood Product Manufacturing, is retitled Veneer, Plywood, and Engineered Wood Product Manufacturing because this title better reflects terminology

used within the industry. Truss Manufacturing is moved to industry group 3212 from industry group 3219, Other Wood Product Manufacturing. Truss Manufacturing is now represented by U.S. NAICS code 321214. NAICS industry group 32191, Wood Construction Product Manufacturing, is retitled Millwork. These changes are made to reflect the new and emerging industry of engineered wood and to more accurately reflect the production processes used in the manufacture of trusses. The products included in NAICS 32191, Millwork, are made from wood that is sawn and molded into wood products such as doors, windows, flooring, etc. Truss manufacturing is much more than just sawing and/or molding a product. Truss manufacturing involves fabricating (including laminating) wood into various configurations that meet certain endurance and structural requirements. Design of the truss to meet these requirements is extremely important. Many times metal pieces are affixed to the end. Trusses are made more like other products included in NAICS industry group 32121, Veneer, Plywood, and Engineered Wood Product Manufacturing, than they are like those produced in 32191, Millwork.

The ordering and title of subsector 326, Rubber and Plastics Product Manufacturing, is changed. The new title is Plastics and Rubber Product Manufacturing and NAICS industry group 3261 now represents Plastics Product Manufacturing while 3262 represents Rubber Product Manufacturing. This change was done to reflect the order in terms of the size of the two industries.

A number of changes are made to NAICS industry group 331, Primary Metal Manufacturing. Specifically, the title of U.S. national industry 331312, Primary Refining of Aluminum is changed to Primary Aluminum Production. The trade association pointed out that the original title was incorrect and should be changed. The titles for industry group 3313 and NAICS industry 33131, Smelting, Refining, Rolling, Drawing and Extruding of Aluminum, are changed to Alumina and Aluminum Production and Processing. This shortens the title and provides a better description of the content of the industry group and industry. The term alloying is added to U.S. national industries 331314, Secondary Smelting and Refining of Aluminum; and 331413, Secondary Smelting and Refining of Nonferrous Metals (renumbered and retitled 331492, Secondary Smelting, Refining, and Alloying of Nonferrous Metals (except Copper and Aluminum). The addition of the term alloying clearly designates that the alloying activity is included in these industries.

NAICS industry groups 3326, Spring, Wire, and Turned Product Manufacturing, and 3327, Machine Shops and Coating, Engraving, Heat Treating and Allied Activities, are restructured to better reflect the production process of the industries included in the industry groups. Specifically, the trade association pointed out that the production processes for machine shops and turned product manufacturing are similar and often the same, using the same type of machinery. The only difference is that machine shops usually produce on a small scale special or "job" order basis, while turned product manufacturing establishments usually produce on a large scale basis or "mass produce." Thus, turned product manufacturing should be grouped with machine shops rather than with spring and wire product manufacturing. Turned product

manufacturing then is moved from industry group 3326 now titled, Spring and Wire Product Manufacturing, to industry group 3327, now titled Machine Shops, Turned Product, and Screw, Nut, and Bolt Manufacturing. NAICS industry, 33272, Coating, Engraving, Heat Treating and Allied Activities, and the U.S. national industries 332721, Metal Heat Treating; 332722, Metal Coating, Engraving and Allied Services to Manufacturing (except Jewelry and Silverware); and 332723, Electroplating, Plating, Polishing, Anodizing and Coloring, are moved to a new NAICS industry group 3328, Coating, Engraving, Heat Treating, and Allied Activities. The NAICS industry has the same title and no changes are made to the U.S. detail except for the following title changes: 332822, Metal Coating, Engraving, and Allied Services to Manufacturing (except Jewelry and Silverware).

Water coolers are moved from NAICS 33522, Major Appliance Manufacturing, to NAICS 33341, Heating, Ventilating, Air-Conditioning, and Commercial Refrigeration. Water coolers are made by establishments also producing heating, ventilating, air-conditioning, and commercial refrigeration, not major appliance manufacturers.

Writing, drawing, artists and stamp pad inks are moved from NAICS industry 32591, Printing Ink Manufacturing, to 32599, Other Miscellaneous Chemical Product Manufacturing (retitled All Other Chemical Product Manufacturing). Establishments producing printing ink do not also produce writing, drawing, artists and stamp pad inks and the production processes are different.

To clarify the placement of some activities, toners are included in NAICS 32599, Other Miscellaneous Chemical Product Manufacturing, (retitled All Other Chemical Product Manufacturing) while ink jet or bubble jet inks and electrostatic inks are included in NAICS 32591, Printing Ink Manufacturing. The manufacturing of these products is classified according to the production process based on a study to determine which manufacturers are making these products.

Foam products made from materials other than polystyrene and urethane are included in NAICS 32625, Urethane Foam Product Manufacturing, now titled Urethane and Other Foam Product (except Polystyrene) Manufacturing. No allowance was originally made for foam products from materials other than polystyrene and urethane.

A new NAICS industry is created for sign manufacturing. Sign manufacturing in the NAICS structure published on July 5, 1996, was dispersed throughout the manufacturing subsectors based on component material. However, the trade association pointed out that sign manufacturing is a special production process and establishments do not specialize in sign making by type of material. Rather, they make signs from any material based on customer specifications. Therefore, NAICS is restructured to establish a separate sign manufacturing industry, 33995, Sign Manufacturing.

Gasket manufacturing is moved to NAICS 33999, All Other Miscellaneous Manufacturing, and a new U.S. national industry is created, 339991, Gasket Manufacturing. As with sign manufacturing, NAICS originally classified gasket manufacturing according to component material. However, further study indicates that

producers of gaskets do not specialize by type of material, but rather produce gaskets of many materials in the same establishment. Therefore, a separate U.S. national industry is established for gasket manufacturing.

Reconditioning of barrels and drums is moved from NAICS 332499, Other Metal Container Manufacturing, to NAICS 81121, Heavy and Industrial Machinery Equipment and Repair. The industry association pointed out that the chief activity in reconditioning barrel and drum establishments is cleaning and repainting or refinishing barrels and drums. Used drums are obtained and cleaned using a chemical cleansing solvent or a burning process is used to burn out impurities. The drums are then painted or coated according to the customer's specification. Since cleaning and repainting is the main activity of these establishments, the activity more logically fits in the repair and maintenance subsector.

Automotive and truck air conditioning compressors and systems (excluding unitary systems and mechanical refrigeration equipment) is moved from U.S. NAICS 333415, Air Conditioning and Warm Air Heating Equipment and Commercial and Industrial Refrigeration Equipment Manufacturing, to NAICS industry 33639, Other Motor Vehicle Part Manufacturing. A U.S. national industry, 336391, Motor Vehicle Air Conditioning Manufacturing is added. The proposed industry is well defined and highly specialized. The manufacture of this type of air conditioning equipment is distinct from other kinds (residential or industrial) due to standards required by motor vehicle manufacturers, such as size, strength of components, environmental requirements, etc. Classifying these motor vehicle parts in the Transportation Equipment Manufacturing subsector is consistent with similar decisions made in NAICS to group all transportation equipment manufacturing together.

NAICS industries and the U.S. detail under 33713, Wood Furniture Manufacturing; 33714, Metal Furniture Manufacturing, and 33715, Other Furniture Manufacturing, are changed. This change is made at the request of trade associations in both Canada and the U.S. There are now two NAICS industries for furniture. They are 33713, Wood Household Furniture Manufacturing and 33714, Non-wood Furniture Manufacturing. Within this structure, the U.S. will recognize the following industries: 337131, Wood Kitchen Cabinet and Counter Top Manufacturing; 337132, Upholstered Wood Household Furniture Manufacturing; 337133, Wood Household Furniture (except Upholstered) Manufacturing; 337134, Wood Office Furniture Manufacturing; 337135, Custom Architectural Woodwork and Millwork Manufacturing; and 337139, Other Wood Furniture Manufacturing; 337141, Nonwood Office Furniture Manufacturing; 337142, Metal Household Furniture Manufacturing; 337143, Household Furniture (except Wood and Metal) Manufacturing; 337145, Nonwood Showcase, Partition, Shelving, and Locker Manufacturing; and 337148, Other Nonwood Furniture Manufacturing. In addition, the three countries agreed that each would work towards adopting the complete structure in the future. Also convertible sofa manufacturing is moved from NAICS 33711, Mattress Manufacturing, to 33713, Wood Furniture Manufacturing. Convertible sofa manufacturing is not like mattress manufacturing, but is furniture manufacturing.

Quick printing is moved from NAICS 571431 (renumbered 561431), Photocopying and Duplicating Services, to NAICS 32311, Printing. A new U.S. national industry, 323114, Quick Printing, is established. Industry representatives pointed out that quick printing uses inputs, labor skills, and capital equipment that are similar to those used in traditional printing establishments and therefore should be classified in the printing subsector. These establishments do, however, employ different production processes than traditional printers and should be classified in a separate industry within the printing subsector. Quick printing includes any establishment that has an offset printer with a maximum paper size less than "18" X "23" and no other "traditional" type printing equipment such as "large offset, flexographic, screen, etc." Also included are establishments that have photocopy type equipment and offer prepress services; and establishments that have electrostatic digital type printers only, that primarily print text type documents. Excluded from this industry are establishments known as copy shops, which use only photocopy type equipment and do not offer prepress services. These establishments remain in U.S. NAICS 561431.

A new U.S. national industry is created for Digital Printing, U.S. NAICS 323115. Digital printing includes establishments that use a unique process involving heavy "front end" or prepress processing. Establishments in this industry use sophisticated scanning equipment and powerful computing equipment to prepare computerized input to newly developed digital output devices (printers). The products of this industry are typically banners, signs, and posters that are generally of high quality and large size. They are graphic as opposed to textual products. This is a distinct production process that is a new and emerging industry that should be recognized in NAICS.

U.S. NAICS industry 323111, Printing on Apparel, is combined with 323116, (renumbered 323113) Commercial Screen Printing. Industry representatives commented that almost all printing on apparel is screen printing and thus a separate industry for printing on apparel should not be recognized. Printing on apparel involves the use of the same kind of equipment (screen printing machines) and has the same highly skilled screen plate labor, and similar raw materials.

The U.S. national industries within NAICS 32311, Printing, are renumbered to reflect the addition of the two industries noted above and the deletion of a separate industry for printing on apparel. The industries are as follows: 323110, Commercial Lithographic Printing; 323111, Commercial Gravure Printing; 323112, Commercial Flexographic Printing; 323113, Commercial Screen Printing; 323114, Quick Printing; 323115, Digital Printing; 323116, Manifold Business Form Printing; 323117, Book Printing; 323118, Blankbook, Loose-leaf Binder, and Device Manufacturing; and 323119, Other Commercial Printing.

NAICS industries 32721, Glass and Glass Product Manufacturing, and 32722, Glass Container Manufacturing are combined. The glass container manufacturing industry is too small to support in Canada. The U.S. will maintain the detail as

published in the July 5, 1996, **Federal Register** notice under the new NAICS industry 32721, Glass and Glass Product Manufacturing.

Retail Trade - At the request of industry associations, NAICS industry 44823, Accessories Stores (retitled Clothing Accessories Stores), is moved to NAICS industry group 4481, Clothing Stores (retitled Clothing and Clothing Accessories Stores). As a result of that change, NAICS industry group 4482, Jewelry and Accessories Stores, is retitled Jewelry, Luggage, and Leather Goods Stores. In addition, the sequencing of industry groups 4482 and 4483 is changed so that 4482 now represents shoe stores and 4483, jewelry, luggage, and leather goods stores. These changes were made to ensure that all clothing stores are grouped together and to reflect the relative importance of the industries within the industry group.

Transportation - In the **Federal Register** published on July 5, 1996, warehousing was shown as an industry group within subsector 488, Support Activities for Transportation. Industry associations pointed out that warehousing is not a support activity only for transportation; a modern warehouse provides not only storage, but other services, including inventory control, and provides them to many using industries. Further, they indicated that warehousing is such an important activity in all three NAICS countries that NAICS should reflect industries for general warehousing and storage. All three countries agreed with this description of the warehousing industry and the following changes are made: sector 48-49 is retitled Transportation and Warehousing and the former industry group 4886, Storage Facilities, is elevated to a subsector and retitled Warehousing and Storage Facilities. U.S. national detail industries 488691, General Storage Facilities, and 488699, All Other Storage Facilities, are elevated to five-digit NAICS industries and retitled General Warehousing and Storage Facilities and All Other Warehousing and Storage Facilities, respectively. The new subsector is 493, Warehousing and Storage Facilities.

Information - NAICS industry 51213, Teleproduction and Other Post Production Services, is combined with NAICS 51219, Other Motion Picture and Video Industries, and 51219 is retitled Post Production and Other Motion Picture and Video Industries. The U.S. establishes a 6-digit national industry 512191, Teleproduction and Other Post Production Services, for this industry. The combination is made at the NAICS level because the industry is not large enough in Canada to recognize as a separate NAICS industry.

Finance and Insurance - U.S. industry group 5251, Holding Companies, is moved to a new sector called Management of Companies and Enterprises, NAICS 55. See the explanation of this sector below for a description of the industries to be included in the new sector.

NAICS 52411 is expanded to include both life and health insurance establishments. The industry 52411 is retitled Direct Life, Health, and Medical

Insurance Carriers and NAICS 52412 is retitled Direct Insurance Carriers (except Life, Health, and Medical). The U.S. national detail shows the following industries under each: 524111, Direct Life Insurance Carriers; 524112, Direct Health and Medical Insurance Carriers; 524121, Direct Property and Casualty Insurance Carriers; 524122, Direct Title Insurance Carriers; and 524129, Other Direct Insurance Carriers (except Life, Health, and Medical). This change was requested by Canada because of the structure of their health insurance industry and their inability to separate life insurance carriers from health and medical insurance carriers.

Real Estate; Rental and Leasing - A separate industry group is created for NAICS 55122, Offices of Real Estate Agents and Brokers. It becomes industry group 5512, Offices of Real Estate Agents and Brokers, with one NAICS industry in that industry group, 55121, Offices of Real Estate Agents and Brokers. NAICS 5212, Activities Related to Real Estate, becomes industry group 5213, Activities Related to Real Estate, with the same national detail as published in the July 5, 1996, Federal Register notice, except for real estate agents and brokers. This change is made to recognize the importance of this industry to real estate and to recognize the different production process of the industry.

U.S. NAICS 531291, Title Abstract Offices, is moved to U.S. NAICS 541191, Title Abstract and Settlement Offices, in the Professional, Scientific, and Technical Services sector under industry 56119 (renumbered 54119), Other Legal Services. Title abstract offices provide a type of legal services and thus "fit" better in the legal services industry group.

Condominium associations are moved to NAICS 81399, All Other Organizations. Some of these organizations provide property management services, but others do not. In the U.S., it is not possible to separate the two types of organizations, so it was decided to place them all in 81399.

With the changes to offices of real estate agents and brokers, title abstract offices, and condominium associations, agreement is reached with Canada and Mexico on the structure of the real estate subsector at the industry group level, though not at the NAICS industry level. The previously published structure would not have provided common North American data for this subsector.

U.S. NAICS industry 532212, Home and Garden Equipment Rental is deleted. A new industry group 5323, General Rental Centers, is created and any establishments primarily renting home and garden equipment and/or a wide range of consumer, and commercial/industrial equipment is included. A new NAICS industry, 53231, General Rental Centers, is also created. Very few establishments primarily rent home and garden equipment. Rental of these items is done either by hardware stores or "rental centers" that rent many different types of equipment, both home and garden and other consumer and commercial/industrial equipment. Therefore, the U.S. industry for home and garden equipment rental is deleted.

Professional, Scientific, and Technical Services - The sector has been renumbered 54 from 56. This renumbering was done to provide for a more logical sequencing of the numbers. Therefore, the first two digit of all numbers within this subsector now are 54.

NAICS industry group 5612 (renumbered 5412) Accounting, Tax Preparation, Bookkeeping and Payroll Services is restructured. NAICS industries 56121, Offices of Accountants, and 56122, Tax Preparation, Bookkeeping, and Payroll Services are deleted. U.S. national industries 561212, Offices of Accountants, Except Certified, and 561222, Bookkeeping and Billing Services, are also deleted. It was determined in writing descriptions for these industries that many of the activities outlined in the tax preparation, bookkeeping, and payroll services industries also were performed by accountants. A clear distinction between the industries could not be made. Therefore, the industry group is restructured to include only one NAICS industry 54121, Accounting, Tax Preparation, Bookkeeping and Payroll Services. Four national industries are included in this NAICS industry as follows: 541211, Offices of Certified Public Accountants; 541212, Tax Preparation Services; 541213, Payroll Services; and 541219, Other Accounting Services.

NAICS industry group 5613 (renumbered 5413), Architectural, Engineering, and Related Services, is reordered to include NAICS 56135 (renumbered 54132), Landscape Architectural Services, after 56131 (renumbered 54131), Architectural Services. Industry groups pointed out that landscape architecture firms perform design services comparable to architectural and engineering firms and grouping them in sequence reflects the similarities in process among them. Industry group 5413 is structured as follows: 54131, Architectural Services; 54132, Landscape Architectural Services; 54133, Engineering Services; 54134, Drafting Services; 54135, Building Inspection Services; 54136 Geophysical Surveying and Mapping Services; 54137, Survey and Mapping (except Geophysical) Services; and 54138, Testing Laboratories.

U.S. NAICS industries 561491, Land Use Planners Services, and 561499, All Other Design Services, are deleted. Land use planning services are now included with 54132, Landscape Architectural Services. It was pointed out by an industry association that there are not specialized establishments providing land use planning services; rather, this is an activity normally carried out by landscape architects. That activity is therefore included with NAICS 54132, Landscape Architectural Services.

Management of Companies and Enterprises - A new sector is created that includes holding companies and corporate, subsidiary, and regional managing offices. All of these establishments are engaged in the management of large, multiple establishment companies and do not fit logically into the structure of any of the other NAICS sectors. Within the new sector the U.S. will recognize three national industries 551111, Bank Holding Companies; 551112, Other Holding Companies; and 551113, Corporate, Subsidiary, and Regional Managing Offices. The three countries recognized that holding companies are economic entities with employees and receipts that should be recognized in NAICS and not included in the U.S. only subsector 525, Funds, Trusts,

and Other Financial Vehicles. See the section on auxiliaries below for a full description of the corporate, subsidiary, and regional managing office industry.

Management, Support, Waste Management, and Remediation Services - The sector is renumbered 56 from 57. This renumbering was done to provide for a more logical sequencing of the numbers and to accommodate the new sector described above. Therefore, the first two digits of all numbers within this subsector now are 56. The sector is also retitled Administrative and Support, Waste Management and Remediation Services to distinguish it from the new sector Management of Companies and Enterprises.

Farm management and construction management are moved to the agriculture and construction sectors, respectively. The activities carried out in these establishments require specialized knowledge of the agriculture and construction industries and are not in any way like the activities in NAICS 57111, Management Services (now renumbered and retitled 56111, Office Administrative Services), where they were originally classified. New NAICS 56111, Office Administrative Services, now includes only those establishments that are primarily engaged in providing office administrative services, a much more homogeneous grouping.

U.S. national industries 571731, Lawn and Garden Services, and 571732, Ornamental Shrub and Tree Services, are deleted. There is no clear distinction between the activities of the establishments included in these industries since many establishments that care for shrubs and trees also provide lawn and garden services. It is also true that establishments that provide lawn services care for shrubs and trees.

A question was raised by an industry group on the placement of landscape installation services. That activity is included in NAICS 57172 (renumbered 56172), Landscape Care and Maintenance, which is retitled Landscape Services.

NAICS industry 57112, Facilities Support Management, is elevated to an industry group. This is a U.S. only activity and is very different from the activities included in NAICS 57111 (renumbered 56111), Management Services (retitled Office Administrative Services), with which facilities support management was grouped. The new industry group and industry are 5612, Facilities Support Services, and 56121, Facilities Support Services.

Educational Services - U.S. NAICS industry 611512, Vocational and Technical Schools, is combined with U.S. NAICS industry 611519, Other Technical and Trade Schools. No distinction can be made between these two industries so they are combined.

The comparability among the three countries for NAICS 6111, Elementary and Secondary Schools, is at this industry group level. Mexico needs additional industries that can only be accommodated if NAICS comparability is at the industry group level. This does not affect the U.S. structure.

Health Care and Social Assistance - U.S. NAICS industry 621611, Home Health Agencies, is combined with U.S. NAICS industry 621619, Other Home Health Care Services. No distinction between these two industries can be made so they are combined.

Arts, Entertainment, and Recreation - NAICS industry group 7131, Operators of Sports and Recreation Facilities, is deleted and those NAICS industries formerly included in this industry group are move to NAICS industry group 7139 retitled Other Amusement and Recreation Industries. The following NAICS industries are included under that industry group: 71391, Golf Courses and Country Clubs; 71392, Skiing Facilities; 71393, Marinas; 71394, Fitness and Recreational Sports Centers; 71395, Bowling Centers; and 71399, All Other Amusement and Recreation Industries. NAICS 7132, Amusement Facilities, is renumbered 7131 and retitled Amusement Parks and Arcades. Establishments providing coin-operated amusement devices are now in 71399, All Other Amusement and Recreation Industries. An industry group pointed out that the production processes of amusement parks and arcades is much different from that of those establishments only providing coin-operated amusement devices for use by amusement parks and arcades. NAICS industries in 7131 are 71311, Amusement and Theme Parks, and 71312, Amusement Arcades. NAICS 7133, Gambling Industries, is renumbered 7132. The industries in 7132 remain the same but are renumbered 71321, Casinos (except Hotel Casinos), and 71322, Other Gambling Industries.

Accommodation and Food Services - NAICS industry 72222, Refreshment Places, is deleted. Therefore, this NAICS industry will be shown as U.S. national industry 722213, Snack and Nonalcoholic Beverage Bars. Neither Mexico nor Canada could support this as a NAICS industry, but U.S. comments indicated that snack and nonalcoholic beverage bars are an important industry that should be recognized in the U.S.

Other Services, Except Public Administration - U.S. NAICS industry 811211, Transportation Equipment Repair and Maintenance, is combined with U.S. industry 811212, Other Industrial Machinery and Equipment Repair and Maintenance (renumbered and retitled 81131, Commercial and Industrial (except Automotive and Electronic) Machinery and Equipment Repair and Maintenance). There are very few establishments primarily engaged in repairing and maintaining transportation equipment (except automotive) since most of the repairs are done at the factory or by the establishment that owns and uses the equipment. Therefore, this industry is too small to recognize separately and is combined with other industrial machinery and equipment repair and maintenance. The sequencing of NAICS industry groups 8112, Heavy and Industrial Machinery and Equipment Repair and Maintenance (retitled Commercial and Industrial (except Automotive and Electronic) Machinery and Equipment Repair and Maintenance), and 8113, Electronic and Precision Equipment

Repair and Maintenance, is changed. NAICS 8112 now represents Electronic and Precision Equipment Repair and Maintenance and 8113 is Commercial and Industrial (except Automotive and Electronic) Machinery and Equipment Repair and Maintenance.

U.S. NAICS industries 813411, Civic and Social Organizations with Restaurants and Bars, and 813412, Civic and Social Organizations without Restaurants and Bars, are combined. These establishments are small and difficult to classify.

Auxiliaries

In the 1987 SIC, auxiliary units, defined as those units that primarily produce support services not intended for use outside the enterprise, are classified to industries based on the industry classification of the establishments they serve -- not the auxiliaries' primary activity. However, establishments that produce goods for use by other units of the same enterprise are classified based on what they do, not whom they serve. The traditional treatment of auxiliary units implies that captive services producing establishments should be treated differently from captive goods producing units. For example, a computer services establishment of an automobile producer that performs services for its automobile assembly plants is classified in the automobile industry. However, if the automobile producer has a captive automotive hose and belting establishment, that establishment is classified into the rubber and plastic hose and belting industry, and not into the automobile assembly industry.

As production activities have become more diverse, complex, and integrated, the classification of auxiliary operations has taken on more and more qualifiers and it has become increasingly difficult to discern to which using industry the auxiliary establishment should be coded. In a multi-national conglomerate, a "central office" may serve a variety of establishments, each classified to a different industry. In addition, the type of personnel employed and the service performed are generic and can transfer from servicing a manufacturing operation, to a retailer, to a government operation with little or no conversion costs. The geographic locations of central management units tend to be similar, usually appearing in or near large cities, and unrelated to the location of the activity serviced. As a result, for example, users of the U.S. economic censuses are typically surprised to find mining industry employment in Washington, D.C., which has no mining activity.

Another recent phenomenon that has complicated the treatment of auxiliaries is the practice of many auxiliaries of selling their services to establishments outside the enterprise after their intracompany responsibilities are met. For example, in the 1987 Economic Censuses, auxiliaries had \$64 billion of receipts from customers outside the parent company. By 1992, that amount had grown to \$141 billion, making these support establishments one of the fastest growing services providers in the economy. And yet, these dollars are not being shown in most industry series.

There are also inconsistencies in industry data published by the Bureau of Labor Statistics (BLS) and the Census Bureau, much of which is due to the treatment of

auxiliaries. The BLS publishes wage and employment information by 1987 SIC for all industries, excluding agriculture and public administration. These data include industry statistics for both operating and auxiliary establishments classified to a 4-digit industry. The Census Bureau, on the other hand, which publishes receipts and expenditures information by 1987 SIC for industries excluding agricultural services, railroads, and public administration does not always include auxiliary establishments. In addition, Census does not classify auxiliaries down to the 4-digit industry level.

As a result of the difficulties in classifying auxiliaries, substantial differences exist in BLS and Census data. For example, in manufacturing, Census reports show more than a half million more workers in auxiliaries than does BLS. For Finance, Insurance, and Real Estate, and Services, on the other hand, BLS counts of auxiliary employment exceeds Census'.

These same differences and more exist in the treatment of auxiliaries among the three countries. A more complete explanation of the treatment of auxiliaries in the three countries and the problems created in industrial statistics by the past treatment of auxiliaries is contained in a paper "The Treatment of Auxiliary Establishments in Industry Classification Systems," by Paula Young and Jack Triplett of the Bureau of Economic Analysis. A copy of that paper can be obtained by calling (202) 606-9615 or through the Internet (please see the Electronic Availability section, above).

Because of the many problems and complexities in the treatment and coding of auxiliaries, it was necessary to develop a principle about auxiliaries that would provide for more consistent treatment of these activities, both within the United States and among the three countries. The following statement, with respect to captive units (auxiliaries) was agreed upon by the statistical agencies of the three countries: "The three countries agree that, in accordance with the production-oriented conceptual framework for NAICS, those units that carry out captive activities for the enterprise to which they belong shall be classified to the extent feasible according to the NAICS code related to their own activity, as well as, if possible, to that of the enterprise they support."

This means that in the 1997 Economic Censuses auxiliary units will be included in the industry which describes the primary activity in which they are engaged. Warehouses that provide storage facilities for their own enterprise will be classified as a warehouse, and not as an automobile assembly plant (if that is the primary unit they serve). For 1997, the Bureau of the Census will code these establishments to both their own activity and to the primary activity they serve so that links can be made to prior census data.

This change will result in significant shifts in employment data. In 1992, Census data showed over 1,000,000 auxiliary employees assigned to manufacturing and over 840,000 auxiliary employees assigned to retail trade. These employees will most likely move to either the Management of Companies and Enterprises sector; the Warehousing and Storage subsector; the Computer Systems Design and Related Services subsector; the Accounting, Tax Preparation, Bookkeeping and Payroll Services subsector; or some other services related subsector.

Time Series Continuity

The standard approach to preserving time series continuity after classification revisions is to create linkages where the series break. This is accomplished by producing the data series using both the old and new classifications for a given period of transition. With the dual classifications of data, the full impact of the revision can be assessed. Data producers then may measure the reallocation of the data at aggregate industry levels and develop a concordance between the new and old series for that given point in time. The concordance creates a crosswalk between the old and new classification systems. Links between the 1987 U.S. SIC and NAICS (with U.S. national detail) are being planned by statistical agencies in the U.S.

ECPC Recommendations for the Hierarchical Structure, Industries, and Coding System for the 1997 NAICS

Table 1 below presents the ECPC final recommendations for the entire structure of the proposed classification system for the United States including both NAICS and non-NAICS industries. It shows the proposed 1997 hierarchy, including NAICS and U.S. national detail industries, and the proposed coding system in 1997 NAICS sequence and relates the 1997 NAICS to the 1987 SIC. All ECPC recommended changes to the structure based on public comment and discussions with INEGI and Statistics Canada are included in Tables 1 and 2. Table 2 is in 1987 SIC sequence and relates the 1987 SIC to the 1997 NAICS.