# **New Mexico's International Trade: Modest Growth, Growing Potential**

Richard V. Adkisson and Ejiro U. Osiobe

**New Mexico State University** 

Department of Economics, Applied Statistics, and International Business

December 10, 2018.



Richard V. Adkisson - Professor and Garrey E. and Katherine T. Carruthers Endowed Chair in Economic Development (radkisso@nmsu.edu)

Ejiro U. Osiobe - Doctoral Candidate, Doctor of Economic Development (euosiobe@nmsu.edu)

# New Mexico's International Trade: Modest Growth, Growing Potential

Richard V. Adkisson and Ejiro U. Osiobe

### **Abstract**

This report uses publicly available data to analyze New Mexico's international trade situation, imports and exports to accomplish two things. The first is to provide the best available information to help readers understand the state's role in international trade. The second is to provide a foundation to guide efforts to increase New Mexico's participation in potentially beneficial international trade.

## Introduction

Compared to other states, a significant share of New Mexicans live in poverty or at least earn below the national average income<sup>1</sup>. Policymakers in New Mexico have developed a set of programs to encourage economic development through human capital development, entrepreneurship, business incubation, innovation, and the promotion of international trade<sup>2</sup>. These initiatives presume that a stronger business sector creates jobs that will lift people from poverty, create more base industries, and increase the state's revenue reserves. This report focuses on the international trade aspects of New Mexico's economic development efforts. The primary purpose of the report is to inform rather than recommend however some broad suggestions are provided.

A 2017 report titled, An Overview of New Mexico's Exports: 2000-2016<sup>3</sup>, examined New Mexico's recent export patterns and drew several conclusions regarding the state's exports. Based on 2000-2016 data, the export report concludes the following.

<sup>1</sup> https://talkpoverty.org/state-year-report/new-mexico-2017-report/

<sup>&</sup>lt;sup>2</sup> https://gonm.biz/why-new-mexico/

<sup>&</sup>lt;sup>3</sup> http://arrowheadcenter.nmsu.edu/wp-content/uploads/2017/09/NM-Exports-July-2017.pdf

- Measured in nominal dollars, the volume of New Mexico's exports has been on an upward trend over the 2000-2016 period.
- New Mexico's exports have been highly concentrated in one category, computer and electronic products, however, reliance on this category has decreased over time.
- New Mexico has become increasingly reliant on exports to a few destination countries, although the particular destinations change through time.
- A result of the above two bullets is that New Mexico's exports have been quite volatile both in volume and direction.
- Most of the volatility in volume has its origin in manufactured exports, especially computer and electronic product exports.
- New Mexico's export volume has grown at a slightly lower rate than has national export volume.
- New Mexico's non-computer and electronic product exports have grown steadily and are less volatile than computer and electronic exports.
- A large increase in re-exports has driven the increase in non-manufactured exports.
- After accounting for re-exports, non-manufactured exports have decreased substantially.

The conclusions outlined above will come as no surprise to anyone familiar with New Mexico's trade situation, but the report does provide a fact-based foundation for anyone interested in the topic. The current report will build on this foundation by taking a somewhat different look at the evolution of New Mexico's international trade and will, to the extent possible, incorporate the import side of the trade equation.

This report begins by providing a brief discussion of New Mexico's programs that aim to increase the state's presence on the international stage. Then the focus will turn to an examination of publicly available (state level) import and export data in search of trends and patterns that might usefully inform New Mexico's leaders as they develop and direct tradeoriented policies.

## Data Limitations<sup>4</sup>

When assembling international trade statistics, exports are assigned to states based on where the merchandise begins its journey to the port of export (origin of movement). In many cases, the origin of movement state is not the state where the good was produced. Imports are assigned to the state of destination but, similarly, in many cases, the state of destination is not the state where goods are finally consumed. When there are intermediate transactions (warehousing, distribution centers, etc.) a state's exports and imports can be misstated. For example, the exports of states that have international ports tend to be overstated and states that serve as major distribution points tend to have their imports overstated. For these reasons, care should be used when interpreting the presentation below.

## New Mexico's Interest in International Trade

New Mexico's Office of International Trade (OIT) touts international trade as a potentially significant contributor to the state's economic development efforts. Exports bring injections of spending into the New Mexican economy, and OIT claims that export-oriented firms pay substantially higher wages than those paid by non-export-oriented firms. OIT's goals are "to support job creation, retention, and expansion by assisting New Mexico companies to capitalize on opportunities in the competitive global marketplace" with a focus on small and mid-size companies. New Mexico is already engaged in international trade. However, most exports from New Mexico are produced in only a few dominant industries and exports sales tend to rely on a few large customers. Diversifying and expanding New Mexico's international trade

<sup>&</sup>lt;sup>4</sup> This section provides only a brief overview of the data limitations. Appendix 1 provides further detail.

<sup>&</sup>lt;sup>5</sup> https://gonm.biz/business-development/edd-programs-for-business/international-trade/

<sup>&</sup>lt;sup>6</sup> http://arrowheadcenter.nmsu.edu/wp-content/uploads/2017/09/NM-Exports-July-2017.pdf

should improve opportunities for small and mid-size companies and help to spread the benefits of international trade more broadly.

A major trade-promotion program operated by the OIT is the State Trade

Expansion Program (STEP). The objectives of STEP are to increase the number of small

businesses<sup>7</sup> engaged in international trade and to increase the value of exports<sup>8</sup>. STEP provides

matching funds to help eligible businesses enter international markets. The Small Business

Administration partially funds many STEP services. STEP services include but are not limited to
the following: one-on-one business consultation meetings, provision of workshops and seminars
designed to educate companies on the export process, and the generation of leads for businesses
to pursue.

Although they are not exclusively international trade policies, New Mexico structures several of its economic development incentives to encourage sales outside the state. For example, many manufacturing firms who operate in New Mexico but export their production outside of the state can deduct their export sales when calculating the share of their income subject to New Mexico's corporate income tax. Similarly, if a New Mexico company hosts a World Wide Web site in the state, its receipts from providing these services are not subject to the state's gross receipts tax; this is effectively an incentive to export services. Further evidence of New Mexico's interest in promoting international trade is evident in its continued effort to

-

<sup>&</sup>lt;sup>7</sup> Although the definition varies by industry, the Small Business Administration's basic definition of a small business is one with 500 or fewer employees. https://www.sba.gov/blogs/how-and-why-determine-if-your-business-small

<sup>&</sup>lt;sup>8</sup> https://gonm.biz/business-development/edd-programs-for-business/international-trade/

<sup>&</sup>lt;sup>9</sup> https://gonm.biz/why-new-mexico/competitive-business-climate/incentives/

develop the Santa Teresa Industrial Park,<sup>10</sup> the Union Pacific Intermodal Port,<sup>11</sup> and the associated international port<sup>12</sup>.

Current trends hint that economic growth and the creation of stable jobs for New Mexico's residents will increasingly depend on expanding its trade<sup>13</sup> and investment opportunities in industries where New Mexico can potentially compete in the world market<sup>14</sup>.

## **New Mexico's International Trade**

Figure 1 shows New Mexico's exports and imports as a percent of its gross domestic product (GDP) for recent years. Exports have ranged from about one-and-one-half percent to a bit over four percent of state GDP with the higher values coming in the last few years. Imports peaked at a bit less than four percent of GDP in 2010 and have otherwise stayed in the two to three percent of GDP range. The higher export values beginning in 2014 may be associated, at least in part, with developments in Santa Teresa and at least part of the increase probably comes from growing re-exports.

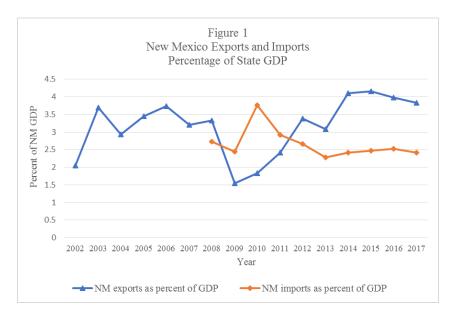
<sup>10</sup> http://www.nmbia.org/

<sup>11</sup> https://gonm.biz/why-new-mexico/borderplex/up-intermodal-facility

<sup>12</sup> http://www.nmborder.com/Santa Teresa.aspx

<sup>&</sup>lt;sup>13</sup> Sales of New Mexican products to customers in other U.S. states has the same impact on the New Mexico economic as do sales of New Mexican products to customers outside of the U.S.

<sup>14</sup> https://www.businessroundtable.org/



Source: Imports and exports - U.S. Census Bureau, USA Trade Online, https://usatrade.census.gov/ (author calculations)

Source: GDP - U.S. Bureau of Economic and Analysis, Regional Economic Accounts,

https://www.bea.gov/data/economic-accounts/regional (author calculations)

Figure 2 shows New Mexico's contribution to national imports and exports. With some fluctuation from year to year, New Mexico has provided about 0.25 percent of the United States' annual exports and has purchased approximately 0.1 percent of the nation's imports. For reference, it also shows that New Mexico's GDP and population shares of the U.S. values are higher than its import and export shares suggesting that New Mexico is less engaged in trade when compared to the nation and other states

Figure 2 New Mexico's Percentage Shares of U.S. Exports, Imports, GDP, and Population, 2002-2017 0.800 0.700 0.600 NM Percent of US 0.500 0.400 0.300 0.200 0.100 0.000 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 Year NM Percent of U.S. Exports ---NM Percent of U.S. Imports

-NM Percent of U.S. Population

Source: Import and export shares: U.S. Census Bureau, USA Trade Online,

-NM Percent of U.S. GDP

https://usatrade.census.gov/ (author calculations)

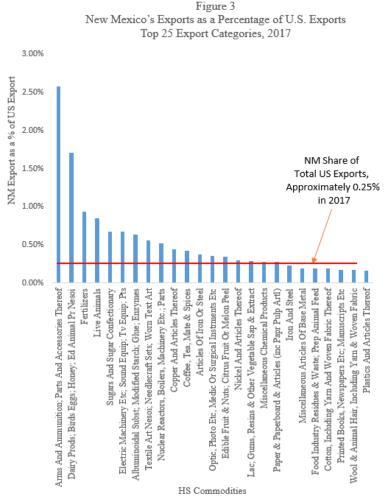
Source: GDP Population, U.S. Bureau of Economic and Analysis, Regional Economic Accounts, https://www.bea.gov/data/economic-accounts/regional (author calculations)

## **New Mexico's Exports**

In both 2016 and 2017, New Mexico exported approximately \$3.6 billion in goods and services. Altogether, New Mexico provided approximately 0.25 percent of U.S. exports in these years. However, New Mexico contributed more than 0.25 percent in several export categories (see Figure 3). The International Trade Administration estimates that New Mexico's exports supported 14,598 jobs in 2016, slightly less than in 2014 (15,218) but still showing an upward trend since 2012. <sup>15</sup> In 2016, 152 countries purchased New Mexico-made goods and services.

 $<sup>{\</sup>color{red}^{15}}\,\underline{\text{https://www.trade.gov/mas/ian/employment/index.asp}}$ 

The top destinations were Mexico, Israel, China, Japan, and Canada. <sup>16</sup> Figure 3 shows New Mexico's 2017 percentage contribution to national exports by broad category.



Source: U.S. Bureau of the Census, USA Trade Online, https://usatrade.census.gov/

Table 1 shows New Mexico's top 25 exports by harmonized system (HS) category for 2017. It is notable that for many categories, export shares are large relative to New Mexico's total exports even when they are only a relatively small contribution to national exports. For example, New Mexico provided less than one percent each of national exports in the first three categories (85, 84, and 90) yet together, these three categories were 70.15 percent of the state's

<sup>&</sup>lt;sup>16</sup> U.S. Department of Commerce, International Trade Administration, TradeStats Express, http://tse.export.gov/tse/tsehome.aspx

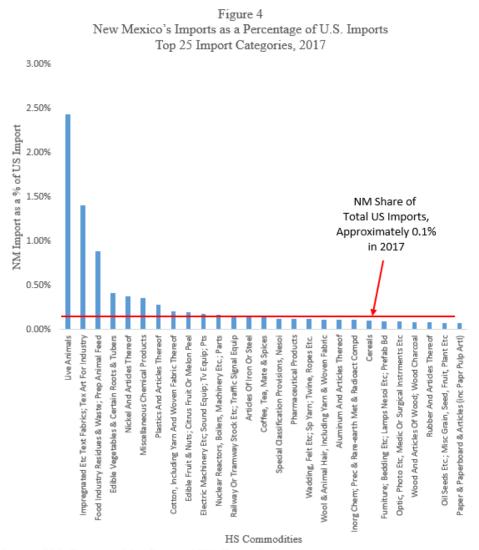
exports. Alternatively, New Mexico made substantial contributions to national exports in categories 93, 04, 88 yet together; these categories were only 8.76 percent of state exports.

Together, New Mexico exports in the top 25 (of 97) categories account for 96.66 percent of state exports. The top five categories account for over 75 percent of New Mexico's exports.

New Mexico Top 25 Exports b	Table 1 by Category and Share	of State Exp	orts, 2017	
HS Code* and Commodity Description	2017 Export Value Current U.S. Dollars	NM Pct. of Total Exports	Cumulative Pct. of NM Imports	NM Pct. of National Exports
85 Electric Machinery Etc; Sound Equip; Tv Equip; Pts	\$1,176,562,725	32.60	32.60	0.67
84 Nuclear Reactors, Boilers, Machinery Etc.; Parts	\$1,058,643,919	29.33	61.92	0.52
90 Optic, Photo Etc., Medic or Surgical Instruments Etc	\$296,757,814	8.22	70.15	0.35
93 Arms and Ammunition; Parts and Accessories Thereof	\$135,839,751	3.76	73.91	2.57
39 Plastics and Articles Thereof	\$103,985,841	2.88	76.79	0.17
88 Aircraft, Spacecraft, And Parts Thereof	\$96,685,249	2.68	79.47	0.07
38 Miscellaneous Chemical Products	\$78,597,512	2.18	81.65	0.28
04 Dairy Prods; Birds Eggs; Honey; Ed Animal Pr Nesoi	\$76,695,250	2.12	83.77	1.71
73 Articles of Iron or Steel	\$69,715,900	1.93	85.70	0.38
08 Edible Fruit & Nuts; Citrus Fruit or Melon Peel	\$51,431,111	1.42	87.13	0.35
48 Paper & Paperboard & Articles (inc Paper Pulp Articles)	\$44,531,863	1.23	88.36	0.28
72 Iron and Steel	\$37,332,431	1.03	89.39	0.23
31 Fertilizers	\$35,204,077	0.98	90.37	0.93
71 Nat Etc Pearls, <u>Prec Etc</u> Stones, <u>Pr Met Etc;</u> Coin	\$34,021,972	0.94	91.31	0.06
74 Copper and Articles Thereof	\$31,641,655	0.88	92.19	0.44
87 Vehicles, Except Railway or Tramway, And Parts <u>Etc</u>	\$24,484,427	0.68	92.87	0.02
35 Albuminoidal Subst; Modified Starch; Glue; Enzymes	\$22,951,722	0.64	93.50	0.64
23 Food Industry Residues & Waste; Prep Animal Feed	\$18,534,402	0.51	94.02	0.19
94 Furniture; Bedding <u>Etc;</u> Lamps <u>Nesoi Etc;</u> Prefab <u>Bd</u>	\$16,163,073	0.45	94.46	0.15
27 Mineral Fuel, Oil Etc.; <u>Bitumin Subst;</u> Mineral Wax	\$15,931,041	0.44	94.91	0.01
52 Cotton, Including Yarn and Woven Fabric Thereof	\$14,436,868	0.40	95.31	0.19
17 Sugars and Sugar Confectionary	\$13,641,023	0.38	95.68	0.67
76 Aluminum and Articles Thereof	\$13,092,916	0.36	96.05	0.11
63 Textile Art <u>Nesoi;</u> Needlecraft Sets; Worn Text Art	\$11,927,318	0.33	96.38	0.56
40 Rubber and Articles Thereof	\$10,394,860	0.29	96.66	0.08

# **New Mexico's Imports**

In 2016, New Mexico imported approximately \$2.2 billion in goods. In aggregate, New Mexico received approximately 0.1 percent of total U.S. imports. However, New Mexico received more than 0.1 percent in several export categories (see Figure 4). Any bar in Figure 4 that extends above the horizontal line at 0.10% indicates that New Mexico is receiving a disproportionally large share of national imports in that category. Bars that don't reach the 0.10% line indicate the opposite.



Source: U.S. Bureau of the Census, USA Trade Online, https://usatrade.census.gov/

	Table 2					
New Mexico Top 25 Imports by Category and Share of State Imports, 2017						
HS Code* and Commodity Description	2017 Import Value Current U.S. Dollars	NM Pct. of Total Imports	Cumulative Pct. Of NM Imports	NM Pct. of National Imports		
85 Electric Machinery Etc; Sound Equip; Tx Equip; Pts	\$620,972,088	27.25	27.25	0.18		
84 Nuclear Reactors, Boilers, Machinery Etc.; Parts	\$571,874,349	25.10	52.35	0.17		
39 Plastics And Articles Thereof	\$144,534,707	6.34	58.69	0.28		
30 Pharmaceutical Products	\$114,013,007	5.00	63.69	0.12		
98 Special Classification Provisions, Nesoi	\$90,325,946	3.96	67.65	0.12		
90 Optic, Photo Etc., Medic Or Surgical Instrments Etc	\$82,369,814	3.61	71.26	0.10		
01 Live Animals	\$68,371,072	3.00	74.26	2.43		
94 Furniture; Bedding Etc; Lamps Nesoi Etc; Prefab Bd	\$60,821,785	2.67	76.93	0.10		
73 Articles Of Iron Or Steel	\$53,285,249	2.34	79.27	0.14		
38 Miscellaneous Chemical Products	\$47,441,653	2.08	81.35	0.35		
07 Edible Vegetables & Certain Roots & Tubers	\$39,560,122	1.74	83.09	0.41		
59 Impregnated Etc Text Fabrics; Tex Art For Industry	\$36,100,061	1.58	84.67	1.40		
08 Edible Fruit & Nuts; Citrus Fruit Or Melon Peel	\$32,624,899	1.43	86.10	0.20		
87 Vehicles, Except Railway Or Tramway, And Parts Etc	\$29,548,008	1.30	87.40	0.01		
23 Food Industry Residues & Waste; Prep Animal Feed	\$25,094,055	1.10	88.50	0.89		
71 Nat Etc Pearls, Prec Etc Stones, Pr Met Etc; Coin	\$25,086,394	1.10	89.60	0.04		
76 Aluminum And Articles Thereof	\$24,584,655	1.08	90.68	0.11		
40 Rubber And Articles Thereof	\$22,314,991	0.98	91.66	0.08		
44 Wood And Articles Of Wood; Wood Charcoal	\$17,162,511	0.75	92.41	0.09		
22 Beverages, Spirits And Vinegar	\$13,536,135	0.59	93.00	0.06		
48 Paper & Paperboard & Articles (inc Paper Pulp Artl)	\$11,981,626	0.53	93.53	0.08		
28 Inorg Chem; Prec & Rare-earth Met & Radioact Compd	\$11,901,977	0.52	94.05	0.11		
09 Coffee, Tea, Mate & Spices	\$11,540,627	0.51	94.56	0.14		
75 Nickel And Articles Thereof	\$8,946,409	0.39	94.95	0.37		
83 Miscellaneous Articles Of Base Metal	\$8,252,486	0.36	95.31	0.07		
*The Harmonized Commodity Description and Coding System (HS code) Source: USA Trade Online and Author Calculations						

Table 2 shows New Mexico's top 25 imports by category for 2017. Like exports, New Mexico's top three import categories represent a large share of the state imports (58.69 percent) although they do not represent a particularly large share of national imports in the same categories. The top 25 import categories represent 95.31 percent of state imports and the top five

import categories represent 67.65 percent of state imports. It is important to note that some of New Mexico's top export categories are also its top import categories, for example, categories 85, 84, and 01. This suggests that some trade in these categories involves importing and reexporting, perhaps with little or no value added in New Mexico.

## **New Mexico Net Exports**

Because New Mexico both imports and exports goods in the same category, looking at New Mexico's exports alone could be misleading. For this reason, it will be useful to identify industries where New Mexico's exports clearly exceed its imports. Table 3 shows the ratio of exports to imports for the state's top 25 export categories in 2017 (96.66 percent of total exports). A ratio of one means that New Mexico's exports in the category exactly equal its imports in the category. A ratio less than one means that New Mexico exports less than it imports and a ratio greater than one shows the opposite. Because there can be substantial year-to-year variation, two averages of the ratios are provided. Column 4 on Table 3, shows the average ratio for 2008-2017, from the Great Recession through the most current annual data available. Column 5 on Table 3 shows the more recent period average ratio based on the years 2014-2017. Categories with export to import ratios of two or more are highlighted in light gray.

New Mexico's top export category in 2017 was HS-85, Electrical Machinery, etc. This category represents 32.6 percent of 2017 state exports and exports were more than twice state imports during both periods. Compare this to the second largest category, HS-84, Nuclear Reactors, etc. In this category, the export-import ratio was well below one for 2008-2017 and only slightly over one for 2014-2017. This suggests that HS-85 exports are likely more important

to the state's economy than are HS 84 exports. Note that the ratios are extremely high in some categories. For example, HS-93, Arms and Ammunition has exports of several hundred times imports.

	Table 3	-		
	25 Exports in 2017 by Imports, 2008-2017 and			
Ratio of Exports to 1	2017 Export Value	NM Pct.		
HS Code* and Commodity Description	Current U.S.  Dollars	of Total Exports	2008-2017	2014-2017
85 Electric Machinery Etc.; Sound Equip; Tv Equip; Pts	\$1,176,562,725	32.60	2.63	2.01
84 Nuclear Reactors, Boilers, Machinery Etc.; Parts	\$1,058,643,919	29.33	0.81	1.05
90 Optic, Photo Etc, Medic or Surgical Instruments Etc	\$296,757,814	8.22	1.39	1.75
93 Arms and Ammunition; Parts and Accessories Thereof	\$135,839,751	3.76	412.65	606.73
39 Plastics and Articles Thereof	\$103,985,841	2.88	1.05	0.83
88 Aircraft, Spacecraft, And Parts Thereof	\$96,685,249	2.68	12.36	8.92
38 Miscellaneous Chemical Products	\$78,597,512	2.18	1.78	1.89
04 Dairy Prods; Birds Eggs; Honey; Ed Animal Pr Nesoi	\$76,695,250	2.12	3202.39	2870.67
73 Articles of Iron or Steel	\$69,715,900	1.93	1.49	1.32
08 Edible Fruit & Nuts; Citrus Fruit or Melon Peel	\$51,431,111	1.42	0.36	0.49
48 Paper & Paperboard & Articles (inc Paper Pulp Articles)	\$44,531,863	1.23	2.78	2.01
72 Iron and Steel	\$37,332,431	1.03	7.99	14.97
31 Fertilizers	\$35,204,077	0.98	104.92	77.97
71 Nat Etc Pearls, Prec Etc Stones, Pr Met Etc; Coin	\$34,021,972	0.94	1.38	0.89
74 Copper and Articles Thereof	\$31,641,655	0.88	5.59	6.05
87 Vehicles, Except Railway or Tramway, And Parts Etc	\$24,484,427	0.68	1.70	2.00
35 Albuminoidal Subst; Modified Starch; Glue; Enzymes	\$22,951,722	0.64	52.06	37.67
23 Food Industry Residues & Waste; Prep Animal Feed	\$18,534,402	0.51	2.48	0.81
94 Furniture; Bedding Etc; Lamps Nesoi Etc; Prefab Bd	\$16,163,073	0.45	0.37	0.44
27 Mineral Fuel, Oil Etc.; <u>Bitumin Subst;</u> Mineral Wax	\$15,931,041	0.44	15.74	13.69
52 Cotton, Including Yarn and Woven Fabric Thereof	\$14,436,868	0.40	11.91	7.57
17 Sugars and Sugar Confectionary	\$13,641,023	0.38	63.69	41.20
76 Aluminum and Articles Thereof	\$13,092,916	0.36	2.08	2.35
63 Textile Art Nesoj; Needlecraft Sets; Worn Text Art	\$11,927,318	0.33	3.93	2.32
40 Rubber and Articles Thereof	\$10,394,860	0.29	0.78	0.79
*The Harmonized Commodity Description and Co Source: USA Trade Online and Author Calculation		e)		

# **Summary**

The information provided in this report indicates several things.

- 1. Aside from the volatility surrounding the Great Recession of 2007-2009, New Mexico shows a generally increasing trend in exports as a share of gross domestic product and a steady to slightly decreasing import share of gross domestic product (Figure 1).
- 2. Compared to its gross domestic product and population, New Mexico contributes less than its share to national exports and imports (Figure 2).
- 3. In 2017, New Mexico contributed about 0.25 percent of the nation's exports and about 0.1 percent of the nation's imports. In several categories, New Mexico's contribution was substantially above these values (Figures 3 and 4).
- 4. A high percentage of New Mexico's exports and imports fall into just a few categories (Tables 1 and 2).
- 5. In some of New Mexico's top 25 export categories, imports in the same category are substantial suggesting (but not proving) that some New Mexico exports represent imports and re-exports of goods, perhaps with little valued added begin created in New Mexico.
- 6. Many of New Mexico's top 25 export categories show exports substantially larger than imports suggesting that New Mexico adds substantial value within these categories.

## **Conclusions**

In economic development circles, exports tend to receive more attention than imports.

This is because exports represent injections of spending into the state economy while imports represent spending leakages. However, imports can be important too. All states have production

limitations, and imports can improve residents' lives by adding variety in consumption plus some imported goods are intermediate goods, inputs into local production. Thus, openness to trade, both imports, and exports, can have positive impacts on a state's economy and its residents.

However, if the purpose is to create jobs within the state, encouraging production in industries where exports exceed imports seems logical.

While New Mexico is not currently a big player in international trade, exports or imports, there is evidence that the state is slowly increasing its international activity and is quite successful in some export categories. If state policymakers plan to encourage further growth in exports, it may be wise to look for further opportunities within the industries where the state's net exports are already positive, or nearly so. Table 3 provides some guidance in this regard so a first step in identifying promising export industries would be to look for opportunities within the broad HS categories shown above. Having done this, one could look at the sub-industries<sup>17</sup> within each broad category and work with officials or others with an intimate knowledge of New Mexico's business patterns to identify sub-industries where the state has the potential to increase production in industries promising export success.

1,

<sup>&</sup>lt;sup>17</sup> Detailed HS codes can be found at Foreign Trade Online, <a href="https://www.foreign-trade.com/reference/hscode.htm">https://www.foreign-trade.com/reference/hscode.htm</a>.

# Appendix 1

United States Census Bureau, Guide to Foreign Trade Statistics, Section 13 (<a href="https://www.census.gov/foreign-trade/guide/sec2.html#state\_limitation">https://www.census.gov/foreign-trade/guide/sec2.html#state\_limitation</a>, copied below.)

## 13. STATE / METROPOLITAN AREA DATA SERIES

### Origin of Movement (OM) State - Based on Origin State

In 1985, a new field indicating the state where the export journey begins, was added. This field allowed the compilation of the State of Origin of Movement Series. The OM series based on origin state, available since 1987, provides export statistics based on the state from which the merchandise starts its journey to the port of export; that is, the data reflect the transportation origin of exports.

## Origin of Movement (OM) - ZIP Code Based

The ZIP Code of the United States Principal Party in Interest (USPPI), the party in the United States that receives the primary benefit monetary or otherwise from the shipment, was redefined in 2004 to indicate the origin of movement of goods. It does not necessarily represent the location of the USPPI. Due to increased electronic reporting in the AES, the validity of the reported ZIP Code has improved since 2004.

Effective with January 2006 statistics, a new OM State series - based on ZIP code, is available on our website.

## State of Destination (SD) Series

Also, in the mid-1980s state data based on the import state of destination were added. However, in 1988, release of the data on import state of destination was discontinued due to quality concerns. Since then changes to the import reporting requirements along with growth of electronic reporting and a better understanding of the data's limitations has made it possible to bring back the import state of destination series.

Effective with January 2010 statistics, this new SD series became available. A new supplement exhibit was added to the FT900: U.S. International Trade in Goods and Services. In addition, the following data products were produced: Import state data by 6-digit Harmonized System (HS) and Import state data 4-digit North American Industry Classification System (NAICS). Historical data tables and products are for monthly data back to January 2008.

This new series is based upon the U.S. State of Destination Code. This is defined as the U.S. state, U.S. territory or U.S. possession where the merchandise is destined, as known at the time of entry summary filing. If the contents of the shipment are destined to more than one state, territory, or possession, or if the entry summary represents a consolidated shipment, report the state of destination with the greatest aggregate value. If in either case, this information is unknown, the state of the ultimate consignee, or the state where the entry is filed, in that order, should be reported. However, before either of these alternatives is used, a good faith effort should be made by the entry filer to ascertain the state where the imported merchandise will be delivered. In all cases, the state code reported should be derived from the standard postal two-letter state or territory abbreviation. For shipments into FTZ's, the import state represents the location of the zone.

#### Limitations

In certain cases, the origin of movement is not the transportation origin. Whenever shipments are consolidated, the state of origin of movement will reflect the consolidate point. This effect is particularly noticeable for agricultural shipments. Intermediaries located in inland states ship agricultural commodities down the Mississippi River for export from the port of New Orleans. In this case, they would report Louisiana, the state where the port of New Orleans is located, as the state of origin of movement.

The primary impact is on the state distribution of nonmanufactured exports, which are generally exported by intermediaries. The most visible result is a tendency to understate exports from some agricultural states and to overstate exports from states like Louisiana that have ports that handle high-value shipments of farm products.

The series DOES NOT represent the production origin of U.S. export merchandise. In some cases considerable manufactured exports are attributed to states that are known to have little manufacturing capability. One reason is that commodities produced by out-of-state suppliers can be shipped from in-state distribution centers. Another factor is shipments of manufactured commodities from in-state warehouses and other distribution centers that are arranged by exporters located out-of-state. In both cases, manufactured exports from the non-industrial state are magnified in the OM series.

In certain cases, the state of destination may not reflect the final location for which the imported goods are destined. Rather for these shipments, the state of destination, as known at the time the entry documentation is filed, may reflect an intermediary, storage or distribution point. From there, these shipments may later be distributed to another location in another state as the ultimate destination. For example, a consolidated shipment of many automobiles may be shipped by the importing company to a distribution point in one state with the intent of later shipping the automobiles to numerous states for final sale.

Data users should keep in mind that import and export transactions are compiled with the state information recorded at time the goods enter or leave the United States. This timing produces reporting limitations as outlined in the previous paragraphs, namely that export origin of movement may not always imply production origin and import destination may not always reflect where the goods are consumed or used. In addition the trade data do not provide information to track or monitor interstate flows. Given these conditions, the concept of calculating trade balances at the state level, using destination and origin state data is problematic and may produce unintended results.

As a result, without some more in depth knowledge of individual state trade patterns available to the user, the Census Bureau would discourage using these state data to calculate state trade balances.

## **Metropolitan Export Data**

All Metropolitan area data in the U.S. Exports by Metropolitan Area report were tabulated by matching the five-digit ZIP Codes from the EEI obtained from the AES with the five digit ZIP Codes specified for each Metropolitan area using concordance files from the Census Bureau Geography Division and the United States Postal Service. Since the boundaries of official Metropolitan areas are county-based, data users can readily determine the coverage of export statistics for any given area by referring to published maps or other widely available references. It is not possible here to provide a comprehensive listing of counties for the many metropolitan areas covered by this publication. Please see www.omb.gov for more information.

For the metropolitan areas for which it is possible to release export data, disclosure regulations still limit or prevent the release of much detail on foreign markets and the industry composition of exports. Manufactured product detail, even for the largest exporting Metropolitan areas, is limited to broad three-digit NAICS (North American Industry Classification System) categories. Information on market destinations, while generally more complete than data on product composition, is also subject to important disclosure-induced limitations.