



DEPARTMENT OF
ECOLOGY
State of Washington

Small Business Economic Impact Statement

Supplemental Rule Proposal

Chapter 173-334 WAC

Children's Safe Products – Reporting Rule

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Small Business Economic Impact Statement Supplemental Rule Proposal

**Chapter 173-334 WAC
Children's Safe Products – Reporting Rule**

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Table of Contents

	<u>Page</u>
Executive Summary	1
Section 1: Background.....	3
Pilot phase.....	4
Baseline.....	4
Changes under Ecology’s proposed rule.....	5
Analytic exemptions	6
Section 2: Analysis of Compliance Costs for Washington Businesses	7
Analytic approach	7
Section 3: Quantification of Costs and Ratios	9
Quantified costs of Ecology’s proposed rule	9
Section 4: Actions Taken to Reduce the Impact of the Rule on Small Business.....	13
Section 5: The Involvement of Small Business in the Development of the Proposed Rule Amendments	15
Section 6: The SIC Codes of Impacted Industries	17
Section 7: Impacts on Jobs.....	19

List of Tables

Table 1: Trade Associations and Likely Testing Facilities Representing or Related to Small Businesses Covered by the Proposed Rule	15
Table 2: OFM Input-Output Model Results: Employment Impacts of the Proposed Rule	19

Executive Summary

The Washington State Department of Ecology (Ecology) first proposed the new chapter called the Children's Safe Products Rule (Chapter 173-334 WAC) based on the authority of the Children's Safe Products Act (RCW 70.240) in October 2010. Ecology revised the October 2010 version of the proposed rule based on comments from businesses and the public and is filing a supplemental proposal to allow another opportunity for public comment on the revised proposed rule.

The Children's Safe Products Act (CSPA) law requires Ecology to identify high priority chemicals that are of high concern for children (CHCC). This includes chemicals that have been:

- Found through biomonitoring studies that demonstrate the presence of the chemical in:
 - Human umbilical cord blood.
 - Human breast milk.
 - Human urine.
 - Other bodily tissues or fluids.
- Found through sampling and analysis to be present in:
 - Household dust.
 - Indoor air.
 - Drinking water.
 - Elsewhere in the home environment.
- Added to, or present in, a consumer product used or present in the home.

Ecology estimated the direct compliance costs of the proposed rule, over 20 years, and assuming product testing (the most expensive option) is used, to be between \$22.4 million and \$34.8 million.

Ecology analyzed the degree of disproportionate impact of the proposed rule on small businesses (those with 50 or fewer employees; versus the largest ten percent of businesses in likely impacted industries), and has concluded that a disproportionate impact is likely. But it should be emphasized that only businesses falling within the definition of a manufacturer as defined in the law would be required to report. That would apply to retailers only if they are the importer in the United States and no other party reports on their behalf.

Based on the statutory authority created by the law, Ecology could have done the following:

- Required reporting for hundreds of possible chemicals of high concern for children if they are added intentionally to a children's product.
- Based the reporting trigger on detection limit.
- Implemented the reporting requirement for all products and all manufacturers six months from the date the rule was adopted.
- Required the reporting to be done at the individual stock-keeping unit (SKU) number.

Instead, Ecology chose options, within the scope of the authorizing statute, to reduce this disproportionate burden, including:

- Phasing in timelines for first reporting based, in-part, on business size. The first date for any reporting for those manufacturers with gross sales less than 100 thousand dollars is 5 years from the date the rule is adopted. And these initial reports are only for those products intended most likely to cause harm because they are designed to be placed in the child's mouth or rubbed on the child's skin, or are mouthable products intended for use by children 3 and under.
- Requiring reporting at the product category level based on the GS1 Global Product Classification (GPC) standard. This standard is already in use globally and provides a standardized system for classifying consumer products. As a result, the reporting burden is reduced. A manufacturer that produces 10 individual products that fall into 2 product categories will have 80% fewer reports to make if all else is equal. Providing multiple examples of how a manufacturer can determine what if any chemicals of high concern for children are in their products. Testing is not required by the law or the rule.

Ecology estimated that the costs and payments created by the proposed rule will likely reduce employment in the state by up to 0.5 positions over 20 years, across the state economy, for all sizes of business, through a redistribution of jobs across industries resulting from respending of wages in the economy. This estimated job impact accounts for the flow of compliance expenditures through the economy as earnings, wages, and further spending by those receiving transfers in the form of payments or wages resulting from actions taken to comply with the proposed rule.

Section 1: Background

Ecology is filing a supplemental proposal of the Children's Safe Products - Reporting Rule (Chapter 173-334 WAC) as part of the rulemaking it is allowed to perform by law in Chapter 70.240 RCW (Children's Safe Products Act; CSPA). This law was passed in 2008, and specifically allows Ecology to, "adopt rules as necessary for the purpose of implementing, administering, and enforcing this chapter."

Based on research and analysis required by the Regulatory Fairness Act – RCW 19.85.070 – Ecology determined the proposed rule has a disproportionate impact on small business (those employing 50 or fewer employees). Therefore, Ecology included cost-minimizing features in the rule where it is legal and feasible to do so.

The CSPA law requires Ecology to identify high priority chemicals that are of high concern for children. This includes chemicals that have been:

- Found through biomonitoring studies that demonstrate the presence of the chemical in:
 - Human umbilical cord blood.
 - Human breast milk.
 - Human urine.
 - Other bodily tissues or fluids.
- Found through sampling and analysis to be present in:
 - Household dust.
 - Indoor air.
 - Drinking water.
 - Elsewhere in the home environment.
- Added to or present in a consumer product used or present in the home.

In July 2009, Ecology published a report (Ecology publication number 09-07-014) describing the work done by Ecology and the state Department of Health (DOH) to:

- Comply with CSPA requirements.
- Address concerns raised by stakeholders.
- Implement direction from the Governor.¹

This included discussion of the process the agencies used to determine chemicals of concern proposed as part of this rulemaking.

The majority of the CSPA law delineates requirements for manufacturers and sellers of children's products, including:

¹ The Governor expressed that Ecology and DOH should rely on safety testing conducted in the European Union and California, to the extent they provide a reasonable assurance of safety, in order to help establish a degree of consistency for the industry.

- Prohibition on the manufacturing and sale of children's products containing lead, cadmium, or phthalates above the limits established in the law. At this time the agency believes s federal programs have substantially pre-empted our agency for the enforcement of these limits. Therefore, the proposed rule only addresses the notification requirements.
- Notification to Ecology that a children’s product contains an intentionally added high priority chemical of high concern for children (CHCC).
- Notification to Ecology that a children’s product is contaminated with a [not intentionally added] CHCC at a level exceeding 100 ppm, unless the manufacturer determines that the presence of any CHCC has been minimized through use of an appropriate due diligence program.
- Actions that must be taken by – and penalties for – manufacturers in violation of the law.

Pilot phase

Ecology conducted a stakeholder process and pilot rule phase to determine the content of the proposed rule. The pilot phase and the stakeholder process helped Ecology:

- Identify possible compliance difficulties for the regulated community without diminishing the effectiveness of the rule.
- Get other input from the public, business, environmental interests, and health interests on the rulemaking.

Baseline

As there is no current state-level CSPA or similar rule, there is technically no baseline rule for comparison. There are no existing federal or Washington State requirements intended explicitly for children’s products as under this rule. There are, however, a number of partially overlapping requirements and mitigating factors, including:²

- **Washington’s toxics in packaging law (Chapter 70.95G RCW – Toxics in Packaging).** This law requires manufacturers to have practices that may include contract specifications, quality control mechanisms, and/or testing protocols to determine the amount of a chemical in product materials.
- **Federal Consumer Product Safety Improvement Act of 2008 (CPSIA).** This law requires manufacturers to have a process in place to test their products for some chemicals. Also some chemicals are restricted in cosmetic products under Food and Drug Administration (FDA) regulations.
- **Interstate toxics rules allowing manufacturers** to employ economies of scale in producing a homogeneous product across multiple markets:
 - Manufacturers who sell children’s products in Maine are subject to similar reporting requirements for priority chemicals (Me. Rev. Stat. Ann. tit. 38, §§ 1691-1699-B). The State of California has several reporting requirements

² See Appendix B for a full listing of existing regulations that will likely mitigate the compliance costs created by the proposed rule.

applicable to manufacturers of children's products, including required reporting on use of specific ingredients in cosmetics (Cal. Health & Safety Code §§ 111791-111793.5).

- Manufacturers who do business in California are also required to label products if exposure to certain chemicals from those products exceeds levels known to cause cancer or reproductive harm (California Proposition 65).
- The European Union, for instance, enforces chemical limits in children's products through its Toy Directive (88/378/EEC) and Cosmetics Directive (76/768/EEC). Many companies have pre-existing restricted substance lists (RSLs) to describe and codify procedures to meet chemical limits in a variety of product lines for sale in various countries.

See Appendix B in the Cost Benefit Analysis and Least Burdensome Analysis (<http://www.ecy.wa.gov/biblio/1107009.html>) for a full listing of existing interstate and international rules that will likely mitigate the compliance costs created by the proposed rule.

These factors will likely mitigate some of the compliance costs for a subset of businesses covered by the proposed rule.

The baseline also includes the explicit provisions of the authorizing statute. These are excepted from this analysis. For further discussion, see Analytic Exceptions, below in this chapter.

Changes under Ecology's proposed rule

The revised proposed rule sets out requirements for:

- Manufacturers or importers to notify Ecology on an annual basis about:
 - All children's products they manufacture or import for sale in Washington State that contain intentionally added Chemicals of High Concern to Children (CHCCs). The notice must include information about the firm, the category of the product, and the amount (in categories) of CHCC in the product.
 - All children's products they manufacture or import for sale in Washington contaminated with greater than 100 ppm of CHCCs, or be able to demonstrate that the presence of any CHCC has been minimized through use of an appropriate due diligence program.
- The timing of first reporting phased in according to the product tier and size of manufacturer. Product tiers (1 – 4) represent the level of contact a child is likely to experience with various types of products. Product categories are based on levels of the GS1 Global Product Classification (GPC) standard- an industry standard for product classification.
- Enforcement processes and penalties.

Analytic exemptions

Ecology excluded from analysis the following elements, explicitly dictated or defined in the Children's Safe Products statute (Chapter 70.240 RCW):

- Definitions, including:
 - Children's cosmetics
 - Children's jewelry
 - Children's product
 - Cosmetics
 - High priority chemical
 - Manufacturer
 - Phthalates
 - Toy
 - Trade association
 - Very bioaccumulative
 - Very persistent
- Prohibition of the manufacturing and sale of children's products containing lead, cadmium, or phthalates.
- Explicit reporting requirements, including:
 - The name of the chemical used or produced and its chemical abstracts service registry number.
 - A brief description of the product or the product component containing the substance.
 - A description of the function of the chemical in the product.
 - The amount of the chemical used in each unit of the product or product component. The amount may be reported in ranges, rather than the exact amount.
 - The name and address of the manufacturer and the name, address, and phone number of a contact person for the manufacturer.
 - Any other information the manufacturer deems relevant to the appropriate use of the product.
- Notification of sellers and distributors
- Civil penalty

Section 2: Analysis of Compliance Costs for Washington Businesses

Analytic approach

Ecology analyzed the costs and benefits of the proposed rule qualitatively, and quantified the impacts where possible. Ecology only analyzed those aspects of the proposed rule that were left to Ecology's discretion in the rulemaking process. In the case of the proposed rule, many of its elements were dictated explicitly by law, as is the general idea of manufacturer reporting.

Ecology only has particular discretion on reporting ranges and the phasing-in of first reporting time. Every chemical on the reporting list meets the standards set by the authorizing law. Ecology chose 66 chemicals from an initial list of two thousand prospective chemicals. Ecology believes the content of the list of CHCCs is sufficiently dictated by statute, so that the chemicals on the final list were not entirely left to Ecology's discretion. However, Ecology also believes it is to the public and state's advantage to present the estimated costs of testing and reporting, to provide additional information to manufacturers and the public regarding compliance with the authorizing statute.

Section 3: Quantification of Costs and Ratios

Quantified costs of Ecology's proposed rule

Ecology estimated the quantitative costs of complying with the proposed rule, including those elements dictated by the authorizing law, based on:

- The number of businesses expected to comply.
- The number of chemicals that require testing or business practice or business supply chain knowledge.
- The estimated costs of testing or business practices and reporting.

These estimates are conservatively high, and do not account for economies of scale, non-reporters, or interstate/international regulatory consistency. Moreover, as a means of estimating CHCC content and reporting into a range, testing is not specifically required by the proposed rule or the law. Other options for gauging CHCC content include supply-chain knowledge and knowledge of the manufacturing process.

Ecology assumed that known businesses operating in Washington State manufacturing or importing toys and games, children's clothing, and baby supplies and accessories may have to comply with the law. These businesses fall into multiple NAICS³ categories, including:

- 3399 (Other Miscellaneous Manufacturing; includes toys, games, baby products)
- 4243 (Apparel, Piece Goods, and Notions Merchant Wholesalers; includes children's clothing)
- 3256 (Soap, Cleaning Compound, and Toilet Preparation Manufacturing; includes baby care)
- 3371 (Household and Institutional Furniture and Kitchen Cabinet Manufacturing; includes baby furniture)

Based on Washington State Employment Security Department information, there are currently about 276 such businesses in the state. Ecology was also able to categorize most of these businesses roughly into size categories by employment and, to a lesser degree, annual earnings. Ecology believes these businesses represent the majority of businesses operating in Washington State that will need to comply with the proposed rule. Ecology could not confidently determine the degree to which many of these businesses were:

- Direct producers.
- Assemblers of parts manufactured by other firms.
- Importers.
- Distributors.

³ North American Industry Classification System (see <http://www.census.gov/eos/www/naics/index.html>)

Some retailers who act as importers or distributors for products made by companies with no presence in the United States may also need to report, but Ecology assumes this number will be minimal.

To maintain the most conservative estimate of net benefit (by overestimating costs to compensate for uncertainty), Ecology assumed all of these businesses would behave as though they had little or no process knowledge—as is likely for importers or distributors only. In reality, the majority of businesses will have some (if not complete) control or knowledge of the manufacturing process and content of their children’s products. This is achieved through direct control or contracting. Ecology also expects that many businesses will already have contracted process knowledge to mitigate liability in the event of product recall.

Therefore, Ecology assumed that any given business would maintain at least existing business practices and standards, and that a business might choose to test for a maximum of ten CHCCs. This is likely an overestimate of costs, but as discussed in the above paragraph, Ecology chose the most cautious approach to dealing with the limited knowledge of the scope of each business’s process and chemical knowledge.

Based on surveys of current testing costs, Ecology estimated that this cost of knowing the level of CHCC content in children’s products for some manufacturers would be in the range of approximately \$1 thousand – \$10 thousand per year for all the CHCCs in their products. This value was based on a range of existing, approved analytical methods. It is possible that new test methods could need to be developed. Ecology multiplied these values to calculate a total conservatively high⁴ testing cost of the proposed rule and CSPA law of \$2.8 million – \$27.6 million the first year, followed by \$2.8 million annually in subsequent years, when testing has been established if necessary. This is if all covered businesses perform testing.

Sensitivity analysis

Those businesses that have directly or indirectly sufficient information about the manufacturing process to know the intentionally added chemicals, and the quality assurance to minimize contamination with other chemicals will not need to test. This is more likely for manufacturers than for importers or distributors. If half of the covered businesses test, or if all businesses must test for only five chemicals because they don’t have sufficient process knowledge or exhibit due diligence, then costs fall to \$1.4 million – \$13.8 million the first year, followed by \$1.4 million in subsequent years.

It is also unlikely that the proposed rule will require the creation of new tests for all possible unknown contaminants, for all covered businesses. If Ecology assumes that no new tests will need to be created for contaminants at or above a concentration of 100 ppm, then the costs fall to \$2.8 million annually.

The above calculations generated at total likely present value (PV)⁵ cost of compliance, over 20 years, with the combined CSPA rule and CSPA law, of \$44.7 million to \$69.5 million.

⁴ Assuming all covered businesses must test to determine whether and what to report.

⁵ Accounting for expected inflation, using US Treasury I-Bonds (see http://www.treasurydirect.gov/indiv/research/indepth/ibonds/res_ibonds_iratesandterms.htm)

Requirements set forward in the latter of these, the CSPA law, are exempt from this analysis, but Ecology included this total cost in this analysis because the contribution of Ecology reducing the possible list of CHCCs (to only those meeting the requirements set forth in the authorizing law) was not separable from the overall impacts of the law.

If only half of businesses need to perform testing, only five (rather than ten) chemicals require testing for contamination, on average, then the PV falls to \$22.4 million – \$34.8 million.

If no new testing methods need to be created for the 100 ppm level, then the PV falls to \$44.7 million in the all tests for all businesses scenario.

Overall, Ecology considered the central range of these scenarios as a reasonable estimate of overall costs: \$22.4 million – \$34.8 million.

The costs estimated by Ecology work under the assumption that costs are for a typical business, and are constant across them, on average. Obviously, the costs per business range of \$10 thousand to \$100 thousand divided by smaller numbers of employees will be larger, as it will be divided by each \$100 of sales recorded (for which records are much more sparse). For 50 employees or fewer, this is at least \$200 – \$2 thousand per employee. For the largest 10 percent of likely affected businesses, this is at most 9 – 90 cents per employee.

Section 4: Actions Taken to Reduce the Impact of the Rule on Small Business

Based on the statutory authority created by the law, Ecology could have done the following:

- Required reporting for hundreds of CHHCs.
- Based the reporting trigger on detection limit.
- Implemented the reporting requirement for all products and all manufacturers six months from the date the rule was adopted.
- Required the reporting to be done at the individual SKU number.

Instead Ecology chose options, within the scope of the authorizing statute, to reduce this disproportionate burden, including:

- Phasing in timelines for first reporting based, in-part, on business size. The first date for any reporting for those manufactures with gross sales in the less than 100 thousand dollars is 5 years from the date the rule is adopted. And these initial reports are only for those products intended to be stuck in the child's mouth, rubbed on the child's skin, and all products for children 3 and under.
- Requiring reporting at the product category level based on the GS1 Global Product Classification (GPC) standard. This standard is already in use globally and provides a standardized system for classifying consumer products. As a result the reporting burden is reduced. A manufacturer that produces 10 individual products that fall into 2 product categories will have 80% fewer reports to make if all else is equal.
- Providing multiple examples of how a manufacture can determine what if any CHHCs are in their products. Testing is not required by the law or the rule.
- Allowing multiple courses for determining CHCC content, rather than requiring only testing.
- Requiring reporting of contaminants in concentrations of 100ppm or higher, or demonstration of sufficient due diligence in production to minimize contaminant content.

Section 5: The Involvement of Small Business in the Development of the Proposed Rule Amendments

Advisory group meetings included representatives from Teaching Toys and Books, and from Find It Games. Small business industry groups were also represented.

Multiple attempts were made to involve small business in the pilot and advisory group phases but the little actual input was provided. One Washington small businesses said they were willing to participate on the advisory group but after multiple efforts to get their input, none was provided. Another small business joined the pilot phase but they also did not provide any input. We assume that this was due to lack of resources. As a result, Ecology relied upon input from trade organizations to represent concerns specific to small businesses, to represent concerns specific to small businesses. Industry associations include:

- Toy Industry Association.
- Juvenile Products Manufacturers Association.
- American Apparel and Footwear Association.
- Others.

Ecology established a listserv (which has over 200 members) to provide the public and small businesses, among others, with regular updates and information related to the proposed rule. Also a press release and focus sheet were issued at the start of the pilot phase.

Table 1: Trade Associations and Likely Testing Facilities Representing or Related to Small Businesses Covered by the Proposed Rule

Trade Associations	Chemical Companies, Consultants and Testing Labs		
American Apparel & Footwear Association	AkzoNobel	Eastman	Perkins Coie
American Chemistry Council	Antheil Maslow & MacMinn, LLP	Exponent	RegNet
American Forest & Paper Association	Arnold & Porter LLP	Foresite Systems	SGS
Apparel and Footwear International RSL Management Group	Brush Wellman Inc.	ICQ	Stateside Associates
Association of Washington Business	Bureau Veritas	Insight Labs	
Fashion Jewelry and Accessories Trade Association	Cascadia Consulting Group	Intertek	
Grocery Manufacturers Association	Cascadia Law Group PLLC	Keller and Heckman LLP	
Juvenile Products Manufacturers Association, Inc.	ChemADVISOR	KSE FOCUS	
Personal Care Products Council	Compliance & Risks	Lab/Cor Materials, LLC	
Toy Industry Association™, Inc.	Consumer Testing Laboratories	MultiState Associates Inc.	
Washington Retail Association	Decernis	NVL Laboratories, Inc.	

Section 6: The SIC Codes of Impacted Industries

Ecology assumed that businesses operating in Washington State manufacturing or importing toys and games, children's clothing, and baby supplies and accessories may have to comply with the law. These businesses fall into multiple NAICS⁶ categories, including:

- 3399 (Other Miscellaneous Manufacturing; includes toys, games, baby products),
- 4243 (Apparel, Piece Goods, and Notions Merchant Wholesalers; includes children's clothing),
- 3256 (Soap, Cleaning Compound, and Toilet Preparation Manufacturing; includes baby care), and
- 3371 (Household and Institutional Furniture and Kitchen Cabinet Manufacturing; includes baby furniture).

Based on Washington State Employment Security Department information, there are currently about 276 such businesses in the state. Ecology was also able to categorize most of these businesses roughly into size categories by employment and, to a lesser degree, annual earnings. Ecology believes these businesses represent the majority of children's product businesses operating in Washington State that will need to comply with the proposed rule.

⁶ North American Industry Classification System (see <http://www.census.gov/eos/www/naics/index.html>)

Section 7: Impacts on Jobs

Ecology used the Washington State Office of Financial Management’s 2002 Washington Input-Output Model (OFM-IO) to estimate the proposed rule’s first-round impact on jobs across the state. This methodology estimates the impact of reductions or increases in spending in certain sectors of the state economy flow through to purchases, suppliers, and demand for other goods. Compliance costs incurred by an industry, or industries, are entered in the OFM-IO model as decreases in spending and investment.

Ecology calculated that between approximately zero and 0.5 jobs are likely to be permanently lost under the proposed rule. This result accounts for the labor income earned during efforts to research and report CHCC content. That income is respent by earners in the economy, providing income for other industries through retail purchases, wholesale, and so forth. Where jobs might be lost in the industries incurring additional process or testing expenditures, that money does not disappear, but rather is respent in the economy. The results of the I-O model indicate a redistribution of jobs across industries, as shown in the table below.

Table 2: OFM Input-Output Model Results: Employment Impacts of the Proposed Rule

INDUSTRY	EMPLOYMENT IMPACT	INDUSTRY	EMPLOYMENT IMPACT
1. Crop Production	0.82	26. Furniture Product Manufacturing	-18.54
2. Animal Production	1.38	27. Other Manufacturing	-88.80
3. Forestry and Logging	-0.48	28. Wholesale	-38.58
4. Fishing, Hunting, and Trapping	0.20	29. Retail	38.05
5. Mining	0.08	30. Air Transportation	0.48
6. Electric Utilities	0.43	31. Water Transportation	0.28
7. Gas Utilities	0.10	32. Truck Transportation	0.25
8. Other Utilities	0.31	33. Other Transportation/Postal Offices	1.08
9. Construction	0.20	34. Support Activities for Storage, Transportation and Warehousing	-0.04
10. Food, Beverage and Tobacco Manufacturing	1.46	35. Software Publishers & Internet Service Providers	0.03
11. Textiles and Apparel Mills	-0.13	36. Telecommunications	2.36
12. Wood Product Manufacturing	-1.12	37. Other Information	2.81
13. Paper Manufacturing	-0.17	38. Credit Intermediation and Related Activities	3.78
14. Printing and Related Activities	0.20	39. Other Finance and Insurance	3.31
15. Petroleum and Coal Products Manufacturing	0.06	40. Real Estate and Rental and Leasing	7.49
16. Chemical Manufacturing	-2.31	41. Legal /Accounting and Bookkeeping /Management Services	-1.21
17. Nonmetallic Mineral Products Manufacturing	-0.16	42. Architectural, Engineering, and Computing Services	0.29
18. Primary Metal Manufacturing	-0.20	43. Educational Services	5.62

INDUSTRY	EMPLOYMENT IMPACT	INDUSTRY	EMPLOYMENT IMPACT
19. Fabricated Metals Manufacturing	-0.406066466	44. Ambulatory Health Care Services	13.60538787
20. Machinery Manufacturing	-0.090763608	45. Hospitals	8.380215879
21. Computer and Electronic Product Manufacturing	-0.071740411	46. Nursing and Residential Care Facilities, Social Assistance	14.89128539
22. Electrical Equipment Manufacturing	-0.005694654	47. Arts, Recreation, and Accommodation	7.011931267
23. Aircraft and Parts Manufacturing	0.00050651	48. Food Services and Drinking Places	24.7220975
24. Ship and Boat Building	0.099552202	49. Administrative/Employment Support Services	1.578830241
25. Other Transportation Equipment Manufacturing	0.020661761	50. Waste Management/Other, and Agriculture Services	11.52590511
Total			0.55