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# U.S. Foreign-Trade Zones: Current Issues

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Mary Jane Bolle
Specialist in International Trade
Foreign Affairs, Defense, and Trade Division

## ABSTRACT

This report provides an overview of the U.S. foreign-trade zone system which has evolved under the U.S. Foreign-Trade Zones Act of 1934 [P.L. 73-397, 19 U.S.C. 81(a)-81(u)]. The report covers what zones are and how they function, the history of the U.S. zone system, how the zone system has evolved from its original intent, and policy issues and legislative issues relating to zones. Twelve tables and figures provide a list of zones and subzones by state, and information on zone or subzone application, cost savings available to zone users, winners and losers from zone use, and major zone legislation in the 105th and 106th Congresses. While this report mentions specific bills, it is not intended as a bill-tracking device. It will be updated periodically, as needed.

# U.S. Foreign-Trade Zones: Current Issues

## Summary

*Foreign-trade zones* are the U.S. version of *free trade zones* scattered around the world. Free trade zones are geographic areas which primarily facilitate economic development, and *co-production* — the joint production of a single good through the efforts of workers in two or more countries. All zones are geographic areas which are physically located *inside* the boundaries of the country, but treated as if they were located *outside* the country for customs purposes. Thus, for goods or materials which are imported, processed, and later re-exported, no tariffs are payable and customs procedures are streamlined.

The 235 U.S. zones are among nearly 850 zones world-wide, but differ from them in two major ways. First, two-thirds of the world's zones are in developing countries, producing primarily for *export*, while U.S. zones produce primarily for *import*. Second, whereas many foreign zones are exempt from customs oversight, taxes, and regulations, U.S. zones are subject to customs control as well as most other federal, state and local laws and taxes.

Most goods enter the United States through customs at the port of entry, and then travel to their ultimate destination. Imports which are not yet complete, needed, or allowed to enter the United States (for quota reasons, for example) after being unloaded at ports of entry, may be taken to a nearby foreign-trade *general purpose zone* (for warehousing or further processing) or to a *special purpose subzone* (a manufacturing site which is separate from but linked to a zone.)

The system of U.S. foreign-trade zones has evolved greatly over its 65-year history since it was set up by the U.S. Foreign-Trade Zones (FTZ) Act in 1934 [P.L. 73-397, 19 U.S.C. 81(a)-81(u)]. Envisioned by some as an engine of export growth, it has become largely a system for avoiding *inverted tariff structures* on imports (higher duties on components than on finished products.)

Policy questions relating to zones today are similar to those of a decade ago; however, the answers are different, largely because of the evolution of the U.S. and world economies. Issues today are: Is the Act fulfilling its original intent? (No. The intent has evolved.) Have U.S. foreign-trade zones helped or hurt U.S. workers? (The question has been eclipsed by the perceived effects of NAFTA and other trade influences). Do U.S. foreign-trade zones set U.S. trade policy by circumventing Congress and U.S. trade negotiators?" (Perhaps, but the issue has dimmed as tariffs and trade barriers decline, and since new regulations went into effect in 1991.)

Legislative issues pertaining to zones have moved from the macro to the micro level. P.L. 106-36 (S. Report 106-2), approved June 25, 1999, provides that commercial importation data for foreign-trade zones shall be included under the National Customs Automation Program under construction. In addition, H.R. 975 (H.Report 106-52), which passed the House on March 17, 1999, provides for a reduction in the volume of steel imports, and requires a steel notification certificate for any steel entering through a foreign-trade zone. Other bills, instead of being focused on how zones affect the U.S. economy, are now focused more on whether zone policy should be used to help specific industries and specific localities.

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# U.S. Foreign-Trade Zones: Current Issues

*Foreign-trade zones* are the U.S. version of *free trade zones* scattered around the world. Free trade zones are geographic areas which primarily facilitate economic development, and *co-production* — the joint production of a single good through the efforts of workers in two or more countries. [1] In the United States, this means that zones are places where some foreign components are typically mixed with U.S. components in the manufacturing process.

Current policy issues reflect the impact of U.S. zones relative to other influences on the U.S. economy. Many current legislative proposals tend to focus on fine-tuning the workings of the zone system or reflect the difference that zone status can make in promoting economic development for a community and improving competitiveness of a company in a specific industry.

First, however, this report examines what the U.S. zone system is, how it relates to zones abroad, and how the U.S. foreign-trade zone program has changed from its original intent. Tables detail trade zone legislation in the 105th and 106th Congresses, provide information on application methods and requirements for zone status, and list zones and subzones, by state.[2]

## U.S. Zones in a World Context

Zones all over the world have an important characteristic in common: They are geographic areas which are physically *inside* the boundaries of a country, but which are treated as if they were located *outside* the country for customs purposes — that is, zones are declared to be outside the customs territory of a country.

This separation from the country for customs purposes links world zones together into a type of international "no-man's-land," which has two important traits. First, no tariffs (taxes on imported goods), and in many cases, (including the United States) no other taxes (sales, excise, or other) are payable on goods so long as they remain in the zone system. Only when they leave the system and enter a country are

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[1] The difference between *free trade zones* and *free trade areas* is this: *Free trade areas* involve agreement to reduce or eliminate certain trade barriers to all members of the group, while each country is free to negotiate its own barriers with countries outside the group. *Free trade zones*, on the other hand, do not affect a country's trade barriers. Rather, they set up secure locations (often fenced) which are inside the boundaries of the country but which are considered to be outside the country for tariff purposes. Hence, the trade barriers do not apply as long as the good is within the zone. When the good exits the zone, only if it then enters the country in which the zone is located, do normal trade barriers apply.

[2] While this report mentions a number of specific bills, it is not intended as a bill- tracking device. It will be updated periodically as needed.

tariffs payable on the imported value of the product and are sales taxes payable on imported goods sold. If the goods are re-exported, no duties are payable.

Second, customs procedures are streamlined for all goods entering and leaving the zone system. As a result, if buttons from Indonesia and fabric from India are sent to a trade zone in the Philippines for assembly into a shirt, which is then exported to the United States, *no tariffs* are payable in the Philippines, and *all customs procedures are streamlined* until the completed shirt enters the United States for consumption. At that time, tariffs are payable on the import value, and the shirt goes through normal customs procedures.

The 235 U.S. zones are part of the world system of 850 zones.[3] Two thirds of these zones are in developing countries, which produce primarily for export. In these countries, zones are often used as an economic development tool. Production takes place in *export processing zones* which are typically islands of modernization, located at ports, in countries which lack extensive infrastructure. Supplies which are unloaded from container ships travel a short distance to be manufactured into components or completed goods, which are then reloaded on ships for export. Multinational corporations in developed countries may view these zones as low-cost offshore production sites.

## Characteristics of U.S. Zones

U.S. zones, in contrast with the export emphasis of zones in developing countries, are primarily for warehousing or processing of *imports* prior to going through customs at the port of entry.

U.S. zones differ from other zones around the world in other ways as well. U.S. imports which are not complete, not yet needed, or not allowed to enter the United States (for quota reasons, for example) after being unloaded at ports of entry, prior to facing full customs procedures, may be taken to a nearby foreign-trade *general purpose zone* for warehousing or further processing, or to a subzone — a unique U.S. invention. The 235 zones include seaports, airports, and fenced industrial parks with warehousing and processing facilities, which are run by public corporations as if they were utilities — with published rates. *Subzones*, of which there are about 427, are manufacturing operations which are administratively linked to a zone, but physically separated from it. They are typically pre-existing operations which have

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[3] Zones around the world are called by at least 19 different names, depending on the country in which they are located or the author or organization referring to them. Among these are the following: Generically they are often called *free trade zones*. Those in the United States are called *foreign- trade zones*. Those in developing countries producing specifically for export are typically called *export processing zones*. They are also called *maquiladoras* in Mexico, *special economic zones* in China, *industrial free zones* or *export free zones* in Ireland, *free zones* in the United Arab Emirates, and *duty free export processing zones* in the Republic of Korea. In addition they are called *tax free zones* or *tax free trade zones* by Walter H. and Dorothy B. Diamond, authors of *Tax-Free Trade Zones of the World*. They have been called *free export processing zones* by the Organization for Economic Cooperation and Development. Source: International Labor Organisation. *Economic and Social Effects of Multinational Enterprises in Export Processing Zones*. Geneva, 1988, p.5.

applied for and been granted subzone status. However, businesses may also apply for zone status before beginning construction on a new manufacturing operation.[4]

U.S. zones and subzones, like other zones around the world, are viewed, in part, as an economic development tool. They allow businesses to save money on *imports* through duty (tariff) deferral, duty exemption, elimination of the need for duty drawback, and tax avoidance. They also allow U.S. businesses to save small amounts through quota storage, zone-to-zone transfer, and customs and inventory efficiencies. (See table 1 for details.) Most importantly, however, *subzones* in particular, allow businesses to save money, in part because they are places where inverted tariff structures can be changed to uniform rate structures (explained below). The Foreign-Trade Zones Board estimates that slightly less than 50% of all foreign merchandise entering through trade zones is being used in the inverted tariff situation.

## What is an Inverted Tariff Structure?

An *inverted tariff structure* means that the tariff rate on a product used as a component of a finished product is higher than the tariff rate on the finished good containing the component. When imported components are combined with domestic supplies in subzones, importers can effectively reduce the tariff rate on components to the same level as those levied on a completed good.[5]

Thus, if a zone manufacturer applies for and is granted subzone status, he can use his zone status to eliminate the adverse cost effect of the inverted tariff in the industry in which he produces. This is because customs provisions allow zone users to choose (when the component enters the zone) between paying, (when the component leaves the zone system as part of a completed good) the tariff on the component itself or the tariff on the component as if it were incorporated into the completed good.[6] Industries where there may be inverted tariffs include oil refining, auto manufacturing, electronics, chemicals, food products, pharmaceuticals, apparel

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[4] Another difference is that many foreign zones allow companies to operate under special or relaxed rules with respect to taxes and customs oversight. Certain foreign zones require neither customs documentation or supervision of merchandise while materials are admitted, stored, or processed in the zone. Some allow significant tax exemptions, including income and property taxes. U.S. foreign-trade zones, on the other hand, are fully subject to all federal, state and local laws and taxes, except for federal excise taxes and local inventory taxes. They are also subject to full customs supervision throughout while materials are admitted, processed, and shipped, and to customs penalties for failure to adhere to requirements, and to customs penalties for failure to adhere to requirements. In addition, prohibited goods (including illegal products) are not allowed into U.S. zones.

[5] World Wide Shipping. *Economic Impact Analysis*, by Dennis Puccinelli, August, 1985, p. 71.

[6] The procedure the zone manufacturer follows to change the tariff rate is as follows: When the duty rate on the imported component is lower than that on the end product into which the component is to be incorporated, the zone manufacturer must file a formal application for the component to receive "privileged foreign status." It such status is approved, the component, when it leaves the zone, is dutied at its own rate -- typically that applicable to the product of which it will make an integral part.

and textiles, steel, and machinery. Not all zone applicants in these industries have been granted zone status. The granting of zone status by the Foreign- Trade Zones Board means that zone status has been deemed in the "public interest." The determination is based, in part, on the cause of the inverted tariff structure.

Inverted tariffs have arisen in the very extensive Harmonized Tariff Schedule in two ways: *inadvertently*, and *by design*. When an industry has an inverted tariff by design, it is generally to protect the component industry from import competition. In such cases, application for zone status may be denied or limitation may be placed on zone status. Inverted tariff structures are the major reason for zone application in the United States, and the greatest source of benefit to users (with duty deferral second). In recent years, tariff levels generally have been negotiated to very low levels, and typically the differences between tariffs on components and tariffs on finished products have become smaller and smaller.

**Table 1. Possible Cost Savings Available to U.S. Foreign-Trade Zone Users**

| Benefit | How Costs Can Be Saved |
|---|---|
| **Duty Reduction (on Inverted Tariff Situations)** | Zone users may choose the lower duty rate when a product is entered into customs territory (for importation) in inverted tariff situations (when the rate of the foreign inputs is higher than the rate applied to the finished product produced in the zone. Zone status, however, is granted by the FTZ Board when it determines that such status will result in a public benefit (typically a net positive effect for U.S. businesses and workers). |
| **Duty Deferral** | Cash flow savings can result because customs duties are paid only when and if the goods are transferred from the zone to a U.S. customs territory for import. |
| **Duty Exemption** | No duty is payable on goods which are exported from a zone, or which are consumed, scrapped, or destroyed in a zone. |
| **Drawback Elimination** | Zones eliminate the need for duty drawback. That is, the refunding of duties previously paid on imported and then re-exported merchandise. |
| **Tax Savings** | Goods stored in zones and goods exported are not subject to state and local ad valorem taxes, such as personal property and sales taxes. |
| **Quota Storage** | Cash flow savings and savings from buying in bulk can be made because U.S. quota restrictions do not apply to merchandise admitted to a zone until is entered into customs territory. When the quota opens, the goods may be immediately entered into U.S. customs territory for importation. |

| Benefit | How Costs Can Be Saved |
|---|---|
| **Zone to Zone Transfer** | Zones can transfer merchandise "in-bond" from one zone to another. Customs duties may be deferred until the product's eventual entry into U.S. customs territory. |
| **Customs and Inventory Efficiencies** | Cost savings (especially cash-flow savings) can occur from zone efficiencies affecting inventory control. These efficiencies include customs procedures such as direct delivery and weekly entries. |

Source of table data: U.S. Foreign-Trade Zones Board.

## How to Achieve Zone Status

The primary constituent interest relating to zones is how to achieve zone status, as quickly as possible. Appendix table 4, p 20, includes information on how to apply for zone or subzone status and requirements for applications, together with telephone and website contacts.[7] While new zones are approved when the Board finds that existing or authorized zones do not adequately serve the "convenience of commerce,"[8] subzones can be approved only when a "public benefit" —(i.e., increased employment without detrimental effects on other competitors) can be clearly demonstrated.[9]

Zone or subzone status is achieved by applying to the U.S. Foreign-Trade Zones Board in the Import Administration of the U.S. Department of Commerce in Washington, D.C. (202) 482-2862. The Board is a committee of two, made up of the Secretaries of Commerce and the Treasury, whose agencies each play a role in the approval and oversight of foreign-trade zones.[10]

The U.S. Foreign-Trade Zones Board is supported by a professional staff of 11, under the leadership of an executive director. It is responsible for reviewing applications for zone approval and making recommendations to the Board. Regulations covering zone application may be found at 15 CFR Part 400. The general purpose zone applications process takes about 18 months, and the subzone application process takes about 12 months. Zones are operated by public or public-

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[7] Most successful zone applicants use general purpose zones for storage, manipulation, and manufacturing, and special purpose subzones for specific larger scale manufacturing. However, some creative uses of zones are also emerging. The International Wildlife Recovery Center has set up an operation in the Medford-Southern Oregon FTZ. The Center specializes in the decontamination and rehabilitation of wildlife affected by oil and other hazardous material spills around the world. By locating the center in a foreign-trade zone, in a pollution event involving 250 birds, for example, the IWRC can save $500,000 in customs duties associated with food imports for the animals.

[8] Foreign-Trade Zones Act, P.L. 73-397, sec. 2(b).

[9] Da Ponte, John J., Jr. United States *Foreign-Trade Zones: Adapting to Time and Space*. The Maritime Lawyer, Fall, 1980, p. 211.

[10] Authority is typically delegated to the Assistant Secretary of Commerce for Import Administration, and the Deputy Assistant Secretary of the Treasury for Enforcement.

type corporations, which may contract out operations. Zones are operated like utilities, with published rates.

Day-to-day supervision of goods into and out of zones is the responsibility of the U.S. Customs Service in the Treasury Department. Customs Service regulations relating to zones are included at 19 CFR Part 146. Overhead costs for zones include reimbursement to Customs for services rendered.

## How Did the U.S. Foreign-Trade Zones Program Begin?

The Foreign-Trade Zones Board was created by the *U.S. Foreign-Trade Zones Act* in 1934 [P.L. 73-397, 19 U.S.C. 81(a)-81(u)][11]. It was given the power to approve applications by public corporations for zone status. The act itself was fairly short — less than six pages in length. It entitled each U.S. port of entry to at least one zone, and prescribed physical conditions and standards for each zone, requirements for operation, recordkeeping, and goods being moved into and out of zones, activities permissible in zones, and the applicability of all U.S. laws to zones

When the U.S. foreign-trade zones program began in 1934, it was a program designed to help accelerate U.S. trade in the wake of the restrictive impact of the Smoot-Hawley Tariff bill of 1930, which raised U.S. tariffs on imported goods as high as 53%.[12] Some have argued that zones were designed originally to be way stations where goods coming in from one foreign port could be *transshipped* (*reloaded* for export to another foreign port) or *re-exported* (*processed* for subsequent export).[13]

The foreign-trade zones legislation was controversial, however, because there was some fear that it would promote imports of cheaper components used in the manufacturing process, and thereby put domestic components manufacturers at risk. To make sure this would not happen, the Act prohibited manufacturing in zones.

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[11] Regulations issued by the U.S. Foreign-Trade Zones Board for establishing and maintaining a foreign-trade zone can be found at 15 CFR 400.

[12] Yarbrough, Beth V., and Robert M. *The World Economy: Trade and Finance*. Harcourt Brace, 1991, p. 368.

[13] U.S. General Accounting Office. *Foreign-Trade Zone Growth Primarily Benefits Users who Import For Domestic Commerce*. GAO/GGD 84-52, March 2, 1984, p. 3, 5.

## Changes to the FTZ Act[14]

After the Foreign-Trade Zone Act was passed, it proved restrictive enough to be very little used. It did not encourage U.S. exports, as some had expected. Even sixteen years after the Act was passed, in 1950, there were still fewer than ten zones.[15] Intense lobbying by manufacturing trade groups to make the zone concept more useful led Congress to permit manufacturing in zones. Many reasoned that zones were too small for much manufacturing to occur there.

The Foreign-Trade Zones Board took the amendment one step further. This one step led the zone system on a course which eventually made it successful in a way that was very different from what some originally intended the program to be. Two years after Congress passed the amendment permitting manufacturing in zones, the Foreign-Trade Zones Board issued regulations creating the concept of *subzones*. Those regulations declared that when a zone was of insufficient size to accommodate manufacturing, an employer could apply for subzone status, and thereby have access to full zone benefits without having to relocate.

Two administrative decisions by the U.S. Treasury Department served to make zone status even more attractive for manufacturing operations. These decisions — one in 1980 (U.S. Treasury decision 80-87) and another in 1982, modifying the first decision, clarified that manufacturers need not pay duty either on *value added* or on *brokerage* or *transportation fees* connected with imported goods.[16]

## 1980s: The Zone System Began Expanding Rapidly

Once the second Treasury decision was handed down in 1982, the zone program began growing very rapidly and changing in nature, for a number of reasons. Among these were that the world-wide technological support system (communications, transportation, merchandise tracking, etc.) was at last ready to handle the huge demands of expanded international trade. Second, increased international price competition led U.S. businesses to seek new ways of shaving costs.

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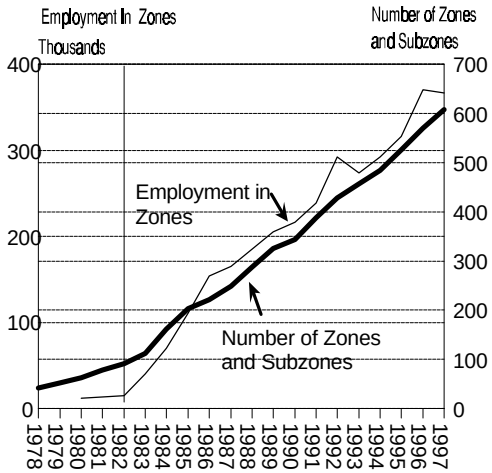
[14] Historical material in this and the following two sections is taken from: U.S. General Accounting Office. *Foreign-Trade Zone Growth Primarily Benefits Users Who Import For Domestic Commerce.* GAO/GGD 84-52. March 2, 1984, and *Foreign-Trade Zones Program Needs Clarified Criteria*. GAO/NSIAD 89-85; U.S. International Trade Commission. *The Implications of Foreign-Trade Zones for U.S. Industries and for Competitive Conditions Between U.S. and Foreign Firms*. USITC Publication 1496, February, 1984, and *The Implications of Foreign-Trade Zones for U.S. Industries and for Competitive Conditions Between U.S. and Foreign Firms*. USITC Publication 2059, February, 1988.

[15] In fact, even as recently as 1970, there were still fewer than ten cities with zones. All of these were ocean or Great Lakes ports. Source: Da Ponte, John J., Jr. United States *Foreign-Trade Zones: Adapting to Time and Space*. The Maritime Lawyer, Fall, 1980, p. 202.

[16] GAO Report, 1984, op. cit., p. 12.

In addition, the value of the dollar was quite high in the 1980s, making cheaper imports even more attractive.[17] On top of this, the Tariff Schedule of the United States (TSUS, replaced by the Harmonized Tariff Schedule in 1989) contained a number of *inverted tariffs*. Many inverted tariffs were later reduced or eliminated by the Uruguay Round of negotiations under the General Agreement on Tariffs and Trade (GATT) in 1994.

**Figure 1.** Growth in Number of and Employment in Zones, 1978-1997




Source of data: U.S. Foreign Trade Zones Board

Soon businesses figured out that, if they could achieve zone status, they could import components in industries with inverted tariff structures, assemble them together with domestic inputs in zones, and import from U.S. zones products that were less expensive to produce by the amount saved in customs costs on each item times the number of items. Word of how to take advantage of the inverted tariff structure and other cost-saving means afforded by zones (reported in table 1) spread through trade organizations. Zone use and zone employment accelerated dramatically. (see figure 1.)

## Congressional Oversight of Zone Growth

The House Ways and Means Committee, concerned about the potential impact that zone status was having on U.S. industries (especially domestic components industries), employment, communities, tariff and tax revenues, competitiveness abroad, and the U.S. economy in general, asked both the General Accounting Office (GAO) and the International Trade Commission (ITC) to examine the economic impact of U.S. foreign-trade zones, in 1983 and again in 1987. Primary findings of these agencies were that the zone program, while growing rapidly, was having only a small (but difficult to measure) effect on U.S. revenue collection, employment, and the economy in general, and a somewhat larger effect on the U.S. components industry, particularly in the auto sector. Not only did the auto sector have an inverted tariff, but application for zone status there was reportedly met with relatively little objection from components manufacturers.[18]

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[17] U.S. Congress. House. Committee on Government Operations. *Foreign-Trade Zones (FTZ) Program Needs Restructuring*. House Report 101-363. November 16, 1989, p. 11.

[18] Quantitative findings included the following:

**Effect of Zones on Tariff Revenues**: International Trade Commission (ITC) reports (referred to in footnote 13) found that the net effect of zone operations on customs revenue was small — 0.04% of total customs duties collected in 1982 and 0.3% of the total customs

(continued...)

One of the most important ITC findings, however, was that the U.S. foreign-trade zones program was doing the opposite of what it was originally intended to do: The International Trade Commission found that "While a stated intention of the 1934 Act was to increase the competitiveness of U.S. products in *foreign* markets, zone status (particularly subzone status) is being used to maintain or improve the competitive posture of firms in *domestic* markets (emphasis added)."[19] The U.S. Foreign-Trade Zones Board points out, however, that this statement is not entirely correct. In fact, the Act itself stated as its purpose "to expedite and encourage foreign commerce," favoring neither exports nor imports over the other.[20]

In 1989, subsequent to the GAO and ITC studies, subcommittees of the House Ways and Means Committee and the House Government Operations Committee held hearings on foreign-trade zones.[21] In addition, the House Government Operations Committee issued an independent report on the Foreign-Trade Zones Program. Its findings were compatible with those reported by GAO and ITC, but went a step further. It found that the Foreign-Trade Zones Act and program were in need of extensive revision for failing to carry out what it referred to as "the original intent of the Act." The committee report, like the GAO and ITC reports, criticized the program for promoting instead of exports, domestic competitiveness and imports for domestic consumption.

The House Government Operations Committee report also criticized the Foreign-Trade Zones Board, among other things, for poorly conceived and inefficiently administered processes, for overly general regulations, which failed to list and use a single set of criteria for granting zone or subzone status, for maintaining regulations no longer consistent with Board practice, for relying on improperly conducted economic analyses, for failing to set time limits for stages in the application process, for failing to certify that operations continue to function in the public interest,

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[18](...continued)
duties collected in 1986. (ITC Report 1984, p. xi) and (ITC Report 1988, p. xix-xx).

**Per-auto savings by manufacturing in zones**: In addition, in 1986, autos accounted for 87% of all shipments from subzones, seven zones accounting for 76% of total zone employment. (ITC Report 1988, p. xiv) and (ITC Report 1988, p. 5-2). For auto plants, the average duty savings per car in 1986-87 was small — about $8.67, down from $9.91 in 1983 and up from $5.54 in 1985 (ITC Report 1988, p. xix).

**Employment effect from zones, in the auto industry:** Overall, the ITC found a 3.5% decline in employment in the auto parts sector for new vehicles, and a 1.6% increase in employment in the auto assembly industry, between 1983 and 1987. (ITC Report 1988, p. 8-7).

[19] U.S. International Trade Commission. *The Implications of Foreign-Trade Zones for U.S. Industries and for Competitive Conditions Between U.S. and Foreign Firms*. USITC Publication 1496, February, 1984, p. viii.

[20] Notes received from Dennis Puccinelli, Executive Director of the U.S. Foreign-Trade Zones Board, July 16, 1999.

[21] U.S. House. Committee on Ways and Means. Subcommittee on Trade. October 24, 1989. *Operation of the Foreign-Trade Zones Program of the United States and its Implications for the U.S. Economy and U.S. International Trade*. Serial 101-56. 442 p. and U.S. House. Committee on Government Operations. Subcommittee on Commerce, Consumer, and Monetary Affairs. March 7, 1989. *Foreign-Trade Zones*. 343 p.

and for failing to operate in a manner consistent with trade policy.[22] The Committee made a number of recommendations to address these perceived weaknesses. Ultimately, in October 1991, in consultation with congressional committees, the Board issued new regulations aimed at codifying its existing practice and meeting congressional criticisms.

In addition to congressional requests to the GAO and the ITC, hearings, and the report mentioned above, continuing periodic congressional interest in foreign-trade zones has been part of a broader focus on trade issues. Zone issues have been addressed by minor amendments to the Foreign-Trade Zones Act and been included in a number of more inclusive hearings and trade laws over the years. Some of the amendments have increased the benefits of zone imports and exports.

## The Zone System Today

Today, as during the 1980s, zones are predominantly instruments for changing inverted tariff structures into uniform rate structures. This is the case even though subzone users may save money in a variety of other ways (listed in table 1) and even though tariffs overall have declined considerably in the past 15 years, from an average rate of 5.5% in 1984 to an average rate of 2.0% in 1998.[23] Today, instead of being places where relatively large tariff savings — (i.e., $5-10 per car, for example) can be made on a few major components, zones are now more typically places where small savings (i.e., $1-3 per car, using the same industry example, according to the Foreign-Trade-Zones Board) can be made on a larger volume of components.[24] While the auto industry is still a prime beneficiary of zone status, the petroleum industry is the primary user now, accounting for 64% of the value of all goods entering zones (see figure 6), with motor vehicles accounting for another 23%. Some of the auto production operations have moved offshore, and large numbers of petroleum operations are still applying for zone status.

The importance of trade zones today is evidenced by the following statistics: Since 1970, the total number of trade zones and subzones combined has grown from 10 to 662, and employment in them has increased from 7,000 to 367,000, as was shown in figure 1. Nevertheless, zones (including subzones) represent only a small part of the U.S. economy. The total zone employment accounts for only 0.2% of total U.S. employment. In addition, all zone inputs (both domestic and foreign — a total of $178 billion in 1997) represent only a small part — 2% of U.S. gross domestic product ($8,111 billion in 1997). While the world-wide zone system plays a large role in international trade, it should be noted that very few imported zone inputs in these industries enter the U.S. zone system from other zones around the

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[22] *Foreign-Trade Zones (FTZ) Program Needs Restructuring*, p. 19-24.

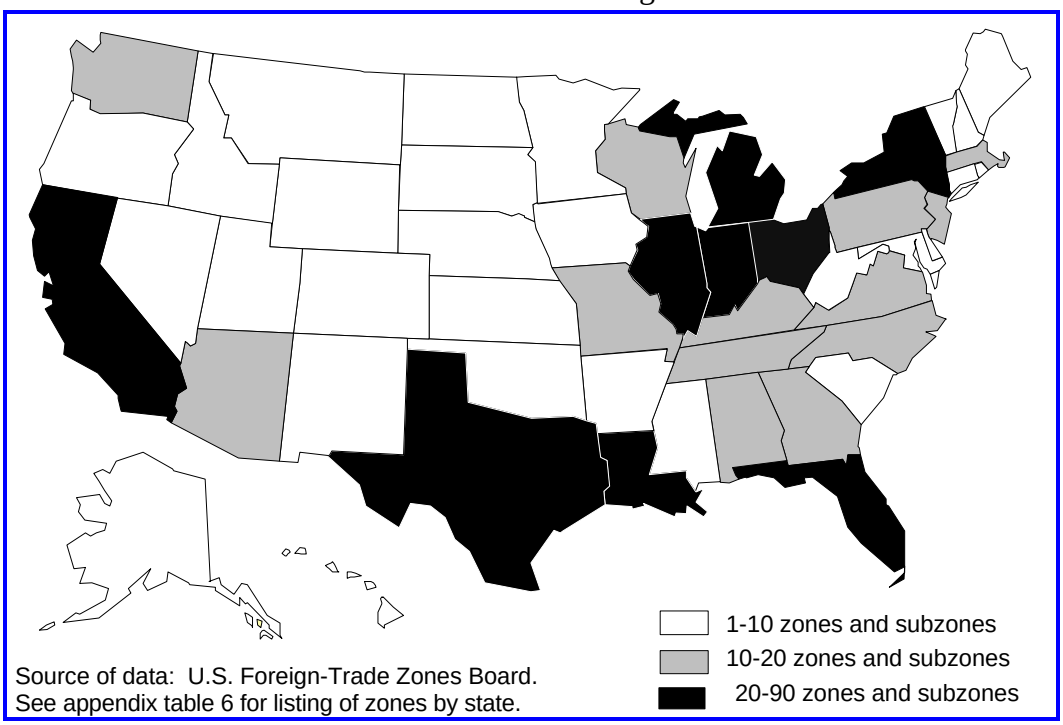
[23] Data for 1984 from U.S. Department of Commerce, Bureau of the Census. Highlights of U.S. Export and Import Trade, FT990/December, 1984, Table 9, p. C-31. Data for 1998 from http://dataweb.usitc.gov.

[24] Savings on a particular item may result from the rationalization of inverted tariffs together with other savings of the types detailed in figure 1.

world. In addition, only a small part of *all* U.S. imports (6%) enter the United States through zones in other countries.[25]

The map in figure 2 shows the states in which zone and subzone use is concentrated (darker shading). Zone and subzone use is concentrated primarily in traditionally heavy industrialized states where there is considerable auto manufacturing and in coastal states where there is considerable oil importing.

**Figure 2**. Concentrations of U.S. Foreign-Trade Zones and Subzones Among States



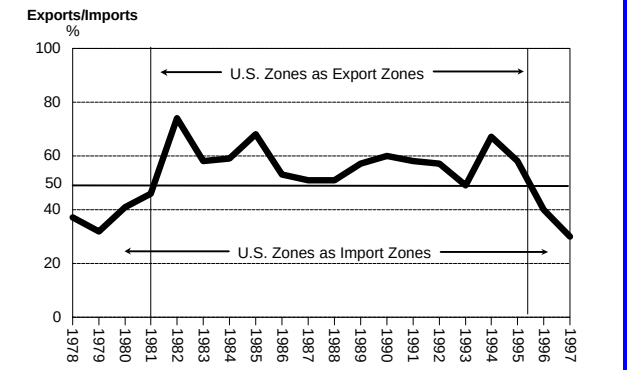

Source of data: U.S. Foreign-Trade Zones Board.
See appendix table 6 for listing of zones by state.

[25] Zone data are taken from U.S. Department of commerce. Foreign-Trade Zones Board. *The 59th Annual Report of the Foreign-Trade Zones Board*. Employment data are taken from U.S. Department of Labor. *Employment and Earnings* (any issue), table B-1. U.S. GDP data are taken from *Economic Report of the President, 1999*, p. 342.

## Zones Today are Functionally Import Rather Than Export Zones

Zones today are primarily import zones, rather than export zones as some observers believe Congress originally anticipated. They are *import* zones in terms of both zone *inputs* and zone *outputs*, even though both the Act itself and the Foreign-Trade Zones Board are currently neutral on this issue. In addition, the fact that most U.S. zones are functionally import zones reflects both the economic maturity (in comparison to developing countries) and the relative strength of the U.S. economy.

**Figure 3**. Extent to Which *Imports* Entering Zones are Subsequently Re-Exported, 1978-1997

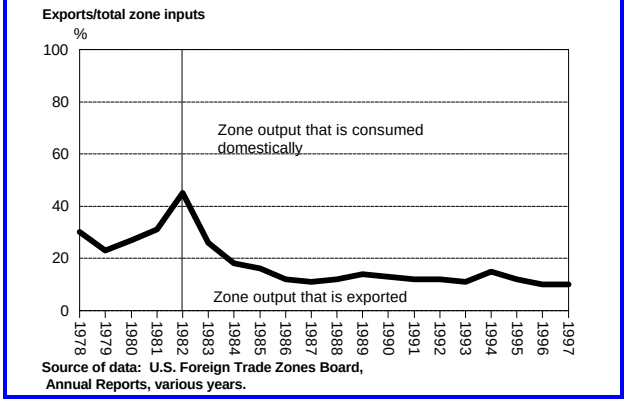



In terms of zone inputs, today's zones have lately become "import" zones in that, in recent years, more goods *entering* the zones have been subsequently imported into the United States than exported. In figure 3, export years (1981-95) are those in which the thick black line remains above the 50% line. Import years (1978-91 and 1996-97) are represented where the line dips below the 50% line. (See appendix table 6 for data supporting figures 3, 4, and 5.)

In terms of zone outputs, today's zones are import zones rather than export zones in that the majority of zone *output* is imported into the United States, and very little is exported. Figure 2 shows that since 1984, the proportion of total zone output that is exported has averaged about 10-15%.

Figures 3 and 4 both show that 1982 is the year when zones reached their pinnacle as export zones.

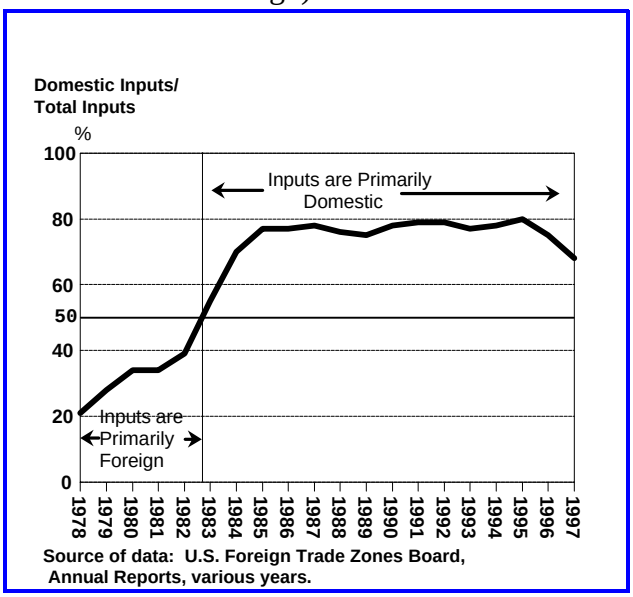
**Figure 4**. Extent to Which Total Zone *Output* is Consumed Domestically or Exported 1978-1997



## Zones Today are Primarily "Domestic-Trade" Rather Than "Foreign-Trade" Zones

Zones can also be classified today as being functionally "domestic-trade" zones rather than "foreign-trade" zones. This is because most of the *inputs* into the zones are of *domestic* origin, even though the *gains* to be made from zone status stem from *imports*. (See table 1 for a listing of the type of gains to be made from zone status.) Since 1983, zone inputs sourced domestically have accounted for more than half, and since 1985 they have accounted for about 75-80% of all zone inputs. (See figure 5). The fact that the percentage of domestically sourced zone inputs has declined somewhat in the last few years reflects a greater presence in zones of oil refining, which uses primarily imported crude, compared to auto assembly, which uses mostly domestic components.

**Figure 5**. Source of Zone Inputs (Domestic or Foreign) 1978-1997

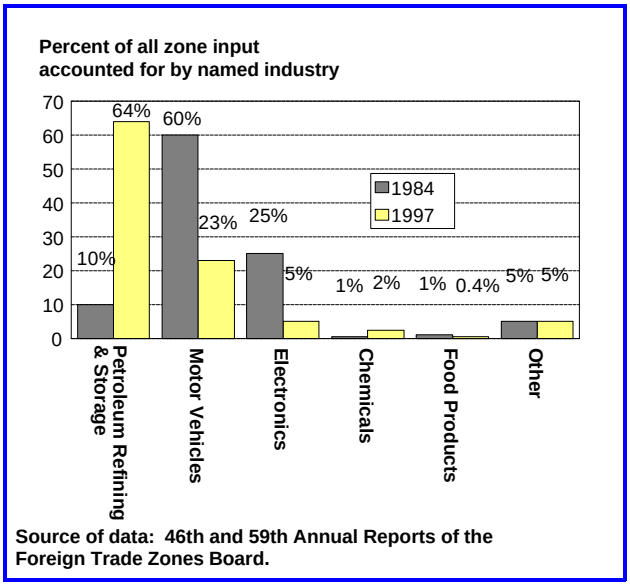



Calling zones "import" zones rather than "export" zones, and "domestic" zones rather than "foreign" zones is another way of reiterating what the ITC found in the 1980s: Instead of increasing the competitiveness of *U.S.* products in *foreign* markets, zone status is still being used (with the support of the Act) to maintain or improve the competitive posture of firms in domestic markets.

## Industry Concentrations in Zones Have Changed

Industry concentrations in zones have changed since the mid-1980s, as mentioned previously. Figure 6 shows that in 1984, motor vehicle assembly plants accounted for 60% of all imports into zones, and electronics companies were

**Figure 6**. Industry Concentrations of Imports in Zones, 1984 and 1997



the second greatest users of zones. By 1997, many electronics and auto assembly plants had relocated abroad, and petroleum refining had become the dominant zone user. Today, the two industries account for 87 % of all zone inputs.

## The Future of Zones

Overall, most tariffs have continued to be reduced to very low levels in the United States, through numerous trade agreements or establishment of free-trade areas. This would arguably point to an accompanying reduction in the use of trade zones. Inverted tariffs will lose their significance when all duties are near the same level. In addition, the nominal cost savings of duty deferral in a country with low tariff rates, like the United States, would make zone status an unnecessary administrative burden in addition to its reduced effect as a protectionist device.[26] Similarly, the gradual phasing out of quotas will also diminish demand for zone use.

However, at the same time, computers are facilitating zone use by making it easier for corporations to search through tariffs on all imported parts that potentially go into making a certain item, in order to identify those that represent an inverted tariff structure. Computers also make it easier to keep track of quota fulfillment and to calculate final tariffs owed on a large and diverse array of small imported components. Thus, smaller savings from zone use, including logistical and administrative savings, may be relatively more important than they once were.

Applications for zone or subzone status are still being approved. In 1997, the U.S. Foreign-Trade Zones Board approved 8 new general-purpose zones and 37 new subzones — consistent with the rate over the past several years — increasing the total number of zones by 3.5% and subzones by 9.5%

Thus, even though businesses may be reaping smaller savings per imported item used in zones, they may be able, in some cases to expand the number of items on which they save money. In addition, international competition has become sufficiently great in recent years that even very small savings from zone status, through duty reduction, deferred duty payment, duty exemption, tax savings, quota storage, or other means outlined in table 1 can make important contributions to U.S. competitiveness.

# Policy Issues Relating to Zones

Many of the zone-related policy issues that were prominent ten years ago are less important today, because the circumstances that surround them have changed:[27]

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[26] Kanellis, William G. *Reining in the Foreign-Trade Zones Board: Making Foreign-Trade Zone Decisions Reflect the Legislative Intent of the Foreign-Trade Zones Act of 1934.* Northwestern Journal of International Law and Business, Spring, 1995, p. 635.

[27] The major issues of the late 1980s were documented in the GAO and ITC reports (continued...)

In the 10 years since the GAO, ITC, and congressional studies were conducted, foreign-trade zones have become much less an issue of congressional focus than they were. This has occurred, in part because congressional interest has shifted from the employment and competitive effects of zone status to increased importation of manufactured goods and the effect this is having on U.S. jobs and the U.S. economy in the long run. Economists argue that with increased trade, everybody wins; however, dislocation of workers in various sectors has become an important congressional concern.

## Is the Congressional Intent of the Foreign-Trade Zones Program Being Met?

The answer to a question on whether the congressional intent on zones is being met depends on whether one judges congressional intent at the time of passage of the U.S. Foreign-Trade Zones Act, or as it has evolved over the past 65 years.

Some of the pre-passage debate suggested hope that the zones would boost exports rather than imports. In addition, while the preamble of the act emphasized the promotion of trade without reference to either exports or imports, section 3 of the Act did strictly prohibit manufacturing in zones (sec. 3). This language is consistent with arguments that manufacturing was prohibited in order to discourage the importation of cheaper components which would compete with domestically produced components.

Amendments to the Act over the years, however, have reflected a gradual shift in congressional intent toward greater acceptance of zones for handling imports. The 1950 amendment permitted manufacturing in zones, thus reversing the original exclusion. In addition, certain other amendments, including a 1990s amendment providing for evaluation of products upon importation from a zone, make specific reference to imports (sec. 81c, of title 19 of the U.S. Code)[28].

Therefore, one could conclude that the congressional intent as it has evolved over the years is being met. In addition, the shifting of congressional focus on the zone issue from major oversight and evaluation to minor tinkering reflects an apparent acceptance of the U.S. zone system as it stands today.

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[27](...continued)
previously mentioned, and also in U.S. Library of Congress. *Foreign-Trade Zones and the U.S. Automobile Industry*, by Gwenell L. Bass, and Lenore Sek. CRS Report 88-659E, October 14, 1988.

[28] Any program that specifically promoted exports to the detriment of imports could violate WTO rules against export subsidies.

## Have Foreign-Trade Zones Helped or Hurt U.S. Workers and Businesses?

The question about whether zones have helped or hurt U.S. *workers* is seen differently in the 1990s than in the 1980s. Some employment effects from trade with Mexico and Canada since the North American Free Trade Agreement (NAFTA) went into effect and from trade with developing countries generally and under the General System of Preferences (GSP),[29] have shifted the perspective on the effects of trade zones on U.S. jobs.

By way of comparison, in the 1980s, there was some alarm that increased use of U.S. foreign-trade zones was leading to the loss of U.S. jobs. The International Trade Commission estimated that for the four-year period 1983-1987, trade zones reduced overall employment in the auto industry by a net 1.9%. This represents a gain in the auto assembly sector and a loss in the auto parts sector.[30] Concern over the effect of *zones* on employment, however, has been eclipsed in recent years by concern over the effect of *trade agreements* [especially the North American Free Trade Agreement (NAFTA)] on employment. A difference in the order of magnitude on a particular industry is shown in the following example: In the 1990s, over a five and one-half year time period after NAFTA went into effect, increased trade with Mexico and Canada led to a 5.3% job loss in the apparel sector.[31]

Thus, small benefits from avoiding the higher tariff rates in industries with inverted tariffs (differentials which are continually shrinking) may seem less important today than they did a decade ago. In addition, in the 1980s, trade zones were viewed as a way of encouraging U.S. manufacturing plants to remain in the United States rather than relocate abroad. Today, the potential cost savings from using zone status to avoid the penalties of an inverted tariff (which may be only a percent or two) seem small compared to the potential cost savings which some businesses can obtain by relocating a labor-intensive plant to Mexico or some other country with a preferential system (i.e., GSP, CBERA, or Andean), and thus saving large amounts from wage differentials.[32]

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[29] The General System of Preferences provides duty-free treatment under specific conditions for 142 developing countries.

[30] A FTZ Board letter to the file documenting a March 3, 1988 meeting with the ITC economist who developed the economic model which was the basis for the ITC findings indicates that the model was meant to provide estimates rather than definitive numbers on jobs gained or lost as a result of zone procedures.

[31] For 1983-87 data for the motor vehicle transportation sector (SIC 37), see ITC Report, 1988, p. 8-7, and U.S. Department of Labor, Bureau of Labor Statistics. *Employment, Hours, and Earnings United States 1981-93*, bulletin 2429. For data on the apparel sector (SIC 23), see *NAFTA: Estimates of Job Effects and Industry Trade Trends After 4 ½ Years*, by Mary Jane Bolle. CRS Report 98-783E, p. 8, and *Employment, Hours, and Earnings United States 1990-95*, Bulletin 2465.

[32] The Caribbean Basin Economic Recovery Act (CBERA), applying to 27 Caribbean nations, and the Andean Initiative (applicable to imports from Bolivia, Ecuador, Colombia, and Peru) are similar to the GSP in that they offer duty-free treatment under specific

(continued...)

## Table 2. Potential Winners and Losers From Zone Use[33]

| | Potential Winners | Potential Losers |
|---|---|---|
| **Manufacturers** | **Final assemblers** could win to the extent that righting an inverted tariff lets them get components at a lower cost.<br><br>**Components manufacturers** could win to the extent that they can automate, become more competitive with imports, and thereby save on production costs. | **Components manufacturers** could lose to the extent that the product becomes less competitive with imported components. |
| **Workers** | Workers in assembly operations could win to the extent that FTZ status results in greater profits which may be passed along to workers.<br><br>Workers in "losing" industries could win to the extent that job loss encourages them to upgrade skills, which could them lead to higher paying jobs. | Either automation, or plant closings, in components industries from losing sales to importers operating in zones, could put workers out of jobs. |
| **Community** | Any zone effects could have ripple effects on the community. Communities with new zones may benefit because zones can attract new business into the area. | Communities with component manufacturing operations that close may suffer. |
| **Consumers** | To the extent that FTZs help manufacturers reduce prices and those prices are passed along to consumers, consumers could benefit. | Consumers may suffer from reduced choices or reduction in quality to the extent that foreign-trade zones encourage the substitution of cheaper imported components or goods for domestically produced ones. |
| **Tariff Revenues** | Total U.S. tariff revenues increase to the extent that increased zone use results in an increased demand for the imported components. | Tariff revenues decline by the difference between the tariff on the component and the tariff on the finished product for each item imported into a zone, times the number of items.[a] |
| **Tax Revenues** | Total U.S. tax revenues increase to the extent that increased zone use results in an increased demand for the product and in greater earnings for each worker producing goods in zones. Increased tax revenues would come from increases in U.S. income tax collections brought about by increased profits and wages, federal excise taxes, and state and local taxes of the types affected by increased business. | |

[32](...continued)
conditions.

[33] These arguments were largely drawn from GAO and ITC reports.

[a] An example showing the potential magnitude of such tariff revenue loss is an ITC finding that zone use reduced overall tariff revenues by 3% for 1986. Overall customs duties of $1,216 million represented an overall duty savings of nearly $39 million on the U.S. economy from foreign-trade zone use in 1986. This represents a total loss of about 3% of tariff revenues for 1986. Source of duty savings: 1988 ITC report, op. cit. Source of overall duties: Highlights of U.S. Export and Import Trade, op. Cit., 1986.

In addition, the question of whether zones have helped or hurt U.S. *businesses* invites a mixed response. Table 2 shows typical winners and losers from zone use. Certainly businesses that have applied for and achieved zone status have benefitted. On the other hand, once one business in an industry achieves zone status, others are forced to follow suit to remain competitive. As a result, once auto assembly plants started getting zone status, virtually all others in the industry followed suit.[34] Today, this is occurring in the oil refining industry.

On the other hand,zone regulations require that U.S. zone activity have a net positive effect for U.S. businesses and workers. In addition, the 1991 regulations applicable to the Foreign-Trade Zones Board specifically require that the Board disallow any actions that would circumvent U.S. trade policy or programs developed by the administration and Congress. In keeping with this policy, the Board has disapproved applications that proposed to use the Foreign-Trade Zones program to circumvent sugar, milk, textile and apparel quota programs in an attempt to prevent situations where there are "losers" (businesses or workers).

## Does the Zone System Set U.S. Trade Policy by Circumventing Congress and U.S. Trade Negotiators?

It can be argued that the U.S. zone system sets trade policy by circumventing Congress and U.S. trade negotiators. The decision to lower tariffs is thus shifted from the traditional method involving Congress and U.S. negotiators to an alternative method involving the U.S. Foreign-Trade Zones Board and its approval of the use of zones by representatives of various industries. However, as mentioned, the gradual decline of tariffs from an average rate of 5.5% to 2.0% between 1984 and 1998 has somewhat diminished the influence of the Foreign-Trade Zones Board on U.S. effective tariff rates. In addition, the Foreign-Trade Zones Board is adamant that if it perceives that zone status in an industry (usually the assembly sector) will harm the components sector, it will deny or limit zone status. Industries where zone status has been denied or limited for this reason include textiles, steel, pigments, TV tubes, ink, ethanol, chain saws, lawn mowers and agricultural products (e.g. dairy and sugar, and orange juice.)[35]

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[34] Bass and Sek, op. cit., p. 11.

[35] From a telephone conversation with Dennis Puccinelli, Executive Director of the U.S. Foreign-Trade Zones Board on May 21, 1999.

# Legislation Relating to Zones

In the last ten years, legislative issues relating to zones have shifted from the macro to the micro level. Instead of being focused on how zones affect the U.S. economy, they are now more focused on whether zone policy should be used to help specific industries.

Nor does foreign-trade zone legislation in the 105th and 106th Congresses attempt to reverse the evolutionary changes which have affected U.S. foreign-trade zones. The current legislative proposals are much more narrowly focused on changing trade policy for various industries and promoting economic development. Bills relating to the foreign-trade zone system fall into four categories: technical corrections relating to zones; bills to help achieve trade objectives through zones (i.e. legislation relating to steel, peanut butter, or tobacco products); legislation to assist zone expansion or promote economic development; and legislation to support specific programs (i.e., space exploration). (See table 3 on major zone legislation).

P.L. 105-303, enacted in the 105th Congress, included a foreign-trade zone provision to further encourage the development of the commercial space industry. It clarifies that payloads launched from trade zones shall be considered exports (not imports) with regards to customs entry.

## Technical Corrections Relating to Zones

In the 106th Congress, Sec. 2405 of P.L. 36, signed by the President on June 25, 1999 (S. Report 106-2) makes technical corrections to various trade laws. It provides, among other things, that the Secretary of the Treasury shall include commercial importation data for foreign-trade zones in the new program automating customs procedures (the National Customs Automation Program) — which is currently undergoing both construction and funding difficulties.

## Legislation to Achieve Trade Objectives For Specific Industries

A number of bills relating to U.S. foreign-trade zones in the 106th Congress, would accomplish trade objectives by affecting the way certain imports are treated. H.R. 975, passed by the House on March 17, 1999, (H. Report 106-52) provides for a reduction in steel imports. It requires a steel notification certificate before steel is entered into the U.S. customs territory of the United States.

Other legislation in the 105th Congress would have related to the tobacco industry by providing for an increase in taxes on tobacco products which enter the United States through a foreign-trade zone (H.R. 1229), and prohibiting the manufacturing of tobacco products in or forwarding them through foreign-trade zones, or selling them in or to duty-free shops (H.R. 3738.)

Also in the 105th Congress H.R. 1875 would have allowed the entry of peanut butter and paste from Mexican peanuts through foreign-trade zones without being subject to the tariff rate quota.

## Legislation to Assist Zone Expansion or Promote Economic Development

Other bills would aim to promote economic development by directing the U.S. Foreign-Trade Zones Board to grant approval for new or expanded zones. In the 106th Congress, H.R. 465 would direct the Board on behalf of the municipal airport of Chico, California. H.R. 5401 would make this direction for zones on Indian territory.

## Table 3. Some Major Zone Legislation of the 106th and 105th Congresses

### 106th Congress

**P.L 106-36: H.R. 435/S. 262 (S.Report 106 -2)** made technical changes to various trade laws. It also included a provision (Sec. 2405) which stated that not later than Jan. 1, 2000, the Secretary of the Treasury shall provide for the inclusion of commercial importation data for foreign-trade zones under the National Customs Automation Program. On June 7, 1999, the House agreed to Senate amendment, roll call #168.

**Passed the House March 17, 1999: H.R. 975 (Visclosky). H.Report 106-52** provides for a reduction in the volume of steel imports. For steel brought into the United States through a foreign-trade zone, requires a steel notification certificate before the merchandise is entered into the customs territory of the United States.

**Other Bills**:
**H.R. 465** (Herger) directs the Foreign-Trade Zones Board to expand Foreign-Trade Zone No. 143 to include an area of the municipal airport of Chico, California.

**S. 401** (Campbell, Nighthorse), Sec. 205 provides for business development and trade promotion for Native Americans. Directs the U.S. Foreign-Trade Zones Board to consider on a priority basis and expedite processing of any application aiming to establish a foreign-trade zone on Indian territory, including any designated an empowerment zone or enterprise community.

### 105th Congress

**Enacted**: **H.R. 1702** (Sensenbrenner, **P.L. 105-303**, Oct. 28, 1998: To encourage the development of a commercial space industry in the United States, and for other purposes. Sec.102: Clarifies that a launch vehicle is not, because of launch or reentry, an export or import. However, payloads launched pursuant to foreign-trade zone procedures shall be considered exports with regard to customs entry. This means that if any part of the launch vehicle or its payload is imported (for example part of the fuel), no tariffs are payable.

**Other Bills**
**H.R. 1875** (Crane) would amend the U.S. Harmonized Tariff Schedule to allow entry of peanut butter and paste from Mexican peanuts in foreign-trade zones without being subject to the tariff rate quota.
**H.R. 1319** (Royce), Sec. 204 would abolish the Department of Commerce and transfer the U.S. Foreign-Trade Zones Board to the Department of the Treasury. The U.S. Trade Representative would replace the Secretary of Commerce on the Foreign-Trade Zones Board.
**H.R. 1229** (Ackerman), Sec. 301 provides for an increase in taxes on tobacco products, cigarette papers, or cigarette tubes entered into a customs territory from a foreign-trade zone.
**H.R. 3738** (Doggett), Sec. 407: prohibits against the sale of tobacco products in or to duty-free shops or forwarding through or manufacturing in foreign-trade zones.
**S. 1415** (McCain): Section 1147 is similar to the provision in H.R. 3738.

# Appendix

The appendix includes information on how to apply for zone status, data supporting figures 3, 4, and 5, and lists, zones and subzones, by state.

**Appendix Table 4. Information Pertaining to Zone or Subzone Application**

## How To Apply for Zone or Subzone Status

- Apply to the U.S. Foreign-Trade Zones Board, Import Administration, U.S. Department of Commerce, Washington, D.C. 20230 (202) 482-2862.
- Basic requirements for foreign-trade zone applications are found in **15 CFR Part 400**, available at the U.S. Foreign-Trade Zones Board website: **http://www.ita.doc.gov/import_admin/records/ftzpage/ftzhome.html**.
- Applications are rather involved, and the approval process is somewhat lengthy. General Purpose Zone applications take about 18 and Subzone applications about 12 months.
- After application approval is granted by the Foreign-Trade Zones Board, before operations can take place, approval to activate the zone must be obtained from the Customs Port Director.

## Zone Status:

- Zone status is typically granted to state or local agencies or public type corporations (i.e., port authorities or economic development agencies), which may contract out operations.
- Zone sites must be in or near U.S. Customs ports of entry (listed at 19 CFR Part 101).
- Zones are operated under the day-to-day supervision of the U.S. Customs Service. Overhead costs include reimbursement to Customs for services. See regulations at **19 CFR Part 146**.
- Operations are conducted as public utilities, with published rates.
- Zone projects should be coordinated at the state level for consistency with economic development plans.
- Applicants must have a suitable plan including provisions for facilities and financing.
- Need for the proposed zone must be shown in terms of the local economy and overall economic development objectives.
- Zone manufacturing is reviewed under "public interest" criteria for consistency with trade policy and net positive economic effects.
- Zones should help create, not just divert employment from region to another.
- There must be convincing evidence of a need for zone services. Letters of intent from firms expecting to be the first zone users should be included in the application.

## Subzone Status:

- Subzones are normally private plant sites that usually cannot be accommodated within an existing general-purpose zone.
- Subzones can be approved only when a "public benefit" resulting in a "positive economic effect" is demonstrated
- Subzone applications include: company background, product description, industry background, zone benefits to the company and public, impact on the domestic industry and environment.

Source of the above information: websites of the U.S. Foreign-Trade Zones Board (listed above), the U.S. Customs Service: **http://www.customs.ustreas.gov/imp-exp2/comm-imp/ftz/ftstart.htm**, and the National Association of Foreign-Trade Zones: **http://www.imex.com/naftz.html**.

## Appendix Table 5. Data Supporting Figures 3, 4, and 5

(In $billions, and percent)

| | Mdse Received in Zone ($billions) | Domestic Inputs ($billions) | Foreign Inputs ($billions) | Exports ($billions) | Data for Figure 4 — Exports as % of Mdse. Received in Zones (%) | Data for Figure 3 — Exports from Zones/ Imports Into Zones (%) | Data for Figure 5 — Domestic Inputs/Total Inputs (%) |
|---|---|---|---|---|---|---|---|
| **1978** | 0.81 | 0.17 | 0.63 | 0.24 | 30 | 38 | 21 |
| **1979** | 1.52 | 0.43 | 1.09 | 0.35 | 23 | 32 | 28 |
| **1980** | 2.60 | 0.89 | 1.71 | 0.69 | 27 | 40 | 34 |
| **1981** | 3.02 | 1.03 | 1.99 | 0.93 | 31 | 47 | 34 |
| **1982** | 3.40 | 1.32 | 2.08 | 1.54 | 45 | 74 | 39 |
| **1983** | 6.51 | 3.61 | 2.90 | 1.67 | 26 | 58 | 55 |
| **1984** | 15.00 | 10.50 | 4.50 | 2.65 | 18 | 59 | 70 |
| **1985** | 24.75 | 19.01 | 5.74 | 3.89 | 16 | 68 | 77 |
| **1986** | 40.19 | 31.07 | 9.12 | 4.87 | 12 | 53 | 77 |
| **1987** | 48.95 | 38.42 | 10.52 | 5.40 | 11 | 51 | 78 |
| **1988** | 58.65 | 44.56 | 14.10 | 7.22 | 12 | 51 | 76 |
| **1989** | 76.27 | 57.51 | 18.76 | 10.75 | 14 | 57 | 75 |
| **1990** | 90.06 | 70.64 | 19.42 | 11.59 | 13 | 60 | 78 |
| **1991** | 84.44 | 66.42 | 18.02 | 10.48 | 12 | 58 | 79 |
| **1992** | 98.69 | 78.39 | 20.30 | 11.65 | 12 | 57 | 79 |
| **1993** | 103.97 | 80.16 | 23.81 | 11.65 | 11 | 49 | 77 |
| **1994** | 119.57 | 93.61 | 25.96 | 17.37 | 15 | 67 | 78 |
| **1995** | 143.51 | 114.37 | 29.14 | 16.94 | 12 | 58 | 80 |
| **1996** | 168.62 | 125.68 | 42.94 | 17.09 | 10 | 40 | 75 |
| **1997** | 177.85 | 121.16 | 56.69 | 16.93 | 10 | 30 | 68 |

Source of data: U.S. Foreign-Trade Zones Board.

# Appendix Table 6. List of Zones and Subzones, by State

| STATE | ZONE# | SUBZONE # | LOCATION | BUSINESS | INDUSTRY | YEAR APPROVED | STATUS: (Active unless otherwise indicated) |
|---|---|---|---|---|---|---|---|
| ALABAMA | | | | | | | |
| | 82 | | Mobile | | | | |
| | 83 | | Huntsville | | | | |
| | 98 | | Birmingham | | | | |
| | 211 | | Anniston | | | | |
| | 222 | | Montgomery | | | | |
| | 233 | | Dothan | | | | |
| | | 116 | Mobile | ADDSCO | shipbuilding | 88 | |
| | | 137 | Huntsville | Chrysler | auto electronics | 88 | |
| | | 159 | Mobile | Degussa | methhionine | 89 | |
| | | 293 | Foley | Peavey | electronics | 95 | |
| | | 329 | Tuscaloosa | Mercedes-Benz | motor vehicles | 96 | |
| | | 334 | Dothan | Sony | magnetic & | 96 | |
| | | 336 | Madison | MagneTec | lighting ballasts | 96 | |
| | | 351 | Mobile . | Zeneca | ag. chemicals | 96 | |
| | | 368 | Tuscaloosa. | ZFIndustries | auto axles | 97 | |
| | | 382 | Mobile Cnty. | Coastal | oil refining | 97 | |
| | | 392 | Tuscaloosa | JVC America | videotape prds. | 97 | |
| ALASK | | | | | | | |
| | 108 | | Valdez | | | | |
| | 159 | | St. Paul | | | | |
| | 160 | | Anchorage | | | | |
| | 195 | | Fairbanks | | | | |
| | 232 | | Kodiak | | | | |
| | | 256 | Fairbanks | Flowline | pipeline insulation | 93 | |
| ARIZON | | | | | | | |
| | 48 | | Pima | | | | |
| | 60 | | Nogales | | | | |
| | 75 | | Phoenix | | | | |
| | 139 | | Sierra Vista | | | | |
| | 174 | | Pima | | | | |
| | 219 | | Yuma | | | | |
| | 221 | | Mesa | | | | |
| | | 197 | Glendale | Conair | small appliance | 91 | |
| | | 250 | Buckeye | Wal-Mart | distribution | 93 | |
| | | 269 | Chandler | Intel | semiconductors | 94 | |
| | | 323 | Phoenix | SGS-Thompson | semiconductors | 96 | |
| | | 353 | Casa | Abbott Mfg. | infant formula | 96 | |
| | | 354 | Phoenix | PETsMART | warehouse/distrib | 96 | |
| | | 375 | Phoenix | Sumitomo Sitix | semionductor | 97 | |
| | | 420 | Chandler/Te | Microchip | semiconductors | 98 | |
| | | 427 | Yuma | Meadowcraft | patio furniture | 98 | |
| ARKANSAS | | | | | | | |
| | 14 | | Little Rock | | | | |
| | | 16 | Forrest City | Sanyo | microwave ovens | 82 | |
| | | 350 | West Helena | Cedar Chemical | ag. chemicals | 96 | |
| | | 376 | El Dorado | Mid States Pipe | steel pipe fab. | 97 | |
| CALIFORNIA | | | | | | | |
| | 3 | | San | | | | |
| | 18 | | San Jose | | | | |
| | 50 | | Long Beach | | | | |

| STATE | ZONE# | SUBZONE # | LOCATION | BUSINESS | INDUSTRY | YEAR APPROVED | STATUS: (Active unless otherwise indicated) |
|---|---|---|---|---|---|---|---|
| | 56 | | Oakland | | | | |
| | 143 | | W. | | | | |
| | 153 | | San Diego | | | | |
| | 191 | | Palmdale | | | | |
| | 202 | | Los Angeles | | | | |
| | 205 | | Port | | | | |
| | 226 | | Merced | | | | |
| | 230 | | Stockton | | | | |
| | | 1 | San | Lilli Ann | aparel | 63 | |
| | | 25 | Long Beach | Toyota | truck beds | 83 | |
| | | 30 | San Jose | Olympus | med. equip. | 83 | |
| | | 54 | San Diego | National Steel & | shipyard | 84 | |
| | | 56 | Fremont | NUMMI | auto | 84 | |
| | | 147 | Benecia | Mazda | auto | 89 | |
| | | 178 | Perris | National RV | motor home/RV | 90 | |
| | | 233 | Pasadena | Datatape | tape recording | 92 | |
| | | 276 | Garden | Alps Mfg. | computer etc. | 94 | |
| | | 332 | Auburn | C. Ceronix | video monitors | 98 | |
| | | 380 | Los Angeles | MMM | pharmaceuticals | 97 | |
| | | 385 | Sacramento | Hewlett-Packar | computer-related | 97 | |
| | | 398 | Dixon | Gymboree | apparel/toys | 98 | |
| | | 400 | El Segundo | Checron | oil refining98 | 98 | |
| | | 408 | Richmond | Chevron | oil refining | 98 | |
| | | 412 | Fremont | Cirrus Logic | integrated circuit | 98 | |
| | | 419 | San Jose | Hewlett-Packar | computer etc. | 98 | |
| COLORADO | | | | | | | |
| | 112 | | El Paso | | | | |
| | 123 | | Denver | | | | |
| | | 226 | Fountain | Apple | data proc. equip | 92 | |
| | | 234 | Boulder | Storage | electronic storage | 92 | |
| | | 415 | Broomfield | Artesym | elec. power | 98 | |
| CONNECTICUT | | | | | | | |
| | 71 | | Windsor | | | | |
| | 75 | | Bridgeport | | | | |
| | 162 | | North Haven | | | | |
| | 208 | | New London | | | | |
| | | 174 | West Haven | Miles | pharmaceuticals | 90 | |
| DELAWARE | | | | | | | |
| | 99 | | Wilimington | | | | |
| | | 41 | Wilmington | J. Schoeneman | apparel | 84 | |
| | | 42 | Newark | Chrysler | auto | 84 | |
| | | 47 | Wilmington | Ge. Motorsauto | -- | 84 | |
| | | 286 | Newark | Zeneca | pharmaceuticals | 94 | |
| | | 340 | Newastle | Star Enterprise | oil refinery | 96 | |
| FLORID | | | | | | | |
| | 25 | | Broward | | | | |
| | 32 | | Miami | | | | |
| | 43 | | Orlando | | | | |
| | 64 | | Jacksonville | | | | |
| | 65 | | Panama City | | | | |
| | 79 | | Tampa | | | | |
| | 135 | | Palm Beach | | | | |
| | 136 | | Brevard | | | | |
| | 166 | | Homestead | | | | |

| STATE | ZONE# | SUBZONE # | LOCATION | BUSINESS | INDUSTRY | YEAR APPROVED | STATUS: (Active unless otherwise indicated) |
|---|---|---|---|---|---|---|---|
| | 169 | | Manatee | | | | |
| | 180 | | Miami | | | | |
| | 193 | | Pinellas | | | | |
| | 198 | | Volusia & Flagler Counties | | | | |
| | 209 | | Palm Beach County | | | | |
| | 213 | | Fort Myers | | | | |
| | 215 | | Sebring | | | | |
| | 217 | | Oscala | | | | |
| | 218 | | St. Lucie County | | | | |
| | | 204 | Cocoa | Flite | machinery | 91 | |
| | | 231 | Melbourne | American | telecom./compute | 92 | |
| | | 277 | Tampa | Reilly Dairy | dairy prds. | 94 | |
| | | 281 | Tampa | Group | electronics | 94 | |
| | | 355 | Ft. | Federal-Mogul | vehicle parts dist. | 97 | |
| | | 407 | Miani | Hewlett-Packar | computer etc. | 98 | |
| | | 411 | Broward | CITGO | petrol. storage | 98 | |
| | | 426 | BrevardCou | Harris Corp | telecommunicatio | 98 | |
| GEORGIA | | | | | | | |
| | 26 | | Atlanta | | | | |
| | 104 | | Savannah | | | | |
| | 144 | | Brunswick | | | | |
| | | 24 | Atlanta | GM | auto | 83 | |
| | | 46 | La Grange | Goetze Gasket | auto gaskets | 84 | Lapsed |
| | | 70 | Hapeville | Ford | auto | 85 | |
| | | 149 | Coweta | Yamaha | golf carts/water | 98 | |
| | | 296 | Dougherty | Merck | pharmaceuticals | 95 | |
| | | 299 | Bulloch | Wal-Mart | distribution | 95 | |
| | | 330 | Chatham | CITGO | oil refining | 96 | |
| | | 346 | Columbus | Pratt& Whitney | United | 96 | |
| | | 347 | Columbus | Precision | aircraft engine | 96 | |
| HAWAII | | | | | | | |
| | 9 | | Honolulu | | | | |
| | | 2 | Oahu | Tesoro Hawaii | refinery | 70 | |
| | | 57 | Honolulu | Kerr Pacific | -- | 95 | |
| | | 95 | Kahului | Maui pineapple | food | 86 | |
| | | 72 | Honolulu | Dole | food | 85 | |
| | | 138 | Oahu | Chevron | oil refining | 88 | |
| | | 364 | Oahu | Gasco | oil refining | 97 | |
| IDAHO | | | | | | | |
| | 192 | | Meridian | | | | |
| ILLINOI | | | | | | | |
| | 22 | | Chicago | | | | |
| | 31 | | Granite City | | | | |
| | 114 | | Peoria | | | | |
| | 133 | | Milan | | | | |
| | 146 | | Lawrencevill | | | | |
| | 176 | | Rockford | | | | |
| | | 22 | Chicago | UNR-Leavitt | steel pipe fab.83 | 83 | Lapsed |
| | | 60 | Peoria | Caterpillar | tractor | 85 | |
| | | 89 | Chicago | Ford | auto | 86 | |
| | | 98 | Du Page | Power | packaging | 87 | expired 91 |
| | | 99 | Du Page | Power | packaging | 87 | expired 91 |
| | | 100 | Kane | Power | packaging | 87 | expired 91 |
| | | 104 | Belvidere | Chrysler | auto | 87 | transferred 93 |

| STATE | ZONE# | SUBZONE # | LOCATION | BUSINESS | INDUSTRY | YEAR APPROVED | STATUS: (Active unless otherwise indicated) |
|---|---|---|---|---|---|---|---|
| | | 112 | Flora | N. Am. Lighting | auto components | 88 | |
| | | 113 | Salem | N. Am. Lighting | auto components | 88 | |
| | | 114 | Peoria | Mitsubishi | auto | 88 | |
| | | 154 | Galesburg | Maytag | appliances | 89 | lapsed |
| | | 155 | Herrin | Maytag | appliances | 89 | |
| | | 220 | Effingham | Fedders | room air | 92 | |
| | | 222 | Dundee | Milk | animal feed | 92 | |
| | | 224 | Loves Park | Clinton | cathode ray tubes | 92 | |
| | | 243 | N. Chicago | Abbott | pharmaceuticals | 92 | |
| | | 275 | Des Plaines | Sanofi | pharmaceuticals | 94 | |
| | | 306 | Manhattan | Amoco | crude storage | 95 | |
| | | 312 | Will County | UNO-VEN | oil refining | 95 | |
| | | 314 | Robinson | Marathon | oil refining | 95 | |
| | | 361 | Madison | Shell | oil refining97386 | 97 | |
| | | 386 | Marengo | Nissan | engines | 97 | |
| | | 401 | Will County | Mobil Oil | oil refining | 98 | |
| | | 403 | obile County | Shell | oil refining989 | 89 | |
| | | 405 | Kankakee | Henkel | vitamin E | 98 | |
| INDIAN | | | | | | | |
| | 22 | | Indianapolis | | | | |
| | 31 | | South Bend | | | | |
| | 114 | | Burns | | | | |
| | 133 | | Clark | | | | |
| | 146 | | Evansville | | | | |
| | 176 | | Fort Wayne | | | | |
| | | 50 | Kokomo | GM | auto electronics | 84 | |
| | | 73 | Indianapolis | Eli Lilly | pharmaceuticals | 85 | |
| | | 74 | Lafayette | Eli Lilly | pharmaceuticals | 85 | |
| | | 75 | Clinton | Eli Lilly | pharmaceuticals | 85 | |
| | | 90 | Indianapolis | Chrysler | auto | 86 | lapsed |
| | | 91 | Kokomo | Chrysler | auto components | 86 | |
| | | 92 | New Castle | Chrysler | auto | 86 | |
| | | 127 | Lafayette | Caterpillar | tractor engines | 88 | |
| | | 148 | Lafayette | Subaru-Isuzu | auto | 89 | |
| | | 179 | Indianapolis | Alpine | audio equip. | 90 | |
| | | 180 | South Bend | EWI | auto parts | 90 | |
| | | 239 | Midlebury | Coachmen | vehicles | 92 | |
| | | 244 | Greenwood | Endress& | instruments | 92 | |
| | | 246 | Evansville | Mead Johnson | pharmaceuticals | 92 | |
| | | 249 | Elkhart | Fairmont | manufactured | 93 | |
| | | 252 | Bartholome | POnkyo | accoustical prods. | 93 | |
| | | 305 | Whiting | Amoco | oil refining | 95 | |
| | | 333 | Indianapolis | Thompson | electronics | 96 | |
| | | 379 | Rushville | Fugitsu | auto audio | 97 | |
| IOWA | | | | | | | |
| | 107 | | Polk County | | | | |
| | 133 | | Davenport | | | | |
| | 175 | | Cedar | | | | |
| | | 55 | Forest City | Winnebago | auto | 84 | |
| | | 156 | Newton | Maytag | appliances | 89 | lapsed |
| KANSA | | | | | | | |
| | 17 | | Kansas City | | | | |
| | 161 | | Sedgwick | | | | |
| | | 84 | Kansas | | auto | 85 | |
| | | 274 | McPherson | Abbott Labs | pharmaceuticals | 94 | |

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|---|---|---|---|---|---|---|---|
| | | 356 | Butler | Equilon | oil refining | 97 | |
| KENTUCKY | | | | | | | |
| | 29 | | Jefferson County | | | | |
| | 47 | | Campbell | | | | |
| | | 37 | Georgetown | Clark | lift trucks | 84 | lapsed |
| | | 43 | Louisville | Ford | auto | 84 | |
| | | 86 | Jefferson | GE | home appliances | 85 | |
| | | 87 | Jefferson | Lexmark | typewriters & | 86 | |
| | | 111 | Scott | Toyota | auto | 87 | |
| | | 177 | Walton | Clarion | auto audio | 90 | |
| | | 182 | Harrodsburg | Hitachi | auto parts | 90 | |
| | | 359 | Boyd | Marathan | oil refining | 97 | |
| | | 365 | Campton | Ascent | elec./electronic | 97 | |
| LOUISIANA | | | | | | | |
| | 2 | | New Orleans | | | | |
| | 87 | | Calcasieu Parish | | | | |
| | 124 | | St. Charles | | | | |
| | 145 | | Shreveport | | | | |
| | 154 | | Baton | | | | |
| | | 120 | Gramercy | Trans-American | oil refining 88 | 88 | |
| | | 134 | Lake | Conoco | oil refining 88 | 88 | |
| | | 150 | Lake | Citgo | oil refining | 89 | |
| | | 193 | Avondale | Avondale | shipbuilding | 91 | |
| | | 194 | Westwego | Avondale | shipbuilding | 91 | |
| | | 195 | Harvey | Avondale | shipbuilding | 91 | |
| | | 196 | New Orleans | Avondale | shipbuilding | 91 | |
| | | 210 | Lafourche | N.Am.Shipbuild | shipbuilding | 91 | |
| | | 212 | Shreveport | AT&T | telecommunicatio | 91 | |
| | | 223 | New Orleans | Equitable | shipbuilding | 93 | |
| | | 261 | Convent | Star Enterprise | oil refining | 94 | |
| | | 297 | Lafourche | LOOP | crude oil | 95 | |
| | | 310 | Garyville | Marathon | oil refining | 95 | |
| | | 318 | St. Bernard | Chalmette | oil refining | 95 | |
| | | 337 | Plaquemine | BP | oil refining | 96 | |
| | | 343 | St. Charles | Shell Oil | oil refining | 96 | |
| | | 348 | Baton | Exxon | oil refining | 96 | |
| | | 373 | St. Bernard | Murphy Oil | oil refining | 97 | |
| | | 404 | Lockport | Halter Marine | shipbuilding | 98 | |
| | | 418 | Lockport | Bollinger | shipbuilding | 98 | |
| MAINE | | | | | | | |
| | 58 | | Bangor | | | | |
| | 179 | | Madawaska | | | | |
| | 186 | | Waterville | | | | |
| | | 202 | Madawaska | Northern | cosmetics | 91 | |
| MARYLAND | | | | | | | |
| | 63 | | Prince Geoge's County | | | | |
| | 73 | | BWI Airport | | | | |
| | 74 | | Baltimore | | | | |
| | | 61 | Sparrow's | Bethlehem | steel | 85 | |
| | | 307 | Walkersville | Rotorex | rotary | 95 | |
| MASSACHUSETTS | | | | | | | |
| | 27 | | Boston | | | | |
| | 28 | | New | | | | |

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|---|---|---|---|---|---|---|---|
| | 201 | | Holyoke | | | | |
| | | 7 | Fall River | Sterlingwale | apparel | 80 | terminated 89 |
| | | 31 | Quincy | General | shipyard | 89 | |
| | | 32 | Lawrencevill | Lawrence | textiles | 84 | |
| | | 105 | Framingham | GM | auto | 87 | |
| | | 117 | New | Codman &Shur. | surgical | 88 | |
| | | 118 | Avondale | Codman & | surgical | 88 | |
| | | 119 | Randolph | Codman & | surgical | 88 | |
| | | 183 | Norwood | Polaroid | camera | 91 | |
| | | 184 | Needham | Polaroid | camera | 91 | |
| | | 185 | New | Polaroid | camera | 91 | |
| | | 186 | Waltham | Polaroid | camera | 91 | |
| | | 187 | Freetown | Polaroid | camera | 91 | |
| | | 188 | Boston | Polaroid | camera | 91 | |
| | | 189 | Cambridge | Polaroid | camera | 91 | lapsed |
| | | 410 | Quincy | Mass. Heavy | shipbuilding | 98 | |
| MICHIGAN | | | | | | | |
| | 16 | | Sault Ste. Marie | | | | |
| | 43 | | Battle Creek | | | | |
| | 70 | | Detroit | | | | |
| | 140 | | Flint | | | | |
| | 189 | | Kent/Ottawa/Muskegon | | | | |
| | 210 | | St. Clair | | | | |
| | | 10 | Romeo | Ford | tractor | 81 | |
| | | 13 | Detroit | Chrysler | auto | 82 | |
| | | 19 | Wayne | Ford | auto | 83 | |
| | | 28 | Wixom | Ford | auto | 83 | |
| | | 29 | Dearborn | Ford | auto | 83 | |
| | | 36 | Springfield | Clark | lift trucks | 84 | terminated 91 |
| | | 48 | Ypsilanti | GM | auto | 84 | |
| | | 49 | Pontiac | GM | auto | 84 | |
| | | 67 | Sterling | Chrysler | auto | 85 | |
| | | 94 | Flat Rock | Mazda | auto | 86 | |
| | | 101 | Flint | GM | auto | 87 | |
| | | 103 | Trenton | Chrysler | auto | 87 | |
| | | 123 | Midland | Dow | chemical | 88 | lapsed |
| | | 129 | Detroit | GM | auto | 88 | |
| | | 130 | Orion | GM | auto | 88 | |
| | | 131 | Lansing | GM | auto | 88 | |
| | | 161 | Detroit | Chrysler | auto | 89 | |
| | | 162 | Trenton | Chrysler | auto | 89 | terminated 92 |
| | | 163 | Detroit | Chrysler | auto | 89 | |
| | | 164 | Detroit | Chrysler | auto | 89 | |
| | | 165 | Detroit | Chrysler | auto | 89 | |
| | | 216 | Zeeland | Mead Johnson | -- | 92 | |
| | | 303 | Wyandotte | BASF | vitamins/plastics | 95 | |
| | | 362 | Detroit | Marathon | oil refining | 97 | |
| | | 377 | Sturgis | Abbott | infant formula | 97 | |
| | | 390 | Kentwood | Diesel | fuel injection | 97 | |
| MINNESOTA | | | | | | | |
| | 51 | | Duluth | | | | |
| | 119 | | Minneapolis/St. Paul | | | | |
| | | 248 | St. Peter | Davisco | dairy prds. | 93 | |
| | | 251 | Apple Valley | Wirsbo | polyethylene | 93 | |
| | | 255 | Howard | Am. Feeds & | animal feeds | 93 | |
| | | 264 | Preston | Wisconsin | infant formula | 94 | |

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|---|---|---|---|---|---|---|---|
| | | 345 | Lindstrom | Plastic | in-line skates | 96 | |
| | | 414 | Redwood | Artesyn | elec. power | 98 | |
| MISSISSIPPI | | | | | | | |
| | 92 | | Harrison | | | | |
| | 158 | | Vicksburg/Jackson | | | | |
| | | 115 | Escatawpa | Moss Pt. | shipbuilding | 88 | |
| | | 190 | Pascagoula | Ingalis | shipbuilding | 91 | |
| | | 237 | Harrison | Avondale Ent. | shipbuilding | 92 | |
| | | 271 | Corinth | Cortelo USA | phone & computer | 94 | |
| | | 279 | Meridian | Peavey Elec. | audio/acoustical | 94 | |
| | | 300 | Pascagoula | Chevron | oil refining | 95 | |
| MISSOURI | | | | | | | |
| | 15 | | Kansas City | | | | |
| | 102 | | St. Louis | | | | |
| | 225 | | Springfield | | | | |
| | | 20 | St.Louis | Chrysler | auto | 83 | |
| | | 23 | Claycomo | Ford | auto | 83 | |
| | | 40 | Hazelwood | Ford | auto | 84 | |
| | | 64 | Kansas | -- | auto | 93 | |
| | | 132 | Wentzville | GM | auto | 88 | |
| | | 151 | Kirksville | Ortech | auto components | 89 | |
| | | 152 | Kansas City | Bayer | ag. chemicals | 89 | |
| | | 160 | Kansas City | Kawasaki | engine parts | 89 | |
| | | 181 | Grandview | Metcals | sink processing | 90 | lapsed |
| | | 278 | Jefferson | Florsheim | shoes | 94 | |
| MONTANA | | | | | | | |
| | 88 | | Great Falls | | | | |
| | 187 | | Toote | | | | |
| | 190 | | Butte-Silver Bow | | | | |
| NEBRASKA | | | | | | | |
| | 19 | | Omaha | | | | |
| | 59 | | Lincoln | | | | |
| | | 8 | Lincoln | Kawasaki | motorcycles & | 80 | |
| NEVAD | | | | | | | |
| | 89 | | Clark | | | | |
| | 126 | | Sparks | | | | |
| | | 52 | Reno | Porsche | auto | 84 | |
| NEW HAMPSHIRE | | | | | | | |
| | 81 | | Portsmouth | | | | |
| | | 18 | Portsmouth | Nashua | office equip | 83 | |
| | | 33 | Colebrook | Manchester | apparel | 84 | |
| | | 232 | Newington | ABB | industrial/nuclear | 92 | |
| NEW JERSEY | | | | | | | |
| | 44 | | Morris | | | | |
| | 49 | | Newark/Elizabeth | | | | |
| | 142 | | Salem/Millvi | | | | |
| | 200 | | Mercer | | | | |
| | 235 | | Lakewood | | | | |
| | | 35 | Edison | Ford | auto | 84 | |
| | | 85 | Linden | GM | auto | 85 | |
| | | 107 | Hazlet | Int'l Flavors | -- | 87 | lapsed |

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|---|---|---|---|---|---|---|---|
| | | 108 | Union | Int'l Flavors | -- | 87 | lapsed |
| | | 109 | S. | Int'l Flavors | -- | 87 | lapsed |
| | | 153 | N. | Squibb | pharmaceuticals | 89 | |
| | | 298 | Rahway | Merck | pharmaceuticals | 95 | |
| | | 319 | Linden | Bayway | oil refining | 95 | |
| | | 321 | Gloucester | Mobil Oil | oil refining | 95 | |
| | | 331 | Gloucester | CITGO | oil refining | 96 | |
| | | 363 | Perth | Chevron | oil refining | 97 | |
| | | 372 | Gloucester | Coastal Eagle | Oil refining | 97 | |
| | | 383 | East | Conair | warehouse/distrib | 97 | |
| | | 416 | Bridgewater | Hewlett-Packar | computer-related | 98 | |
| NEW MEXICO | | | | | | | |
| | 110 | | Albuquerqu | | | | |
| | 194 | | Rio Rancho | | | | |
| | 197 | | Dona Ana | | | | |
| | | 58 | Albuquerqu | SP | pharmaceuticals | 84 | |
| NEW YORK | | | | | | | |
| | 1 | | NY City | | | | |
| | 23 | | Buffalo | | | | |
| | 34 | | Niagara | | | | |
| | 37 | | Orange | | | | |
| | 52 | | Suffolk | | | | |
| | 54 | | Clinton | | | | |
| | 90 | | Onondaga | | | | |
| | 109 | | Jefferson County | | | | |
| | 111 | | JFK Intl. Airport | | | | |
| | 118 | | Ogdensburg | | | | |
| | 121 | | Albany | | | | |
| | 141 | | Monroe | | | | |
| | 172 | | Oneida | | | | |
| | | 26 | Webster | Xerox | office equip | 90 | |
| | | 59 | Waltertown | NYAirbrake | -- | 84 | lapsed |
| | | 63 | Cortland | Smith-Carona | electronics | 85 | |
| | | 66 | N. | GM | auto | 85 | |
| | | 93 | NY City | Jack Young | -- | 86 | lapsed |
| | | 96 | Chatauqua | CPS Corp. | -- | 86 | expired 96 |
| | | 106 | Onodaga | Chrysler | auto | 87 | lapsed |
| | | 133 | Rochester | Eastman Kodak | photography | 88 | |
| | | 213 | Rochester | ITT | auto electronics | 91 | lapsed |
| | | 258 | New | Bally | shoes | 93 | |
| | | 273 | Rensselaer | Sanophi | pharmaceuticals | 94 | |
| | | 292 | Rochester | Gleason Corp. | gear production | 95 | |
| | | 302 | Sherrill & | Oneida | tableware | 95 | |
| | | 322 | Rensselaer | BASF | chem. | 95 | |
| NORTH | | | | | | | |
| | 57 | | Mecklenburg County | | | | |
| | 66 | | Wilmington | | | | |
| | 67 | | Morehead | | | | |
| | 93 | | Raleigh | | | | |
| | 214 | | Lenoir | | | | |
| | 230 | | Fuilford, Forsuth,, etc. | | | | |
| | | 88 | Mecklenbur | IBM | electronics | 86 | |
| | | 173 | Alamance | Honda | lawnmowers | 90 | |

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|---|---|---|---|---|---|---|---|
| | | 219 | Kernersville | Deere-Hitachi | hydraulic | 92 | |
| | | 227 | Raleigh/Dur | IBM | info processing | 92 | |
| | | 230 | Wake | Mallinckrodt | pharmaceuticals | 92 | |
| | | 283 | Wilson | Merck | pharmaceuticals | 94 | |
| | | 328 | Goldsboro | R.G. Barry | footwear & | 96 | |
| | | 335 | Whitsett | Lucent | telecommunicatio | 96 | |
| | | 378 | Yadkinville | Unifi | polyester yarn | 97 | |
| NORTH DAKOTA | | | | | | | |
| | 103 | | Grand Forks | | | | |
| OHIO | | | | | | | |
| | 8 | | Toledo | | | | |
| | 40 | | Cleveland | | | | |
| | 46 | | Butler | | | | |
| | 100 | | Dayton | | | | |
| | 101 | | Clinton | | | | |
| | 138 | | Franklin | | | | |
| | 151 | | Findlay | | | | |
| | 181 | | Akron/Canto | | | | |
| | | 5 | Hamilton | GE | jet engines | 79 | |
| | | 6 | Union City | Honda | motorcycles | 79 | |
| | | 34 | Toledo | Jeep | auto | 84 | |
| | | 44 | Lorain | Ford | auto | 84 | |
| | | 65 | Lordstown | GM | auto | 85 | |
| | | 102 | Norwood | GM | auto | 87 | |
| | | 110 | Shelby | Honda | car/motorcycle | 87 | |
| | | 121 | Findlay | Cooper Tire & | tires | 88 | |
| | | 128 | Cincinnati | Nine West | shoes | 88 | |
| | | 157 | Dayton | GM | electric motors | 89 | |
| | | 158 | Kettering | GM | auto parts | 89 | |
| | | 166 | Dayton | Chrysler | auto parts | 89 | |
| | | 167 | Perrysburg | Chrysler | auto parts | 89 | |
| | | 168 | Sandusky | Chrysler | auto parts | 89 | |
| | | 169 | Van Wert | Chrysler | auto parts | 89 | |
| | | 170 | Toledo | Giant Products | industrial pumps | 90 | |
| | | 203 | Richwood | Wascator Mfg. | washing machines | 91 | |
| | | 236 | Ottawa | W.C. Wood | freezers | 92 | |
| | | 254 | Avon Lake | Ford | motor vehicles | 93 | |
| | | 257 | Euclid/Ment | Lincoln Electric | arc welding equip. | 93 | |
| | | 259 | McComb | Consolidated | food | 93 | |
| | | 268 | Bedford | Mr. Coffee | small appliance | 94 | |
| | | 280 | Valley View | Picker | medical | 94 | |
| | | 325 | Grove City | Pier 1 | distribution | 96 | |
| | | 326 | Bedford | Ben Venue | pharmaceuticals | 96 | |
| | | 338 | Toledo | BP Oil | oil refining | 96 | |
| | | 344 | Euclid | Motch | machinery | 96 | |
| | | 358 | Stark/Allen | Marathon | oil refining | 97 | |
| | | 366 | Springboro | pioneer | auto audio | 97 | |
| | | 387 | Columbus | Abbott | infant formula | 97 | |
| | | 417 | Beverly | Globe | ferroalloys | 98 | |
| | | 424 | Columbus | Lucent | telecommunicatio | 98 | |
| | | 425 | Lima | Clark USA | oil refining | 98 | |
| OKLAHOMA | | | | | | | |
| | 53 | | Rogers | | | | |
| | 106 | | Oklahome | | | | |
| | 164 | | Muskogee | | | | |

| STATE | ZONE# | SUBZONE # | LOCATION | BUSINESS | INDUSTRY | YEAR APPROVED | STATUS: (Active unless otherwise indicated) |
|---|---|---|---|---|---|---|---|
| | 227 | | Durant | | | | |
| | | 51 | Oklahome | GM | auto | 84 | |
| | | 240 | Oklahome | Ted Davis Mfg. | voice aoil motors | 92 | |
| | | 394 | Lincoln | ARCO Pipe | crude oil | 98 | |
| OREGO | | | | | | | |
| | 45 | | Portland | | | | |
| | 132 | | Coos | | | | |
| | 184 | | Klamath | | | | |
| | 206 | | Medford-Jackson County | | | | |
| | | 9 | Multnomah | Beall Pipe | | 80 | deactivated 83 |
| | | 171 | Portland | AIM | | 90 | lapsed |
| | | 207 | Portland | Alcatel | fiberoptic cable | 91 | |
| | | 221 | Pendleton | Continental | food | 92 | |
| | | 247 | Tualatin | Tofle USA | stainless steal | 92 | |
| PENNSYLVANIA | | | | | | | |
| | 24 | | Pittston | | | | |
| | 33 | | Allegheny County | | | | |
| | 35 | | Philadelphia | | | | |
| | 147 | | Berks | | | | |
| | | 3 | Westmorela | VW | auto | 77 | |
| | | 4 | Harrisburg | Olivetti | typewriters, | 78 | deactivated 81 |
| | | 21 | Landsdale | Ford | auto | 83 | |
| | | 142 | Allegheny | Verosol USA | window shade | 89 | |
| | | 282 | West Point | Merck | pharmaceuticals | 94 | |
| | | 285 | Riverside | Merck | pharmaceuticals | 94 | |
| | | 342 | Philadelphia | Sun Company | oil refining | 96 | |
| | | 369 | Delaware | Tosco | oil refining | 97 | |
| PUERTO RICO | | | | | | | |
| | 7 | | Mayaguez | | | | |
| | 61 | | Guyanabo | | | | |
| | 163 | | Ponce | | | | |
| | | 15 | Penuelas | CORCO | oil refining | 82 | |
| | | 217 | Humacao | Bristol-Myers | pharmaceuticals | 92 | |
| | | 218 | Barceloneta | Bristol-Myers | pharmaceuticals | 82 | |
| | | 245 | Caguas | Searle | pharmaceuticals | 92 | |
| | | 266 | Barceloneta | Searle | pharmaceuticals | 94 | |
| | | 267 | Cidra | SB Pharmco | pharmaceuticals | 94 | |
| | | 294 | Arecibo | Merck | pharmaceuticals | 95 | |
| | | 295 | Barceloneta | Merck | pharmaceuticals | 95 | |
| | | 316 | Guayama | IPR | pharmaceuticals | 95 | |
| | | 317 | Carolina | IPR | pharmaceuticals | 95 | |
| | | 360 | San Juan | Baxter Caribe | pharmaceuticals | 97 | |
| | | 371 | Skagit Cnty. | PR Sun oil | oil refining | 97 | |
| | | 384 | Cidra | PepsiCo | concentrate | 97 | |
| | | 423 | San Juan | Pfizer | pharmaceuticals | 98 | |
| RHODE ISLAND | | | | | | | |
| | 105 | | Providence | | | | |
| SOUTH | | | | | | | |
| | 21 | | Dorchester Cnty | | | | |
| | 38 | | Spartanburg Cnty | | | | |
| | 127 | | West | | | | |
| | | 53 | Charleston | Porsche | auto | 84 | |
| | | 208 | Anderson | AUTECS | auto electronics | 91 | |

| STATE | ZONE# | SUBZONE # | LOCATION | BUSINESS | INDUSTRY | YEAR APPROVED | STATUS: (Active unless otherwise indicated) |
|---|---|---|---|---|---|---|---|
| | | 235 | Goose | Haarmann & | chemicals | 92 | |
| | | 272 | Spartanburg | BMW | auto | 94 | |
| | | 399 | Goose | Bayer Corp | rubber | 98 | |
| SOUTH DAKOTA | | | | | | | |
| | 220 | | Sioux Falls | | | | |
| TENNESSEE | | | | | | | |
| | 77 | | Memphis | | | | |
| | 78 | | Nashville | | | | |
| | 134 | | Chattanoog | | | | |
| | 148 | | Knoxville | | | | |
| | 204 | | Tri-City | | | | |
| | 223 | | Memphis | | | | |
| | | 14 | Symnra | Nissan | truck/auto | 82 | |
| | | 27 | Lebanon | Toshiba | microwave ovens | 83 | |
| | | 38 | Hartsville | TVA Nuclear | energy | 84 | |
| | | 39 | Phipps | Global Power | energy | 84 | |
| | | 45 | Memphis | Sharp | microwave ovens | 84 | |
| | | 175 | Maury Cnty. | Saturn | auto | 90 | |
| | | 192 | Hawkins | Form Rite | -- | 91 | |
| | | 289 | Bristol | SmithKline | pharmaceuticals | 95 | |
| | | 301 | Carter Cnty. | Soemens | industrial | 95 | |
| | | 308 | Bartlett | Brother Ind. | typewriters/word | 95 | |
| | | 311 | Columbia | Columbia | room | 95 | |
| | | 413 | Ripley | Komatsu | equip. parts dist. | 98 | |
| TEXAS | | | | | | | |
| | 12 | | McAllen | | | | |
| | 36 | | Galveston | | | | |
| | 39 | | Dallas/Fort Worth | | | | |
| | 62 | | Brownsville | | | | |
| | 68 | | El Paso | | | | |
| | 80 | | San Antonio | | | | |
| | 84 | | Harris | | | | |
| | 94 | | Webb | | | | |
| | 95 | | Starr County | | | | |
| | 96 | | Maverick | | | | |
| | 97 | | Val Verde County | | | | |
| | 113 | | Ellis County | | | | |
| | 115 | | Beaumont | | | | |
| | 116 | | Jefferson County | | | | |
| | 117 | | Orange | | | | |
| | 122 | | Corpus | | | | |
| | 149 | | Freeport | | | | |
| | 150 | | El Paso | | | | |
| | 155 | | Victoria & CalhounCounties | | | | |
| | 156 | | Weslaco | | | | |
| | 165 | | Midland | | | | |
| | 168 | | Dallas/Fort Worth | | | | |
| | 171 | | Liberty | | | | |
| | 178 | | Presidio | | | | |
| | 183 | | Austin | | | | |
| | 196 | | Fort Worth | | | | |
| | 199 | | Texas City | | | | |
| | 234 | | Gregg | | | | |
| | | 62 | Jefferson | Bethlehem | | 85 | |
| | | 76 | Corpus Ch. | Coastal St. | oil refining | | |

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|---|---|---|---|---|---|---|---|
| | | 77 | Corpus Ch. | Koch Refining | oil refining | 95 | |
| | | 78 | Corpus Ch. | Trifinery | oil refining | 85 | |
| | | 79 | Corpus Ch. | Gulf Marine | oil refininh | 85 | |
| | | 80 | Corpus Ch. | Berry | -- | 85 | |
| | | 81 | Corpus Ch. | CC Distributing | -- | 85 | expired 91 |
| | | 82 | Corpus Ch. | Compressors | -- | 85 | expired 91 |
| | | 83 | Corpus Ch. | Hitox | -- | 85 | |
| | | 122 | Athens | Harvey Inds. | TVs | 88 | |
| | | 124 | Victoria | Safety Railway | freight car repair | 88 | lapsed |
| | | 125 | Victoria | Safety Steel | freight car repair | 88 | lapsed |
| | | 135 | Corpus | Citgo | oil refining | 88 | |
| | | 136 | Nueces | Valero | oil refining | 88 | |
| | | 139 | Weslaco | McManus | food processing | 88 | |
| | | 140 | Weslaco | FGulf De Bruyn | food processing | 88 | |
| | | 141 | Weslaco | Sundor | food processing | 89 | |
| | | 143 | Corpus Ch. | Reynolds | alumina | 88 | |
| | | 144 | Houston | Hughes Tool | drilling tools | 89 | |
| | | 145 | Houston | Texas Steel | heat-treat oil | 89 | |
| | | 176 | LaPorte | DuPont | hydrofluoric acid | 90 | |
| | | 198 | Houston | United General | hand tools | 91 | |
| | | 199 | San Antonio | Bausch & Lomb | sunglasses | 91 | lapsed |
| | | 200 | San Antonio | Colin Medical | medical equip, | 91 | |
| | | 201 | San Antonio | Friedrich A/C & | air conditioners | 91 | |
| | | 205 | Calhoun | Alcoa | alumina/aluminum | 91 | |
| | | 206 | Houston | Gulf Coast | oil refining | 91 | |
| | | 209 | Nueces | Koch Refining | oil refining | 91 | |
| | | 211 | Arlington | GM | auto | 91 | |
| | | 214 | Houston | Calero Refining | oil refining | 91 | |
| | | 215 | Houston | Goodman Mfg. | -- | 91 | |
| | | 225 | Harris | Shaffer | oil drilling equip. | 92 | |
| | | 241 | Austin | Dell Computer | electronics | 92 | |
| | | 242 | Harris | Tuboscope | steel tube prds. | 92 | |
| | | 260 | Harris | Shell Oil | oil refining | 93 | |
| | | 262 | Port Arthur | Star Enterprise | oil refining | 93 | |
| | | 263 | Wylie | Sanden | auto a/c | 93 | |
| | | 265 | Houston | Dril-Quip | oil field equip | 94 | |
| | | 287 | Houston | Hydril | oil field equip | 95 | |
| | | 288 | Houston | Tadiran | telecom. prds. | 95 | |
| | | 290 | Tx City | Amoco | oil refining | 95 | |
| | | 291 | Freeport | BASF | chemicals | 95 | |
| | | 309 | Jefferson | Fina | oil refining | 95 | |
| | | 313 | Jefferson/Li | Mobil Oil | oil refining | 95 | |
| | | 315 | Freeport | JHoffnam-LaRo | pharmaceuticals | 95 | |
| | | 320 | Harris | Crown Central | oil refining | 95 | |
| | | 324 | Mansfield | Pier1 | distribution | 96 | |
| | | 327 | San Angelo | R.G. Barry | footwear & | 96 | |
| | | 339 | Texas City | Marathon | oil refining | 96 | |
| | | 341 | Harris | Exxon | oil refining | 96 | |
| | | 349 | Jefferson | Clark | oil refining | 96 | |
| | | 357 | Texas City | Valero | oil refining | 97 | |
| | | 374 | Jefferson | USDOE Oil | crude oil shortage | 97 | |
| | | 381 | Brazoria | Phillips | oil refining | 97 | |
| | | 388 | Richardson | Fossil Partners | watches, etc. | 97 | |
| | | 389 | Dallas | B&F System | consumer prds. | 97 | |
| | | 395 | Brazoria | Seaway | crude oil | 98 | |
| | | 396 | Texas City | Seaway | crude oil | 98 | |
| | | 402 | Harris | Lyondell-Citgo | oil refining | 98 | |
| | | 409 | Harris | Equistar | petrochemicals | 98 | |

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|---|---|---|---|---|---|---|---|
| | | 421 | Lewisville | Ultrak | closed circuit TV | 98 | |
| | | 422 | Brazoria | Amoco | petrochemicals | 98 | |
| UTAH | | | | | | | |
| | 30 | | Salt Lake | | | | |
| VERMONT | | | | | | | |
| | 55 | | Burlington | | | | |
| | 91 | | Newport | | | | |
| | | 17 | St. Albans | Pedigree | apparel | 82 | |
| | | 172 | Georgia | Wyeth | | 90 | |
| VIRGINI | | | | | | | |
| | 20 | | Suffolk | | | | |
| | 137 | | Wash. Dulles Intl. Airport | | | | |
| | 185 | | Culpeper | | | | |
| | 207 | | Richmond | | | | |
| | | 146 | Va. Beach | Stihl | chain saw/power | 89 | lapsed |
| | | 228 | Culpeper | ITT Teves | auto brake comp. | 92 | |
| | | 229 | Culpeper | Rochester | cable | 92 | |
| | | 253 | Newport | NN | shipbuilding | 93 | |
| | | 284 | Elkton | Merck & Co | pharmaceuticals | 94 | |
| | | 305 | Whiting | Amoco | oil refining | 95 | |
| | | 367 | Altavista | Abbott | formula/nutritional | 97 | |
| | | 406 | Richmond | Hewlett-Packar | computer-related | 98 | |
| WASHINGTON | | | | | | | |
| | 5 | | Seattle | | | | |
| | 85 | | Everett | | | | |
| | 86 | | Tacoma | | | | |
| | 120 | | Cowlitz | | | | |
| | 128 | | Whatcom | | | | |
| | 129 | | Whatcom | | | | |
| | 130 | | Whatcom | | | | |
| | 131 | | Whatcom | | | | |
| | 173 | | Grays | | | | |
| | 188 | | Yakima | | | | |
| | 203 | | Moses Lake | | | | |
| | 212 | | Tacoma | | | | |
| | 216 | | Olympia | | | | |
| | 224 | | Spokane | | | | |
| | | 126 | Tacoma | Tacoma Boat. | shipbuilding | 88 | |
| | | 191 | Hoquiam | Lamb-Grays | -- | 91 | |
| | | 270 | Arlington | West-Coast | wood building | 94 | |
| | | 370 | Skagit Cnty. | Equilon | oil refining | 97 | |
| WEST VIRGINIA | | | | | | | |
| | 228 | | Wood/Jackson Counties | | | | |
| | 229 | | Charleston | | | | |
| | | 397 | Buffalo | Toyota | auto engines | 98 | |
| WISCONSIN | | | | | | | |
| | 41 | | Milwaukee | | | | |
| | 167 | | Brown | | | | |
| | | 11 | Kenosha | Chrysler | auto | 81 | |
| | | 12 | Manitowac | Muskegon | piston rings | 81 | |
| | | 68 | Janesville | GM | auto | 85 | |
| | | 69 | Oak Creek | GM | auto electronics | 85 | lapsed |

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|---|---|---|---|---|---|---|---|
| | | 71 | Sturgeon | Bay | shipbuilding | 85 | |
| | | 97 | Milwaukee | Ambrosia | -- | 87 | expired 91 |
| | | 238 | Blue | Stauffer | cheese prods | 92 | |
| | | 352 | Hudson | Robin Mfg. | small engines | 96 | |
| | | 391 | Osceola | Polaris | small engines | 97 | |
| | | 393 | Plymouth | Sargento Foods | cheese prcessing | 98 | |
| WYOMING | | | | | | | |
| | 157 | | Casper | | | | |