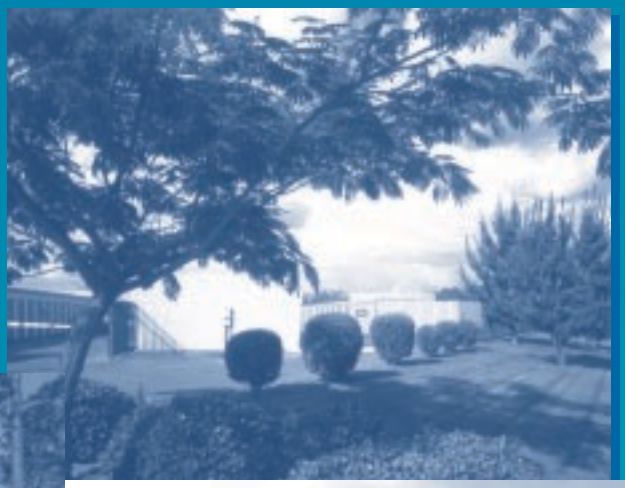
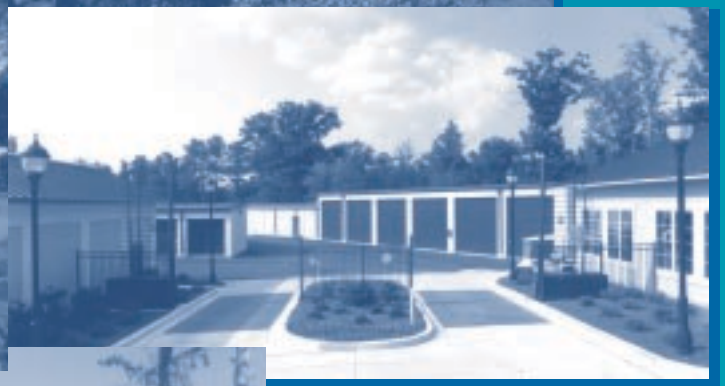
Self Storage Standards and the Modern Community





A Self Storage Association

Self Storage Standards and the Modern Community

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The Self Storage Association

The SSA, representing over 2,300 member organizations, is the oldest nonprofit national association for owners, operators, and suppliers in the self-storage industry. Recognized and respected worldwide for its consistently outstanding service to its members and the industry, the SSA is the only organization solely dedicated to the enhancement and protection of self-storage business practices, products and services.

Self storage is the term applied to facilities that offer do-it-yourself, month-to-month storage space rental. They are also sometimes referred to as "Mini storage" or, incorrectly, as "Mini Warehouses." Self Storage differs greatly from warehousing because it is a landlord/tenant relationship. In the early 1980s, the SSA advoacted the creation of a model Self Storage Facility Act, defining and protecting this relationship. To date, forty-six states have self storage laws based on the SSA model legislation. The SSA considers the support and defense of these laws essential to the economic principles supporting landlord/tenant relationships for the self storage industry and all income producing property classes.

The self storage industry has matured into a sophisticated, vibrant, multi-billion dollar industry and has earned the respect of Wall Street and international investors as a distinct income-producing commercial property class. There are more than 35,000 facilities in the United States. The basic operation of self storage is the rental of space for the exclusive purpose of storing personal property whereby the ***care, custody, and control*** of property placed in self storage is maintained by the renter. Inasmuch, self storage is not warehousing and presumes no possession of customers' goods. This is a fundamental distinction often missed when the self storage industry is not correctly identified.

Chapter 1

The Need for Zoning Practices Specific to Self Storage

The growth and professional evolution of the self storage industry over the past three decades reflects the sensational advancement in personal and business lifestyles that individuals in the US, and the world over have come to enjoy. The reality of a global economy and technological advances in travel, communications, and consumer products has granted the world's growing population a lifestyle enriched beyond historical comparison. What was thought of as extreme wealth in terms of personal and business possessions just 40 years ago is now the norm of middle-class America. Access to, and use of, auxiliary storage space for managing possessions, inventory, and our typical transitory needs is no longer a luxury but an expected service by residents and businesses in every community. Much like the expectations we have for reliable retail services near our homes and work centers to support our daily lives, the American public now takes for granted that the local infrastructure will also include places where they may conveniently store and manage their personal property.

So many economic factors have influenced the evolution of self storage development. People move more often and, therefore, require short-term storage space. Increasing construction costs have resulted in smaller housing units that do not have traditional garages, basements, or attics, particularly in the Sun Belt states. Affordable new single-family houses, apartments, and mobile homes are unlikely to have much storage space. Most businesses have found that constructing and providing for on-site storage has become prohibitively expensive at the same time that the number of records, files, and equipment they keep has risen. Off-site storage space is the only way to effectively manage these issues.

Unfortunately, in the infant years of the self storage industry, some community planners viewed self storage facilities as small conventional warehouses, hence the once common name "mini- warehouse." This name has been problematic from the industry's point of view. The label had, for many years, prevented some zoning officials from seeing that these developments differ considerably from warehouses. Warehouses have employees-self storage facilities have tenants; manufacturers usually use warehouses, whereas families and all forms of commercial enterprises use self storage facilities. Because the differences between the two uses were not accurately perceived, early zoning ordinances did not distinguish between them, and many communities restricted self storage facilities to the same districts as warehouses.

With the growth of the self storage industry, however, zoning regulations governing these facilities are changing. As the number and need for self storage facilities increases and people are now aware of differences between self storage and conventional warehouses, many communities are adding regulations specifically referring to self storage facilities in their zoning ordinances. Accordingly, many communities have begun to allow self storage in retail and residential districts.

A proper evaluation of the differences between self storage and warehousing — specifically in the types of users, the traffic generation, and the fundamental consumer definition of self storage — indicates a public need for regulations that support safe, practical, and specific guidelines for self storage planning and development.

In a survey the American Planning Association conducted in October 1985, approximately 80 % of the 396 communities that responded reported a growing number of self storage facilities in their jurisdictions; none reported a decline. In the two decades following the APA survey, self storage has matured from a "mom and pop" business culture to a multi-billion dollar industry. There are still some misperceptions regarding self storage, but the industry is beginning to resolve many land-use

questions and, subsequently, enjoy a respected position in the commercial real estate industry as a economically productive property class with many subcategories and distinctions. Like other commercial properties, self storage has A, B, and C class value distinctions and architectural and aesthetic advancements have provided for SSF proper development in all property zones.

Today, builders implement elaborate architecture facades to make the facilities blend with existing structures and surrounding architecture. Accordingly, the SSA urges zoning officials and planning boards to approach regulations on self storage with an eye towards the industry's growth, consumer usage, and the advantages of having adequate self-storage available in the community. The following are market-proven benefits for allowing a self storage facility into communities where there is economic support:

- SSFs are quiet.
- They provide an excellent buffer between zones.
- They create very little traffic.
- They have little impact on utilities.
- They have no impact on schools.
- They provide good tax revenues.
- They provide a community service.

Given the documented consumer need for self storage and the economic success as a commercial real estate endeavor, planners need to understand the characteristics of self storage as a distinct property class.

This guide examines the issues communities must consider when contemplating regulations for self storage facilities and will present the views of a number of communities surveyed as well as examples of local ordinances that are currently in use. This study focused on the most prevailing land use issues that the SSA hopes zoning officials and city planners will consider prior to drafting regulations for self storage facilities. A better understanding of the consumer and of the typical daily operations at a self storage facility are essential if safe and practical guidelines are to be established.

Accordingly, the SSA encourages all interested parties to include the association in the drafting of new guidelines and ordinances to ensure that both public safety and economic balance are maintained.

Chapter 2
A Practical View of Self Storage in the Well-Planned Community

Introduction

(by D. Carlos Kaslow[1])

The modern self storage facility is a multi-tenant rental business that serves the storage needs of homeowners, renters and small businesses. Today's self storage facilities are designed to provide customers easy access to the premises and to conform to the aesthetic character of the communities they serve. Self storage facilities are often mistakenly viewed as industrial warehousing operations, yet they have few characteristics in common. This misconception has caused city planners to limit the siting of self storage facilities to industrial areas that are often inconvenient for customers.

A self storage facility is not an industrial operation. It is a community service that can realistically be sited in areas zoned from high-density residential to industrial. This bold statement may come as a surprise to many city planners but the modern self storage facility is not just a row of flat roofed buildings or an old multi-story building that has been converted to self storage use.

Today, a self storage facility is an operating business that reflects the design needs of the neighborhood it serves. Not only can the self storage facility offer an aesthetically pleasing design, (see graphic on page 7) but a recently conducted traffic study demonstrates self storage operations generate very little vehicle traffic (see page 13). Modern facility design and low traffic generation make it very feasible to site self storage facilities in most neighborhoods, with the exception of single family and other low density residential areas.

[1] Carlos Kaslow, General Counsel for the Self Storage Association (SSA), is the Editor of the ***SSA Self Storage Legal Review*** and a founding partner of the Self Storage Legal Network. He is the co-author of the Self Storage Rental Agreement Handbook and Self Storage Lien Manuals for Arizona, California and Nevada. Kaslow is recognized as an authority on self storage law.

Self Storage is not Commercial Warehousing

"Self-service Storage Facility" means any real property designed and used for the purpose of renting or leasing individual storage spaces to occupants who are to have access to such for the purpose of storing and removing personal property. A self-service storage facility is not a warehouse for purposes of Article 7 of the Uniform Commercial Code.

Thirty years ago, when the self storage industry was new, communities viewed self storage facilities as small commercial warehouses, hence the name "mini-warehouse." This name was problematic from the industry's point of view. (See Appendix D *"What is Self Storage")* The label has in some cases prevented zoning officials and the public from seeing that self storage differs considerably from warehousing facilities. Warehouses are beehives of activity. They often have dozens of employees who operate heavy equipment that generates noise and pollution. Commercial vehicles go in and out of the typical warehouse during business hours and this activity can also create noise and traffic problems.

Contrast the commercial warehouse with the typical self storage facility. Self storage facilities have two to four employees. The heaviest equipment used at a self storage facility is an electric golf cart. While self storage facilities get regular use, traffic studies demonstrates that the actual vehicular traffic is light. The most important difference between a self storage facility and a commercial warehouse is the market they serve. Warehouses serve the needs of manufacturers and large commercial operations; self storage serves the needs of individuals and small businesses located in the community. Because the users of self storage facilities are from 50% to 70% individuals most tenants enter the facilities in the family car, small van or pickup truck. Larger vehicles occasionally enter self storage facilities but moving

van and large truck use is more like that associated with apartment complexes, not commercial warehousing operation.

Today's community planning decisions should not be based upon popular myth or the misunderstandings of the past. Self storage facilities are not mini-warehouses or a smaller version of their commercial namesake. The modern self storage facility is a business serving the need for space of a modern society. They can be good neighbors in most settings and create few traffic congestion problems.

Self Storage Regulatory Trends

The early trend was to permit self storage facilities to locate only in heavy commercial, industrial areas. This in turn caused self storage facilities to take on the look of their surroundings. A small number of communities allowed self storage facilities to locate in light commercial and even high density residential areas. The modern self storage facility was born in an effort to conform to the aesthetic requirements of light commercial and residential neighborhoods.

City planners need to take a more innovative approach when considering the permissible siting of self storage facilities. As the self storage business has matured public acceptance of the service has grown. Customers want self storage facilities reasonably close to their businesses, apartments and homes. A recent survey of 81 communities conducted by who indicates that only 15% of the responding towns and cities zone self storage for light commercial and residential areas. One reason for this is that few communities differentiate between self storage and warehousing.

The starting point for a new approach is an effective functional definition of a self storage facility. Self storage is not a commercial warehousing operation, but a commercial real estate rental business. A good definition can be found in the proposed federal Americans with Disabilities Act access regulations.

"Self-Service Storage Facility." Real property designed and used for the purpose of renting or leasing individual storage spaces to customers for the purpose of storing and removing personal property on a self-service basis.

This is a functional definition of a self storage facility. It describes the activities that actually occur at a self storage facility. It is also similar to the definition found in the laws of many states. For example Florida has enacted the following definition:

"Self–service storage facility" means any real property designed and used for the purpose of renting or leasing individual storage spaces to tenants who are to have access to such space for the purpose of storing and removing personal property. [Florida Statutes § 83.802(1)]

The California statutory definition of a self storage facility is very similar to that adopted in the federal ADA regulations and Florida.

"Self-service storage facility" means any real property designed and used for the purpose of renting or leasing individual storage space to occupants who are to have access to the space for the purposes of storing and removing personal property, but does not include a garage or other storage area in a private residence. [California Business and Professions Code § 21701(a)]

Each of these definitions recognizes the fundamental character of self storage as a real property rental business. Only when self storage is clearly defined and differentiated from warehousing and other miscellaneous classifications can city planners effectively zone self storage facilities. Permitted use should reflect the true nature of the typical self storage operation and the ability of communities to place both aesthetic and operational restrictions on businesses sited in non-industrial areas.

Traffic Generation

A self storage traffic study conducted in 2001 by Economic Consulting Associates[2] offers a clear and surprising profile of the traffic generated by self storage facilities. The study reviewed traffic at 158 facilities ranging in size from 13,000 square rental feet to over 160,000 square feet and from 100 spaces to over 1800 spaces. The reporting facilities were from all parts of the country. The primary finding of the study was that self storage facilities generate low levels of associated traffic.

[2] Economic Consulting Associates, 201 E. Southern Avenue, Ste. 206, Tempe, AZ 85282-5140 (See ECA Study results in Appendix A, page A-1) .

On average the reporting self storage facilities had fewer than 7 vehicles enter and leave the facility each day for every 100 storage spaces. To put this into perspective a typical self storage facility is open for 10 to 12 hours per day. A 500 space facility would have just three to four vehicles come to the facility each hour. Customers typically drive to their individual storage unit and create little off-premises congestion. Self storage is one of the lowest vehicular traffic generating business and creates no off premises parking congestion.

Self Storage Facility Aesthetics

Self storage facilities are ugly. This myth may be the most difficult for the self storage industry to dispel. Part of the reason is that it contains a kernel of truth. Self storage facilities can be ugly, but they do not have to be. Because self storage facilities have been forced to locate in industrial areas they have taken on the look of their surroundings. Self storage facilities in light commercial and residential neighborhoods have a more elegant look than those in industrial areas. Appendix B provides a complete pictorial overview of the modern self storage facility.

City planners have the means to control self storage development. Construction design standards for a facility located in an industrial area would not be those for a facility in a light commercial zone. The self storage facility has proven it can adapt to its neighborhood. City planners need to adopt a more elastic view of self storage when determining where a facility may be located.

Conclusion

Self storage is a young and dynamic industry. Its patrons are typically individuals and small businesses. Providing the public with a clean secure place to store personal property has been the industry's primary goal since its inception. However, there has been a marked change in facility design and aesthetic appearance since the early days. Self storage facility design can be adapted to conform to the needs of a wide variety of neighborhoods. City planners should keep three basic points when developing city development plans:

1. Self storage facilities are not commercial warehouses;
2. Self storage facilities generate very little traffic; and,
3. Self storage design can be adapted to conform to the aesthetics of the neighborhood.

When these simple facts about self storage operations are understood, the creation of appropriate zoning standards is greatly simplified. Classifying self storage facilities as warehousing operations is clearly suspect. A more realistic approach to self storage zoning is clearly in order.

Chapter 3

An Exemplary Approach to Self Storage for a Balanced Environment

Plantation Self Storage, Bluffton, South Carolina

Looking at today's state-of-the art facilities, it's hard to believe that only a few decades ago, self storage was little more than small groups of metal garages sitting on dusty gravel roads in out of the way places, with little or no security and was largely a seat-of-the-pants operation. Early developers had strong demand and a huge advantage—no competition. This isn't the case anymore.

Today self storage operates in a highly competitive marketplace. They are required to have a new level of sophistication in order for them to succeed in this new environment.

The modern conventional form of self storage was born without a legal status. It is imperative to understand that the business of self storage is unique and quite different from commercial warehousing. The tenancy relationship in self storage is based on individual rentals or leases of storage units whereby the facility operator does not assume "care, custody or control" of the goods stored. Because self storage tenants have occupancy rights and maintain responsibility for their stored property, much like tenants in residential rental dwellings have for their furnishings, a self-service facility is not a warehouse operation. On the other hand, the traditional landlord/tenant relationship between, say, an apartment house owner and his tenant, is not workable in most jurisdictions because of the expensive eviction procedure and time consuming court process which must be used in dealing with delinquent tenants.

In the early 1980s, the Self Storage Association (SSA) began sponsoring state level legislation which accomplished two basic objectives:

(1) It specifically defines the self storage facility and clarifies that such a facility is not a warehouse; and,

(2) It provides a specific procedure for dealing with the delinquent tenant's property, lending protection to tenant and facility operator alike.

Today, 46 states have enacted some version of the Self Storage Association model legislation.

What is Self Storage

Self storage facilities are real property designed and used for the purpose of renting or leasing individual storage spaces to tenants who are to have access to such space for the purpose of storing and removing personal property. They offer rental on a month-to-month basis of individual spaces, customers provide their own lock and have sole access to their space.

A typical storage facility in today's market may comprise seven one or two-story buildings on two and a half to five acres or a multiple-story building, containing a carefully designed unit mix of spaces ranging in size from 5x5 to 10x30 feet with 30,000 to 120,000 rentable square feet of space. Self storage properties frequently feature large roll-up doors and drive up access to outside spaces and offers outside parking for storage of boats and recreational vehicles, which often can't be stored in residential communities. Today's facilities normally have the following features:

- Contain 10,000 to over 100,000 rentable sq. ft.;
- Offer a wide range of unit sizes;
- Are well lighted;
- Are paved;
- Have storage units divided by steel panels;
- May have some or all of their spaces climate controlled;
- Contain high-tech security systems, including electronic access, cameras, etc.;
- Have perimeters that are walled or fenced;
- May or may not have a resident manager;
- Have single or multi-story buildings;
- Provide carts for self service use by customers;
- May have moveable panels so that units can be expanded or contracted;
- May contain movable storage modules;
- Sell storage related supplies; and,
- Provide ancillary retail services and products.

From the real estate standpoint, self storage:

- Meets the needs of several consumer groups (residential & commercial);
- Uses simplified structures;
- Makes efficient use of land, especially odd shaped parcels;
- Has short construction time, thereby providing little traffic disruption; and,
- Uses little energy;

Self Storage Tenants

It's been said that self storage is used by people and businesses in transition, but that's only part of the picture. Self storage is used by a wide range of consumers with different needs. They include:

- Homeowners and businesses in need of temporary space for overflow of property or inventory;
- Those in the process of relocating;
- Property stored in relation to an estate in transition due to death, litigation, restoration, etc.;
- Businesses in need of space for general control of inventory, records, supplies and equipment;
- Businesses that are expanding or contracting;
- Businesses storing seasonal displays;
- College students storing books, desks, etc., mostly during summer;

- Military personnel in need of low cost space or are on temporary duty tours; and,
- Seasonal visitors with household items and sports equipment.

The advantage of using rental storage space is increased flexibility, lower cost, convenience, and value.

Self storage space is rented on a month-to-month basis and does not commit customers to long term leases. Tenants may typically leave whenever they want and rent only the space they need. The cost of self storage space is lower than office or retail space, saving users money. Self storage users can often find facilities in their local area and they receive additional service value because self storage managers are trained to council consumers on how to store items more efficiently in less space, thereby reducing the cost.

Self storage is a useful management resource for small businesses, since businesses can easily obtain more space as they grow without committing to expensive long term leases. Furthermore, it provides businesses with a means to cut costs, should they need to downsize. Self storage is also useful for college students and seasonal visitors who may rent space for a season, and for military personnel who go on temporary tours of duty, but intend to return to the area, and for those who can't afford to rent more living space.

History

The conventional concept of personal storage began in England when British banks were asked to safeguard valuables for clients embarking on extended voyages. Overcrowded vaults quickly forced them to seek storage in lofts from drayage companies (the first moving companies). The first mini-warehouse for household and personal items was built. The two story structures were built with packing on the lower floor and private storage rooms on the second. Except for expansion into multi-story buildings, things remained the same for decades, until the 1950's, when costs rose. This led to construction of palletized warehouses which were designed to handle crated customer goods that could be stacked three levels high.

Access to household/personal goods was restricted and it was expensive, since customers had to make appointments to obtain items and pay each time for the service (stored property could only be reached by forklifts which were operated by staff) and business hours were limited and normally did not include weekends.

Initial development of self storage facilities in the US occurred primarily in the Western United States and the Sunbelt states. Contributing factors were: a transient population moving to new jobs and better climate, retirement condominiums, apartment and townhouse residences, slab construction, etc.

Many facilities were developed prior to 1979, with 1978 generally acknowledged as one of the greatest growth years in the industry. As the decade of the 1980's began, increased self storage construction activity occurred along the Eastern coast of the United States, with increased interest in Canada, Europe, Australia and other counties of the free world.

Estimates of the overall number of self storage facilities operating in the United States varies greatly. Most industry veterans estimate somewhere between 35,000 and 40,000 are now in operation. Other sources contend that the figure is closer to 50,000.

Validity of these figures depends upon what types of operations are included in the facility count. Including boat storage, records storage, security vault operations, resort and outdoor storage, postal boxes, and very small storage facilities located in rural areas will yield figures on the higher side. However, if the count includes primarily those facilities ranging from 20,000 to 100,000 square feet of rentable space, the total figure will be closer to 30,000.

As the population became more familiar with self storage, the demand for off site storage expanded to accommodate the growing needs of the business community, storing files, medical records, excess inventory, equipment, etc. In some areas business storage accounts for 30 % or more of the total tenancy of the facility. Easy access, convenient office hours, short term rental agreements, and no long term commitment to pay for space which may not be needed in the future, make the self storage facility extremely attractive to the retail customer, contractor, home based businesses, manufacturer's, and pharmaceutical representatives, etc.

As demand for space has grown and the self storage industry has evolved, consumers have become more familiar with the property type (92 % of the

households in the U.S. were familiar with the concept, according to a survey sponsored by the Self Storage Association in 1989). Inasmuch, local and regional competition ranges from a handful of properties to scores in a given trade area. Accordingly, customers may choose where they will store and from many different options, with unit size and the choice of climate or non-climate controlled space being the base options. Today consumers have the ability to compare and choose from among a variety of self storage property styles and customer services to meet specific storage needs.

Competition in the self storage market is keen. Maximum success for operators depends on the ability to meet customer needs with convenience and value.

To satisfy customers today's self storage must look to locate in retail corridors, light commercial or even high density residential neighborhoods, in addition to traditional industrial and heavy commercial areas. Newer facilities emphasize architectural aesthetics in construction and are designed to blend in with the retail or residential nature of the areas they serve. Landscaping has also become a prime consideration, as well as the interaction of storage development with adjacent planned tracts of offices, retail stores and business parks, in order that incubator space is available to support public planning. All of this is done with the aim of creating a clean, stable, secure upscale image that supports the perception, and the reality of trust among current and prospective customers.

Regulatory Trends

Self storage has become a part of the American scene, growing from a novelty with a few metal garages in the early 1960's to an estimated 35,000 or more facilities nationwide, many providing the latest technology in attractive modern facility development.

Like other kinds of businesses which have grown fast, mistakes were made by some with shortsighted thinking on the private side. This, in turn, was met by restrictive regulation by some public authorities to overcome excesses. However, customer needs for convenience and growing competition has forced developers to design and build better storage facilities that are located near the consumer base, more often in retail settings and that are sensitive to infrastructure and the environment. Accordingly the regulatory climate is becoming less restrictive in many areas to support today's consumer needs, both in terms of convenience and safety of access.

How Much Space is Required?

For self storage, market saturation was thought to occur somewhere between two-four square foot of rentable space per person and depending upon the population, housing and commercial mix in the neighborhood. However, square footage per capita has proven a poor definition of market saturation as some sub markets now have 10-12 square feet per capita with occupancy rates in the 90th percentile.

In particular, communities that absorb larger amounts of storage space are found in the Sun Belt area, where people have more opportunity to be outdoors and to own more recreational equipment. The type of housing (basement, enclosed garages, large homes with closets or no frills housing, military bases, condominiums and apartments, and the density of older housing which may not have adequate storage space) also has an impact on how much storage space the market will accommodate. Age of population, mobility rate, employment status, and income are other important measures.

Construction Trends

Construction and development costs in self storage have several interesting characteristics. While many facilities have been very cheaply and crudely constructed at low cost, there is a high end limit which, if exceeded, changes the nature of the product and is pointless. There will be future facilities supplying different degrees of service. Consequently, there will be varied rental rates and development cost.

Another construction cost characteristic of self storage is that a large portion of the construction expense is for manufactured components versus hand built construction. Doors, mullions, header panels, steel panel partition systems, prefabricated roof systems, precast support and appearance columns, wall panels, etc., comprise the majority of the structures. This situation permits more stable construction cost over time, reduced impact of unfavorable weather during construction, and a shortened construction period. The use of these components also results in a similar level of cost for structures in all regional areas.

The typical self storage facility design includes a management office and a resident manager's apartment within the site, either as a separate structure or a 2 story all in one. The management office is usually 1000-1200 square feet and used for showroom and retail sales in addition to storage rental.

While there are facilities designed emphasizing security features and with the electronic installations and access control, there are a number of operations which utilize nonresident manager personnel as part of our ever changing employment and management styles.

Given these general comments, there are no absolutes pointing to the "perfect design" or the "best construction" in the self storage industry.

Construction techniques depend upon a number of variables. These variables include climate, fire, and building code requirements, zoning restrictions, and neighborhood surroundings (the facility should blend in with the other structures in the area). In addition, certain areas may best lend themselves to renovation

or conversion of an existing structure and sometimes the use of movable modules or modified intermodal containers to house storage units.

When a new facility is being built, there are several choices as to type of construction. Basically, these include:

- Metal buildings;
- Combination metal and block;
- Tilt-up;
- Wood frame; or
- Modular

Each has its advocates; each type has advantages and disadvantages.

A visit to one of the many industry trade shows will demonstrate the various types of construction used in the "state of the art" self storage structures. Literature and exhibits on these are available at the Self Storage Association's Annual Convention and Trade Shows, held each spring and fall.

Additionally, information on vendors of construction systems and materials can be obtained from the Self Storage Association or by contacting the vendors who advertise in trade industry magazines such as the ***"Mini-Storage Messenger" and "Inside Self Storage."*** Whatever the construction technique selected, proper design of a facility achieves many purposes.

Accommodation of the site is a primary consideration. Single story, two story (with ground level access to the second floor), split level and renovation of an older structure - all are possibilities. The choice usually depends upon the price and availability of suitable land and the surrounding neighborhood, including density of structures and topography of the site.

Design of the rentable space depends primarily upon the type of tenants anticipated. Commercial customers create longer tenancies and fewer delinquencies. A high ratio of multifamily will create more demand for smaller units. Business tenants generally prefer larger units, where as college students and young singles prefer smaller units. Another function of good design is to enhance effective management of the facility. An attractive design will encourage upper middle income tenants and business tenants to choose the facility. Additionally, proper

design of a facility can provide for built in control by the manager and greater security. For example, design of the office area can assist the manager in controlling the activities of tenants.

Design of the facility also can minimize parking and traffic patterns and makes it possible for emergency access. Width of driveways and loading areas are not casual decisions. It is an all too common mistake to sacrifice needed paved areas i.e., semi trucks, moving vans, turn around access space, to provide for greater utilization of land for rental space.

Special attention to design is necessary with the multi storage facility which utilizes elevators, lifts, or ramps and in which an enclosed hallway may provide the sole access to some units. Such "housekeeping" considerations as lighting, drainage, etc., are affected by design, as is the type of landscaping used at the facility. Lighting, landscaping, fencing and, of course, gates determine the level of security at the facility.

Signage, although not strictly a part of the facility's design, is an essential part of the overall plan. Signage assists and instructs the tenants and may contain such items as information on gate hours and access, rules and regulations for tenants, location of office and/or auxiliary retail sales, payment schedules and

late fees. Information on business hours, holidays, and emergency contacts should be featured on visible signage.

The manager's apartment, if an on-site manager is employed, may be directly adjacent to the facility office or may be located in another area of the facility. Each location has points in its favor. The apartment may possibly be built on the second level so that it affords an unobstructed view of the facility grounds and access areas and lowers construction costs, however, it should be noted in today's more sophisticated developments storage offices do not have doors directly leading into managers apartments as was the style in years past.

Appropriate Regulations

It is necessary to set standards specific to self storage to avoid confusion with warehousing and, thereby avoid unnecessary problems. For instance, 72 of 269 cities that have zoned self storage as warehousing have reported problems with regulations.

Standards for warehouses should be different. Warehouse standards for parking, loading facilities, and the like, aren't suited for self storage. Most storage facilities have at least some drive up access so customers can have direct access to their space; this isn't the case for warehouses. And, warehouses may generate considerable heavy truck traffic, which is not the case for self storage, which requires considerably less parking, for instance.

Permitted Zones

The public wants convenience and accessibility, which wasn't available when storage was provided only by moving companies. This has driven the need

to locate in retail and residential areas rather than to be restricted solely to industrial settings.

Self storage should be permitted in all manufacturing, industrial, and commercial zones, as well as high and medium density residential zones. Comparison of the results of two independently performed nationwide studies shows a growing trend away from restricting them solely to manufacturing, industrial and heavy commercial zones.[3]

Design review and architectural standards should be imposed for self storage facilities in residential zones. There are many self storage facilities that look more like residential units and less like storage. They can blend in with housing and cause little noise and generate little traffic.

Conditional Use Permits (CUPs), An Active Option

Despite trends toward permitting self storage in more restricted zones sometimes there is a reluctance to accept the use in an area because of appearance or for some other reason. One way to resolve the situation is to have a conditional use permit (CUP). It enables the community to consider the proposal over the entire range of development issues, including appearance, size, and the like, while giving government the opportunity to determine whether a particular location is appropriate for public convenience and welfare.

CUP's permit facilities to be conveniently located to customers while ensuring that they fit in with their surroundings.

Traffic Generation

Volume and type of traffic generated by land use must be considered when determining how they should be regulated. If self storage is treated as warehousing it is limited to industrial and heavy commercial zones. This would be done because they would accommodate frequent use by large multi-axel trucks. But, traffic studies have shown that self storage generates little large truck traffic.

Studies have also shown that a self storage property generates a very small volume of traffic.[4] The first study found that the average self storage property generated 8.33 vehicle roundtrips per day for every 100 self storage spaces contained in a facility; the second, a study believed to be more representative of the industry (see Appendix C on page C-1), found that the figure was 6.82 roundtrips. This would mean that a 500 unit space facility would generate 42 vehicles per day in the former study and 34 in the latter. If self storage facilities were open only eight hours a day, that would result in 5.25 vehicles per hour in the former; 4.25 in the latter. But, most self storage offices are open more than eight hours a day and gate access is most frequently 7:am to 7:pm seven days a week, except for national holidays. This would reduce hourly traffic generation well below these figures.

Several factors affect the use of self storage and can impact the traffic it generates. These include it's location, type of customers who use it, access hours and so on. Self storage facilities near a lake or other recreational area could have much higher use by boat and recreational vehicle owners, while those in an industrial area might have more business customers. Typically, about 70 % of self storage customers are residential and 30 % commercial, but this frequently varies by trade area. Furthermore, there is almost no way to determine whether a residential tenant may actually be a small business owner or a small office home operation user (SOHO market user).

There are some self storage facilities that are nearly 100 % commercial customers, but normally, the customer base contains both residential and commercial tenants. A self storage facility may also support a large tenant mix of college students, if near a university, or seasonal visitors if near a resort, or military customers if near a military base. Tenant mix and usage will depend on the nature of the area.

Each customer group may have different requirements for storage. Students, seasonal visitors and apartment dwellers more often rent smaller sized spaces (under 10x10), while single family residential dwellers typically rent larger sizes (10x20 and up). Business customers normally rent larger sizes than apartment dwellers. This is important since smaller

[3] Nationwide Zoning Survey, *Mini-Storage Messenger* July 1989 pp. 29 by Michael J. Strausser, Economic Consulting Associates, Tempe, AZ and Thomas D. Breazeal, Breazeal & Associates, Temple City, CA and Self Storage Zoning Study, prepared for the Self Storage Association, Springfield, Virginia, February, 2001 by the same authors.

[4] "Dispelling the Traffic Generation Myth," *Mini-Storage Messenger*, February 1996, and Traffic Generated by Self Storage, a study conducted for the Self Storage Association, Springfield, VA July 2001, both by Michael J. Strausser.

sizes are apt to turnover more often and therefore generate more traffic, while larger unit sizes rented by single family dwellers and businesses turn over less often and generate less traffic. There is no data publicly available to determine traffic volumes generated by size of space and nearly all facilities offer a variety of different unit sizes. Unit mixes can and do vary, sometimes considerably, even within a trade area.

Customer tenure at a self storage facility is less transient than would be expected. The typical residential customer rents for eight to nine months, while commercial customers typically average 22 months.

The type of commercial customer can also be a major factor affecting traffic generation. Where there is a mix of self storage and flex spaces operate from a facility, a higher amount of traffic can be generated. This depends on the type of business utilizing the flex space. Most self storage facilities don't permit businesses to conduct consumer transactions for a variety of reasons. For example, safety to other tenants and for protection against environmental risk (storage of hazardous materials is not permitted in self storage). However, most business customers are not frequent visitors to their storage space since they usually use it for storage of dated records, overflow inventory, for materials and supplies, excess equipment, and for seasonal items, such as Christmas decorators for boutiques and fast food restaurants. Typical residential customers may store furniture and household items and are also less likely to make frequent trips to the facility, since they use it for dead storage.

Lot Minimums & Maximums

There are no hard and fast rules about the minimum property size for self storage to operate profitably. Property size is determined by the size of unit spaces in demand, whether or not climate control is needed, if other services will be offered (retail sales of supplies, etc.), and whether the buildings will be single or multi-story. Generally, a minimum of two net buildable acres are needed for single story facilities and at least 0.75 buildable acres for multi-story facilities (if lot coverage averaged 50 %, double the amount of land would be required. More information is reviewed on this subject further into this study).

Often, small property lots can create circulation problems and may not be economically viable to develop without some form of ancillary business service.

Self storage does have an advantage over other land uses because it can use irregular shaped lots which might may not otherwise be developed. This includes L-shaped parcels and those that are long and narrow. The current trend towards multi-story storage facilities help to maximize land use for odd shaped lots.

The multi-story trend is driven in part by the higher cost of well located developable land and by increased development of in-fill sites, some of which are in central cities where land may be more expensive and where multi-story buildings are the norm in the neighborhood.

There is also a trend towards the elimination of maximum lot size, based on the comparison of results of the two nationwide zoning studies cited earlier (see Appendix A on page A-3). Nearly all respondents to the 2001 survey had no lot maximums, up from

two-thirds who had implemented lot maximums 12 years earlier. Spokane, WA is one of the few with maximums, using seven acres as the restriction.

There is also a gradual increase in communities specifying lot minimums, which has grown to over 4 in 10. The rationale for this trend may be to eliminate the development of uneconomic facilities.

Maximum Lot Coverage

Over half of the cities responding to the cited 2001 survey reported that they had no maximum lot coverage requirements. While this may sound permissive, it is not. While they may not have lot size maximums per se, many have setback, parking and landscaping requirements that reduce coverage. Salem, OR, for example, requires a minimum of 20 % coverage for landscaping.

Permitted lot coverage ranged from 40 % to 60 % in the 1989 nationwide zoning survey mentioned earlier. No exact comparison could be made with the more recent study because of the way planners responded. But, the mode for cities with fixed percentage maximums for self storage was 50 % to 59 % and nearly two-thirds implementing fixed maximums were in the 50 % to 69 % range. Several communities had higher maximums. Tampa, FL reported 100 % in commercial and 75 % in industrial. Honolulu, HI permits an 80 % maximum in industrial and no maximum in commercial.

In general, allowing less than 50 % lot coverage will inhibit development of self storage and may result in a shortage of self storage space and very high unit rents to the public.

Setbacks

It is reasonable to assume that there will be setbacks when self storage development abuts residential zones and such regulations are more stringent. Arlington,

TX generally has a 10 ft. front setback and none for side and rear yards, but increases side and rear yard setbacks to 30 feet, if abutting a residential use zone.

If self storage abuts a residential zone, a setback equivalent to what would be required for abutting residential uses or requiring an eight foot concrete wall is appropriate.

The most commonly used front setback minimum is 20-25 ft., 10-15 ft. for side yard setbacks and 20-25 ft. for rear setbacks, according to the 2001 study cited earlier.

Side and rear yard setbacks were originally required for fire suppression. This is no longer necessary due to technological advances in safety control and should be reduced or eliminated in industrial, manufacturing and commercial zones. The problem is that side and rear yard setbacks become havens for debris, junk and weeds, which also become fire hazard risks.

There should be front yard setbacks in commercial zones, so long as signage is permitted in the setback. The maximum front yard setback should be 20 feet.

Height Limits

Height limits for self storage facilities should be the same as heights permitted other uses in zones where self storage is permitted. Height limitations should be building insensitive and be neither more restrictive nor more permissive, so that self storage facilities may complement the areas in which they are located.

While the percentage of areas with no height maximums has declined from 1989 to 2001, the percentage with limits of 35 ft or less declined from 23 % to 11 %, indicating more flexibility to accommodate the growing number of multi-story facilities. Height limits for the highest percentage of communities reporting specific height maximums

was in the 36-to-95 ft. range, according to the two previously cited zoning surveys.

Cities that had no height limits according to the 2001 study included Beaumont and Abilene, TX and Hartford.

Parking

There was no universality of parking standards, based on results of the two nationwide zoning surveys. Both found some cities with standards based on number of employees, some based on minimum number of spaces, while others implement separate standards for those parking at the facility office and those using storage units.

Parking for Office

The central tendency was to base office parking on gross floor area (gfa) of office space, with roughly one-third of the surveyed cities using this method. Other cities base minimum number of parking spaces on the number of employees or simply have some minimum requirement for the number of parking spaces. Those using gross floor area typically use one parking space for every 250-300 gfa of office space, with a second mode of 1 space per 400 gfa, according to the 2001 study referenced earlier.

Parking for Tenants Using Units

There is a trend away from requiring parking spaces for those using storage unit spaces based on comparison of the two nationwide zoning surveys. Over one-third of the communities surveyed in 2001 do not require parking for customers at units, compared with little over 15% in 1989. For those communities that did require parking for tenants using units, gross floor area of storage space was used to determine the number of parking spaces, with the central tendency being one parking space for every 1,000 gfa.

The Parking Standard

There should be no minimum parking requirements for customers using their storage units. Developers are not going to build facilities with inadequate access to storage spaces because the industry is so competitive and other developers will provide more spaces to attract business.

Parking for the office is different. For a self storage facility the "office" can be a combination of office, residence and service/retailing space. Most planning agencies have separate parking standards for each of these uses. The most appropriate alternative is to require two parking spaces for the manager plus one space per 250 gfa for service/retail area. This method takes into account the fact that self storage generates little traffic, as discussed previously.

Curb Appeal

Curb appeal is an important element of success of self storage today. One of the most important factors, based on research[5], for people selecting a self storage facility is by merit of driving by the facility and seeing either the building, the sign, or both.

It was also found that property cleanliness is one of the most important things to the public. Therefore developers have a motive, in addition to pride, to build clean attractive facilities. It makes a good first impression.

The same holds true with maintenance. Where facilities are not kept up, they lose out to those that do. This is especially true when it comes to cleanliness and maintaining the façade. Those who

[5] Proprietary research conducted by Economic Consulting Associates, Tempe, AZ.

let doors become oxidized and don't regularly repaint them and their facilities are less apt to attract business, simply because of the industry competitive market.

Aesthetic Design

While there is a compelling reason to ensure that aesthetic design of self storage in residential zones is compatible to adjacent property, there is no need to restrict design in other zones where self storage is permitted.

Developers who want to build and succeed in residential zones aren't likely to propose fortress-like designs and football field length buildings in today's competitive environment. Flexibility in use of materials, landscaping, and layout should be permitted so developers may create facilities that blend in with the area. Features that include the use of attractive facade materials, varying width of aisles, and designing storage buildings so they look like adjacent buildings, are just a few of the things that can be done in order to compliment the community.

The one controlling factor in self storage facility design is safety, especially the ability to service facilities in the unlikely event of fire. Requirements for this are specified in building codes.

A second important issue is drainage, which is also addressed in building codes. Such codes stipulate width and length of aisles, for example, to permit access, circulation, and exit of fire trucks and equipment. Again, there is little need to regulate parking for unit access because developers must design facilities to compete with others and will ensure customers have access to their spaces.

There is a trend in self storage design for wider drive aisles that improve interior circulation. This encourages customers to store at a facility and also helps owners reduce potential damage from those who might accidentally strike the corner of a building, when turning radii are too tight or where tenants are driving rental trucks with which they may not be overly familiar. Developers often incorporate 25 feet or even 30 feet wide aisles in self storage for these reasons.

Signage

Visibility is important for self storage since surveys have found that drive-by is one of the most important ways the public learns of a self storage facility. Both free-standing and wall signs are almost universally permitted and lighted signs are permitted in most jurisdictions, according to the 2001 zoning survey (see Appendix A, page A-5). But, fewer communities are permitting roof and projecting signs than they did in 1989 (roof declined from 45.2% to 17.5%; projecting from 52.9% to 36.2%).

Communities with more restrictive sign regulations put self storage operators in their jurisdictions at a competitive disadvantage if regulations are less stringent in adjacent communities. This practice can result in lost tax revenues.

Free-standing signs are very important for maximum visibility, especially if the facility is near a freeway or has more than one street frontage. The majority of communities permit free-standing signs.

Though the majority of communities responding indicated that sign height varies by zone, the mode of respondents said maximum sign height permitted was 25 feet. Just over 1 in 20 said 15 feet or less. The latter height is only one and one-half stories, and this restriction can be adverse when the sign is on a heavily traveled street with many competing signs. The few cities permitting a maximum of less than 15 feet include Santa Rosa, CA—9 ft., Tempe, AZ—8 ft. and Livonia, MI—6 ft.

A tall sign is not advantageous if streets are at grade level and all signs are the same height, unless the facility covers enough street frontage to provide reasonable relief from competing signs. In areas with elevated highways or freeways a taller sign becomes very important, especially if 200 sq. ft. or more of surface face is permitted.

All types of signs should be permitted in manufacturing and industrial zones. And double-faced, free-standing signs should be permitted in heavy commercial zones. In planned commercial or light commercial districts double-faced monument signs, as well as wall signs, should be permitted. If the facility abuts a freeway or elevated highway, a free standing illuminated sign with a minimum of six to ten feet clearance from the plane of the freeway or elevated highway should be permitted.

Signage in residential zones must be subdued. Monument signs of a maximum of four feet in height and ten feet in width parallel to each street front should be permitted.

Projecting signs should not be permitted in commercial or residential districts.

When considering free-standing signs, height and surface area permitted are critical when considering speed limits, vegetation, traffic congestion, grade, and competing signs. Nearly one-fourth of respondents specifying a maximum sign size said it was 100 to 400 sq. ft.; under a fifth said 100 sq. ft. or less. Some of the cities that restricted signage to less than 100 sq. ft. included Boise, ID—80, Anaheim, CA—65 and Des Moines, IA—12.

Resident Managers

According to the 2001 zoning survey, over 80% of communities permit the use of resident managers for self storage facilities. Some, such as Oxnard, CA, require it. While recent trends among operators is

away from use of resident managers, because of advancements in automated operating practices and improved security systems, some self storage operations still make them part and parcel of what they offer customers.

Security was one of the primary reasons for resident managers in the early years of the self storage industry. This is much less of an issue today, because of the improved effectiveness of high-tech security systems, which include electronic access gates with computerized records of entries and exits, 24 hour monitored central alarm systems, electronic motion sensors, color cameras, and the like.

Resident managers should be permitted, but not required in self storage facilities, since it should be up to individual operators to decide how to manage their businesses.

Outside Storage

This typically includes storage of recreational vehicle's (RVs), boats, and automobiles at self storage facilities.

A variety of factors have resulted in a growing need for outside storage by the public and by businesses. These include increased buying power and the ability to afford these items, increased use of national parks, and local zoning ordinances that restrict or preclude parking of RV's and boats in driveways at home, and the like.

Sales of RV's surged in the late 1990's, though some communities don't permit people to park them in driveways. This means the public needs alternative places to store them.

In higher density urban areas with front and side yard parking restrictions the need for vehicle and boat storage can be considerable. The overwhelming majority of communities surveyed permit outside vehicular storage at self storage facilities.

RV, boat, and vehicle storage should be permitted in self storage as an ancillary use, as a public service. If the facility is next to, or in a residential zone, outside storage should be screened from public view.

Perimeter Fencing

In the past fencing and/or screening was required for self storage. This has changed somewhat. The number of cities prohibiting perimeter fencing increased to one of five, according to the previously mentioned 2001 survey. This does not bode well for self storage operators since security is one of the most important things they offer and to prohibit fencing restricts a self storage operator's ability to provide adequate consumer safety. Cities prohibiting perimeter included Fort Worth, TX, Hartford, CT and Newport News, VA.

Cities that permit perimeter fencing most often limited the height to either six or eight feet, with the latter being the central tendency. Nearly two in five who permitted perimeter fencing restricted it to concrete block only.

Six or eight foot concrete block fences should be permitted in all zones. Razor or barbed wire should be permitted only in industrial and manufacturing zones.

Landscaping

The overwhelming majority of cities require landscaping, though there is considerable variation in requirements. Nearly three in ten communities require landscaping as a buffer for the perimeter in parking areas, according to the 2001 survey. That's where similarity ends. Approximately another 15% of the communities surveyed set specific percentage formulae for landscaping, ranging from 5% to over 15% lot coverage, while others require landscaping in setbacks or front yards only and others leave it to plan review. Finally, over one in ten communities require landscaping, but provided no specifics beyond that.

Some cities don't require landscaping. They include Erie, PA; Hartford, CT; and Abilene, TX.

Certain communities require additional landscaping if the facility borders a residential zone. They include New York, NY; Richmond, VA; and Toledo, OH, for instance.

On the one hand, landscaping is not an economic use of land. On the other, there is the issue of aesthetics. Self storage is a competitive business and developers recognize the need to build attractive facilities. Because of this, and because considerable land is devoted to space for aisles, minimum required landscaping is suggested; even in commercial and manufacturing zones. A minimum of five feet of landscaping in the front yard area should be required except in high density residential zones where CUP's should be used to come up with enough landscaping in order that the facility is compatible with the neighborhood.

Lighting

Lighting should be designed for safety of customers, visitors, and staff. And also to discourage theft and vandalism. It should be focused solely on the storage facility and shielded from neighboring properties.

Self storage should be treated as are other businesses. Regulations should be neither more, nor less, stringent.

Limits on Storage Use

Self storage operators do not permit tenants to store hazardous materials, explosives, food, or illegal drugs in their facilities. These items should be prohibited in regulations.

While some older facilities may provide power to units for some tenants, the overwhelming majority do not, and they do not have electrical outlets for tenant use in storage units.

Accessibility & Hours

Because self storage generates little traffic it should not pose problems in terms of accessibility. Driveways should be long enough to permit queing up to the gate without overflowing into the street. This normally is not a problem with today's facilities which are more customer oriented them those of the past. In the early years of the self storage industry some facilities implemented two gates; one to permit normal entry and one for the occasional large moving truck to enter or exit. To enhance security, this is normally not found in new facilities since they are designed for one point of entry and exit.

Most facilities have two sets of hours of operation. The first is office hours, which typically run from 9:00 am or 9:30 am to 5 or 6:00 pm, Monday through Friday. Many are open at least part of Saturday and some have limited hours on Sunday. However, most also have longer hours of customer access, in addition to office hours, to accommodate today's lifestyles. They have access either by electronic key pad entry, card, or key, frequently from 7:00am to 7 or 7:30pm, or 6:00am to 9:00pm, seven days a week and are usually closed on national holidays.

Most facilities do not have, nor want, customers to have 24 hour access, although some permit those few who need longer hours to have special access. This is usually the case for certain commercial customers who start work before normal office hours, such as contractors, who must be at job sites early in the morning.

Appendix 1:
The Zoning Survey Responses

Standards For Self Storage Facilities

Economic Consulting Associates, Inc. (ECA), Tempe, Arizona, in conjunction with Breazeal & Associates, Temple City, California, conducted a nationwide zoning survey of cities with populations of 100,000 or more in 1989. The 1989 survey was sponsored by *The Mini Storage Messenger,* an industry trade magazine. The results of the survey confirmed some of our suspicions, refuted a few, and created a few. The Self Storage Association (SSA) retained ECA to replicate the survey in 2000 to identify current zoning practices, compare and contrast them with our past study, and determine what changes, if any, had occurred. We were also asked to develop zoning guidelines and opinions for self storage facilities.

The 2001 survey was analyzed by Michael J. Strausser, President, Economic Consulting Associates and Thomas D. Breazeal , who have performed several nationwide studies for the industry and for operators throughout the US and Canada. Economic Consulting Associates is one of the few research firms in the world that has experience conducting household and business surveys on the usage of self storage. ECA has performed over 2,500 telephone interviews of the public in five studies in Maricopa County (Greater Phoenix) and has performed hundreds of business interviews in markets all over the US in its nearly 20 years of researching self storage industry trends.

The aim of the survey and analysis is to:

1) Identify what planning and zoning standards communities use for self storage and compare the findings with previous research; and,
2) Create recommended standards that may be used as guidelines for devolpers and planning and zoning officials.

Methodology

The survey, which covered topics from zones where self storage facilities are permitted, to parking, setbacks, signage, landscaping and the like, drew responses from nearly two in every five cities surveyed, for a 37.2% response rate (81/218). The response rate was not as high as in our 1989 study (37.2% vs 59.3%), because, in our opinion, communities and planning officials have gained more experience with self storage over the 11 years, since the last study was performed.

The responses by region were very close to the national distribution of cities of 100,000 or more by region-slightly lower in the West, slightly higher in the Midwest, slightly higher in the South, and slightly lower in the Northeast (see Table A).

TABLE A
Distribution of Responses by Region

	Total Region		Responses	
	No.	Pct.	No.	Pct.
West	81	37.2	29	35.8
Midwest	42	19.3	17	21.0
South	69	31.7	27	33.3
Northeast	26	11.9	8	9.9
Totals	218	100.1	81	100.0

**Exceeds 100% due to rounding*

The same questionnaire was used for both surveys.

The distribution of cities which responded to the 2001 survey are shown following:

WEST REGION
(29 RESPONDING CITIES)

Anaheim, CA	Pueblo, CO
Bakersfield, CA	Reno, NV
Boise, ID	Riverside, CA
Chula Vista, CA	San Bernardino, CA
Escondido, CA	Salem, OR
Fontana, CA	Santa Clara, CA
Garden Grove, CA	Santa Rosa, CA
Glendale, CA	Simi Valley, CA
Honolulu, HI	Spokane, WA
Irvine, CA	Stockton, CA
Lakewood, CA	Tempe, AZ
Long Beach, CA	Vallejo, CA
Mesa, AZ	Ventura, CA
Moreno Valley, CA	West Valley City, UT
Oxnard, CA	

MIDWEST REGION
(17 RESPONDING CITIES)

Akron, OH	Minneapolis, MN
Ann Arbor, MI	Omaha, NE
Des Moines, IA	Peoria, IL
Flint, MI	Sioux Falls, SD
Fort Wayne, IN	Springfield, IL
Independence, MO	Springfield, MO
Indianapolis, IN	South Bend, IN
Kansas City, KS	Toledo, OH
Livonia, MI	

SOUTH REGION
(27 RESPONDING CITIES)

Abilene, TX	Lafayette, LA
Amarillo, TX	Lubbock, TX
Arlington, TX	Little Rock, AR
Baton Rouge, LA	Macon, GA
Beaumont, TX	Mesquite, TX
Carrollton, TX	Mobile, AL
Charlotte, NC	Nashville, TN
Corpus Christi, TX	Newport News, VA
Fort Worth, TX	Oklahoma City, OK
Greensboro, NC	Plano, TX
Hollywood, FL	Portsmouth, VA
Houston, TX	Richmond, VA
Jackson, MS	Tampa, FL
Jacksonville, FL	

NORTHEAST
(8 RESPONDING CITIES)

Albany, NY	Hartford, CT
Allentown, PA	New York, NY
Bridgeport, CT	Pittsburgh, PA
Erie, PA	Stamford, CT

A summary of broad findings indicate that:

- Overall, there has been a reduction in restrictions on self storage, which, we believe, is the result of more experience with the industry; but,
- The data also shows evidence that regulations are still overly restrictive; and,
- There are inconsistencies in regulations that should be eliminated for the benefit of the public, customers, municipalities, and developers.

The following are the details of the survey.

Permitted Zones

Over half of cities restrict storage facilities to heavy commercial, industrial, or manufacturing zones (see Table 1). This may reflect a continued misunderstanding of the customers of self-storage facilities and the industry as a whole. The tendency continues for cities to perceive self-storage facilities as bulky, unattractive facilities, or simply as a category of stereotypical warehousing. The good news is that the percentage is down from nearly 7 in 10 that did so in our 1989 survey. And while 8.6 % limit storage facilities to industrial or manufacturing zones only, 25.5 % did so in 1989.

Cities permitting self storage in residential zones increased. Four (4.9 %) permit facilities in residential zones. They are Pueblo, Reno, Mobile, and Oklahoma City. The latter requires an exception permit. In 1989, we found only 2 out of 106 responding cities permitted self-storage facilities in residential zones (1.9 %).

TABLE 1
Zone Classifications

	No.*	%
Industrial Manufacturing Only	7	8.64
Light Commercial	9	11.11
Heavy Commercial	14	17.28
Light Industrial	22	27.16
Heavy Industrial	13	16.05
Light Manufacturing	1	1.23
All Commercial/ Industrial Manufacturing	10	12.35
Heavy Commercial/ Industrial Manufacturing	36	44.44
Some Residential	4	4.94

** Based on 81 responding cities. Responses exceed the number of responding cities because some cities permit storage in several zones.*

Maximum and Minimum Lot Sizes

Ninety six percent of respondents who answered the question do not have a maximum lot size (up from 65 % in 1989). Four percent (three responding cities) have maximum lot sizes, down from 7 % in 1989. These are Spokane, WA (7 acres), Lafayette, LA (3 acres in the light commercial, no maximum in other permitted zones), and Irvine, CA (0.67 Acres). Five responding cities did not answer the question.

The percentage of cities imposing minimum lot sizes has increased since our 1989 study. Thirty-two cities, or 41.0 % of responding cities impose minimum lot sizes (up from 36.8 % in 1989). In five of these, the minimum depends on the zoning classification. As Table 2 shows, the minimum sizes permitted run the gamut. Forty-six cities indicated no minimum lot sizes. Three cities did not answer the question.

TABLE 2
Minimum Lot Sizes

- 5 Acres Industrial, 1 Acre Commercial-Moreno Valley
- 4 Acres-Allentown
- 2 Acres- Jacksonville
- 1478 Acres-Peoria (This is the standard. Their standards are all expressed in acres. This was as close to 50,000 square feet as they could get.)
- 1 Acre-Garden Grove and Riverside
- 0.5 Acre-Ventura, Santa Clara, West Valley City, Carrollton, and Lakewood, CO
- 0.23 Acre-San Bernardino
- 0.18 Acre-Charlotte
- 0.17 Acre-Beaumont
- 40,000 square feet-Fontana
- 20,000 square feet-Greensboro
- 15,000 square feet-Arlington, TX
- 15,000 square feet Industrial, 10,000 Commercial-Tampa and Hartford
- 13,000 square feet-Ann Arbor
- 10,000 square feet-Macon (Industrial Only), Albany and Chula Vista
- 5,000 square feet-Portsmouth, Pueblo and Houston
- 4,000 square feet-Stamford

Maximum Lot Coverage

Cities are more restrictive on lot coverage than in the past. Over half of the cities do not have maximum lot coverage requirements, as shown in Table 3. This is down from 64.5% during our 1989 survey. Over one-fifth have specific lot coverage requirements regardless of zoning, and another one-quarter have different requirements for different zoning classifications. It should be pointed out that while cities may not have a maximum lot coverage per se, many still have setback, landscaping and parking requirements which reduce the coverage. For example, Salem, OR, requires a minimum of 20% landscaping.

TABLE 3
Lot Coverage

	Responses	Percent
No Maximum Lot Coverage	42	53.2
Fixed Percentage	17	21.5
Varies by Zone	20	25.3

Two cities did not answer the question.

Interestingly, none of the responding cities stated that they use floor to area ratio. In our 1989 survey, 13.2% of the cities did.

Some of the varies by zone cities are:

- Stamford-90% for commercial lots and 80% for interior in the Industrial zone, 50% in Commercial zones;
- San Bemardino-75% Industrial, 50% Commercial;
- Ann Arbor-60% Manufacturing, no maximum Industrial or Heavy Commercial; and
- Honolulu, HI -80% Industrial, no maximum Commercial.

Setback Requirements

The percentage of cities with no setback requirements has declined (in 1989 it was 20%), attesting to increased control. Only six respondent cities, (7.5%), had no front yard setback requirements, while 32 (39.5%) had neither side yard nor rear yard setback requirements. This was down from 1989, when nearly half required side or rear yard setbacks. A number of cities (58.0%) have established front yard setbacks for all zones where self storage facilities are permitted while only 27.2 % have similar standards for side and rear yards. One-third of responding cities has setback requirement which vary by zone. These are reflected in Table 4.

TABLE 4
Setback Requirements

	Front	Side	Rear
0 Feet	6	32	32
3 Feet	1		
5 to 9 Feet	2	6	4
10 to 15 Feet	13	12	7
20 to 25 Feet	25	4	11
Over 25 Feet	6		
Varies with Zone	28	27	27

The most frequently mentioned front yard setback is 20- 25 feet. It is 10-15 feet for side yard setbacks and 20-25 feet for rear setbacks.

Plano and Carrollton, TX, both require 50 foot front yard setbacks but no side or rear yard setbacks. New York requires neither front nor side yard setbacks but has a 20 foot rear yard setback. Albany, NY, has a unique side yard setback. It is a total of 30 feet with a minimum of 10 feet on one side. Ann Arbor, MI, is one of the more restrictive with minimum setbacks of 40 foot front and 25 foot for side and rear yards. Tempe, AZ requires 60 foot for front, side, and rear setbacks in the Planned General Commercial Center zone.

It is not particularly uncommon for a city to increase setback requirements for any commercial use abutting a residential use. For example, Arlington, TX generally has a 10 foot front and zero foot for side and rear yards but increases side and rear yard setbacks to 30 feet if abutting a residential use. The only negative aspect of such a standard is the use of the term “use” versus “zoned” property. This is because in a transitional area where the uses are being converted from older housing to commercial uses,

such a standard may discourage commercial development and definitely removes land from economic use.

Side yard setbacks were initially required for access for fire suppression. This is no longer necessary. Rear yard setback requirements should be discouraged because they tend to be used for "storage" or simply allowed to grow weeds. The storage in actuality is usually junk, which should be discarded, and the weeds create a fire hazard.

Building Height Limits

It is difficult to draw conclusions about building height limits because standards vary greatly (see Table 5). Substantial changes have taken place since our 1989 study. Then nearly 3 in 10 responding cities had no height limits in 2000 only 1 in 10 did. This indicates more government control. On the other hand, our 1989 survey showed 23 % of cities with height limits of 35 feet or less contrasted with only 11 % in 2000, suggesting less control. Of the 9 cities in the 2000 survey with height limits of 35 feet or less, all but two were either 30 or 35 feet. The two are Stockton, CA at 18 feet and Riverside, CA at 20 feet. El Toro, CA has the most unusual method of establishing permitted heights. Because the city is very near to the El Toro Marine Aviation Airport, all applications are submitted to the FAA. Most are approved for a maximum of two or three stories.

TABLE 5
Height Limits

	Number	Percent
No Limit	8	10.1
100 Fee-Plus	3	3.8
36 to 95 Feet	21	26.6
35 Feet or Less	9	11.4
Varies with Zone or Other Methods Used	38	48.1

Based on 79 responses. Two cities did not answer the question

Signage

Based on our research, visible signage is one of the most important ways the industry attracts business. We asked questions about permitted types of signs, heights, and sign areas. We also asked if the city permitted more than one free standing sign.

Free standing and wall signs are almost universally permitted, the same as our finding in 1989. Illuminated signs are permitted in most jurisdictions, also unchanged from 1989. But roof and projecting signs are not only not favored, but the percentages permitting both types dropped substantially (roof 2000 was 17.5 % versus 45.2 % in 1989) and projecting signs (36.2 % in 2000 versus 52.9 % in 1989). These percentages suggest significantly greater restrictions on these types of signs.

Cities with restrictive sign ordinances can put local self storage facilities at a disadvantage with facilities in their trade areas, but who are in other cities with more permissive ordinances.

TABLE 6
Types of Signs Permitted

	Number	Percent
Free Standing	79	98.8
Wall	79	98.8
Roof	14	17.5
Projecting	29	36.2
Single Faced	60	75.0
Double Faced	44	55.0
Illuminated	68	85.0

80 responding cities
Escondido, CA permits wall signs only.

The following cities permit all of the types of signs listed:

Sioux Falls, SD	Amarillo, TX	New York, NY
Springfield, MO	Houston, TX	Vallejo, CA
Abilene, TX	South Bend, IN	Lafayette, LA
Flint, MI		

The following cities permit roof signs:

South Bend, IN	Abilene, TX	Houston, TX
Springfield, MO	Amarillo, TX	Omaha, NE
Flint, MI	Lafayette, LA	Vallejo, CA
Pittsburgh, PA	Lubbock, TX	Ann Arbor, MI
New York, NY	Sioux Falls, SD	

Free standing signs are very important for maximum visibility particularly if the facility is near a freeway or has more than one street frontage. We asked if cities permitted more than one free standing sign. There were 46 "yes" responses (57.5%) and 34 "no" responses (42.5%). There was no change in the percentage permitting more than one sign compared to 1989 results. One city did not respond to the question.

Ten cities said the number of free standing signs permitted varies. The most common reason to permit multiple signs was one per street frontage. Houston,TX, permits a maximum of five signs and San Bernandino, CA, four. Fort Worth, TX, permits one per 100 feet of separation and Long Beach, CA, permits one per 300 feet of street frontage. Livonia, MI permits two free standing signs if the property has more than 400 feet of frontage on a major thoroughfare or a minimum of 200 feet on each of two major thoroughfares. Some cities, such as Bakersfield, CA, will permit one free standing sign per street frontage plus an additional free standing sign if the property abuts a freeway. There is indeed a diversity in standards for signage.

We also asked permitted height limits. Nearly 54% of those who answered the question said that maximum sign height varies by zone (see Table 7). The most frequently mentioned height specified was 25 feet (27.8% of those specifying one height. Over one-half of those specifying one height said 30 feet or more; a bit higher than 1989).

TABLE 7
Maximum Permitted Sign Heights

	Number	Percent
60 to 65 Feet	1	1.3
50 to 55 Feet	1	1.3
40 to 50 Feet	5	6.4
35 Feet	6	7.7
30 Feet	6	7.7
25 Feet	10	12.8
20 Feet	2	2.6
15 Feet or Less	5	6.4
Varies With Zone	42	53.8

Three cities did not respond to this question.

A sign of 15 feet or less is just one and one-half stories high. When such a sign is on a heavily traveled street with many competing signs, such a height restriction can be adverse. The cities which only permit free standing signs of 15 feet or less are as follows:

Santa Rosa, CA	-9 feet
Tempe,AZ	-8 feet
Anaheim, CA	-8 feet
Carroliton, TX	-8 feet
Livonia, LA	-6 feet

A tall sign is not advantageous if streets are at grade level and all signs are the same height, unless the facility covers enough street frontage to provide reasonable relief from competing signs. However, in areas with elevated highways or freeways, a taller sign becomes very important, especially if 200 square feet or more of surface face is permitted.

Maximum Sign Areas

When considering free standing signs; height and surface area permitted are critical when considering speed limits, vegetation, traffic congestion, grade, and competing signs. When this survey was conducted

in 1989 nearly 60 % of the respondents gave us responses in specific square footages. This year 57.1 % gave the response "varies with zone," and of the remaining 42.8 %, 18 or 23.4 % permitted sign faces with between 101 and 400 square feet. The remaining 13, or 16.9 %, restricted signage to 100 square feet or less. These are shown below.

Santa Rosa, CA	-100
Plano, TX	-100
Fontana,CA	-100
Independence,MO	-100
Livonia, LA	-100 (wall sign only)
Boise, ID	-80
Peoria,IL	-70

Parking

We didn't find any degree of universality of parking standards in our 1989 survey. The results are unchanged in our 2000 survey. We continue to find that some cities have parking standards based on number of employees, minimum number of spaces, fixed number of spaces, separate standards for the office and storage units, etc. These are shown in Table 8.

Parking for Office

The central tendency was to base office parking on square feet of office space to determine off-street parking requirements. This is not surprising, considering use of gross floor area (gfa) is a very common method for calculating parking requirements. Requirements based on square feet of office space, plus a fixed number of spaces for the resident manager's quarters or square feet of office plus number of employees, are similarly to be expected.

TABLE 8
Methods of Determining Off-Street Office Parking Requirements

	Number	Percent
Square Feet of Office Space	26	32.5
Absolute Minimum	10	12.5
Not Designed Separately	10	12.5
Number of Employees	7	8.8
Number of Employees Plus Square Feet of Office	3	3.8
Manager Quarters Plus Square Feet of Office	11	13.8
None Required	2	2.5
Other Methods	11	13.8

Based on 80 responses.

The range of standards imposed by the 42 responding cities which use square feet of office in determining parking requirements is interesting. As Table 9 shows, the standard ranges from 1 space per 200 feet gfa of office to 1 space per 5,000 feet gfa.

TABLE 9
Parking Standards Based on Gross Square Feet of Office Space

	Number	Percent
1/200 gfa	6	14.3
1/250 gfa	12	28.6
1/300 gfa	9	21.4
1/375 gfa	1	2.4
1/400 gfa	8	19.0
1/500 gfa	3	7.1
1/1,000 gfa	1	2.4
1/5,000 gfa	2	4.8

The number of parking spaces required based on an absolute is reasonable ranging from two to five. San Bernardino, CA has a requirement for seven parking spaces, but this includes the office, resident manager and customers visiting units. Greensboro, NC requires five spaces for the entire facility.

In our 1989 survey, we found several cities established office parking requirements in part, based the number of units. None of our responding cities in the 2000 study did so.

Parking for Customers Using Units

The most popular standard for parking requirements for customers using their storage units continues to be gross floor area (gfa). As shown in Table 10, 41.2% of all respondents utilizes this standard, versus 38.0 % in 1989. What is very gratifying to see is that in our 2000 survey, 33.8% of respondent cities have no parking requirements contrasted with only 16.7% in 1989. We believe this reflects more and more cities are coming to recognize self storage facility developers are not going to build facilities with inadequate unit access. It may also mean that some cities see self storage as a unique type of warehousing, but with a different customer base and fewer employees and they simply don't know what standards to use.

TABLE 10
Methods for Determining Parking Requirements for Customers Using Units

	Number	Percent
Gross Floor Area	33	41.2
Number of Storage Units	16	20.0
None Required	27	33.8
Minimum Aisle Width	1	1.2
Number of Warehouse Employees	3	3.8

Customer parking requirements based on gfa of units ranges from one space per 250 square feet to one per 20,000 square feet. The range of requirements is shown in Table 11. The central tendency was 1/1,000 gfa.

TABLE 11
Parking Requirements Based On Gross Floor Area of Storage Units

	Number	Percent
1/250 gfa	1	3.0
1/500 gfa	1	3.0
1/1,000 gfa	8	24.2
1/2,000 gfa	5	15.2
1/5,000 gfa	5	15.2
1/10,000 gfa	3	9.1
1/20,000 gfa	1	3.0
Variable gfa	5	15.2
Other gfa	4	12.1

33 responding cities base their requirements on gross floor area

Albany, NY, and Newport News, VA, have respective standards of 1 per 250 and 1 per 500 square feet of gfa of storage space. Simi Valley, CA requires 1 per 20,000 with a minimum of three spaces. Simi Valley also requires one parking space for every 50 boats or vehicles parked.

Jackson, MS requires 1 parking space for every 10,000 square feet of climate controlled space, otherwise a total of five spaces. Charlotte, NC's standard is 0.25 parking space per 1,000 gfa, Anaheim, CA's is 0.27 space per 1,000 gfa and Lakewood, CO requires 0.35 space per 1,000 square feet of gross floor area.

Of the 16 responding cities which require parking based on number of units, 12 have standards ranging from one space per 10 units to one space per 30 units. Springfield, MO requires a parking space for every unit with a door which opens on a driveway. Moreno Valley requires one space per 100 units.

Resident Manager

Increasingly, owners/operators of self storage facilities are moving away from having resident managers. Primary reasons for this are cost savings (labor and space required for office parking), enhanced automated operational and security systems and manager burnout. Ironically, a higher

percentage of cities in our 2000 survey permitted them (80.2% in 2000, 74.8% in 1989). Year 2000 survey results are shown in Table 12.

TABLE 12
Permit, Prohibit or Require Resident Manager

	Number	Percent
Yes, Permit	65	80.2
No, Prohibit	13	16.0
Require	3	3.7

The cities that will not permit a resident manager are:

Chula Vista, CA	Stamford,CT	Bridgeport,CT
Fort Wayne, IN	South Bend,IN	Sioux Falls,MN
Hartford, CT	Macon, GA	Fort Worth, TX
Baton Rouge, LA	Allentown, PA	Livonia, MI
Akron, OH		

Only Oxnard, Escondido and Garden Grove require a resident manager. Note all three cities are in Southern California.

Perimeter Fencing

In our 1989 survey only 12% of responding cities prohibited perimeter fencing. This figure has increased to nearly 20% in 2000. This does not bode well for the industry, particularly for owners that want to offer vehicle/boat storage. The owner of a very expensive recreational vehicle or boat would be loath to store the vehicle in a facility without even the most basic type of security. Sometimes operators purchase a larger parcel than one needs for current demand in anticipation of leasing the excess space for vehicle/boat storage until population and business growth warrant additional units. This long-range planning strategy may be without perimeter fencing particularly if the facility is in a city which does not permit a resident manager. This may explain why we see numerous facilities that have continuous units with rears around the perimeter of the property leaving only the office and access gate on the front of the property without peripheral storage units. The results of our 2000 survey are reflected in Table 13. There are 77 responding cities. Four cities chose not to answer the question.

TABLE 13
Permitted and Prohibited Perimeter Fencing

	Number	Percent
Permitted	62	80.5
Prohibited	15	19.5

The cities that prohibit fencing are:

New York, NY	Honolulu, HI
Bridgeport, CT	Springfield, MO
Newport News, VA	Albany, NY
Mobile, AL	Corpus Christi*, TX
Peoria, IL	Hartford, CT
Fort Worth, TX	San Bernardino, LA
Greensboro, NC	Abilene, TX
Amarillo, TX	

** Corpus Christi requires fencing which screens the self storage facility from any abutting residential use. If you were looking for a site with potential expansion might this condition influence your site selection decision?*

TABLE 14
Type of Perimeter Fence Permitted

	Number	Percent
Concrete Block Only	23	37.1
Concrete Block or Chain Link	13	21.0
Chain Link Only	3	4.8
Top Mounted Barb Wire or Other Security Wire	3	4.8
Block or Chain Link With Security Wire	15	24.2
Varies with Zone	5	8.1

What is most interesting about Table 14, which shows the types of perimeter fencing permitted by responding cities, is the percentage which permit security wire. In our 1989 survey nearly one-half of responding cities that permitted perimeter fencing permitted security wire. That number is reduced to only about one-quarter in 2000. This reflects a combination of municipal concerns for collateral liability if the city permits security wire and individuals are severely injured trying to breach the wire and property owner liability for the same reason. Self storage owners would also recognize that with enhanced security systems, security wire is not particularly necessary.

Of the 62 responding cities who permit perimeter fencing, 80% set height limits at either six or eight feet, up from 59.6% in 1989. Recent results are shown in Table 15.

TABLE 15
Fence Height permitted

	Number	Percent
6 Feet	21	35.0
7 Feet	2	3.3
8 Feet	27	45.0
9 Feet	2	3.3
10 Feet	4	6.7
12 Feet	2	3.3

Based on 60 responses from the cities which permit perimeter parking. Two did not respond to height.

Recreational Vehicle and Boat Storage

Many facility managers provide storage for recreational vehicles, automobiles, boats, trailers, and camper shells to provide an economic use of otherwise non-economic land, pending possible expansion, provide revenue from space which otherwise would have to remain vacant because of lot coverage limitations, or simply to meet demand. In higher density urban areas with front and side yard parking restrictions, the need for vehicle, boat, etc., parking can be considerable. Our 2000 survey found 80.2% of responding jurisdictions permit such storage (see Table 16). It was 84.9% in 1989. What would happen if local zoning ordinances prohibit storage of recreational vehicles and boats at home in driveways and in self storage as well?

TABLE 16
Recreational Vehicle, Boat and Trailer Storage

	Number	Percent
Permit Storage	65	80.2
Prohibit Storage	16	19.8

Some of the cities that permit vehicle and boat storage are a provisional "yes." Albany, NY only permits such storage in the rear yard, Sioux Falls, SD permits the storage only if screened from view, similarly South Bend, IN requires screening or storage in an enclosure, Anaheim and Moreno Valley require a Conditional Use Permit, and Simi Valley, CA will permit boat and vehicle storage only if such was approved as part of the original application. Several cities permit vehicular and boat storage only in selected zones. The cities which prohibit storage of vehicles, boats, trailers, camper shells, etc., in conjunction with self storage units are:

Escondido, CA	Flint, MI
Plano, TX	Arlington, TX
Chula Vista, CA	Des Moines, IO
Fontana, CA	Macon, GA
Newport News, VA	Bridgeport, CT
Carrollton, TX	Garden Grove, CA
Corpus Christi, TX	Fort Wayne, IN
Erie, PA	New York*, NY

**Permitted only if ancillary to a marina use.*

Time Required for Processing Permits

"Time is money" is more than just a cliche. Once an owner operator has finally completed plans and arranged for construction and take out financing, the amount of time required to process plans becomes very important. We asked cities how much time it takes to process required permits. Most responding cities are able to process permits fast. Half said in

less than a month and nearly 74% in 60 days or less (see Table 17).

TABLE 17
Approximate Amount of Time Required to Process Permits

	Number	Percent
Less Than 30 Days	34	50.0
30 to 60 Days	8	11.8
60 Days	8	11.8
61 to 89 Days	4	5.9
90 Days	6	8.8
Over 90 Days	7	10.3
Varies	1	1.5

**The total number of responses is less than 81 because 13 cities did not answer the question.*

The cities which require 30 days or less are:

Greensboro, NC	Escondido, CA
Houston, TX	Amarillo, TX
Lafayette –b/p*, LA	Beaumont, TX
Hartford –b/p, CT	Charlotte, NC
Vallejo, CA	Boise, ID
Portsmouth, VA	Independence, MO
Mesquite, TX	Macon, GA
Plano, TX	Abilene, TX
Springfield, IL (7 to 10 Days)	Mobile, AL (10 Days including SUP)
West Valley City, UT (14 Days)	Little Rock, AR (5 to 10 Days)
South Bend, IN (8 Days)	Pittsburgh, PA (2 to 10 Days including SUP)
Peoria, IL (14 Days)	Lubbock, TX (20 Days)
Spokane, WA (14 Days-Design Review)	Hollywood, FL (10 Days-No Special Permits)
Honolulu, HI (15 Days-No Permits)	Tampa, FL (7 to 10 Days-No Permits)
Des Moines, IO (10 Days-No Permits)	Toledo, OH (10 Days-No Special Permits)
Carrolton, TX (10 Days-b/p)	Indianapolis, IN (5 Days-No Special Permits)
Fort Worth, TX (5 Days-No Sp Permits)	Oklahoma City, OK (14 Days-No Sp Permits)

**b/p means builidng permit only*

On the upper end of the range, Oxnard, CA and Chula Vista, CA each require approximately 120 days to process permits. The latter requires a planning commission review.

Landscaping

Landscaping is very important to planners. The more the better. In both the 1989 and 2000 surveys this was one of the few questions which received a 100% response. However, this sometimes doesn't square with who developers look to the economic return per square foot of space. In our 1989 study the comments from respondents were adamant. One stated, "I would like to see the landscaping requirements greatly increased for mini- warehouse type developments. Presently, these facilities are blight on newly developed areas. Their orange doors and black asphalt remind me of Halloween." We did not see the same level of vehemence in our 2000 survey. In fact, we received numerous copies of landscaping ordinances in 1989; few were received in 2000, and responses were traditional.

TABLE 18
Landscaping Requirements

	Number	Percent
Buffer, Perimeter, Parking Areas, etc.	22	27.2
5 to 10% of Net Area	4	4.9
10 to 15% of Net Area	7	8.6
Over 15% of Net Area	1	1.2
In Setbacks Only	8	9.9
Front Yard Only	5	6.2
Plan Review	5	6.2
Others, Varies, Combinations	15	18.5
No Landscaping Required	5	6.2
"Yes," No Detail	9	11.1

The Cities that do not specifically require landscaping are:

Erie, PA	Abilene, TX
Hartford, LT	Springfield, MO or IL
Bridgeport, CT	

Although Springfield does not currently require landscaping, the city is preparing landscaping requirements. Des Moines, IA is just the opposite The city requires landscaping, but has no established standards.

Beaumont, TX, Toledo, OH, Richmond, VA and New York, NY all require additional landscaping if the facility buffers a residential zone.

Appendix 2:

Self-Storage Development Standards Questionnaire

City and State _____ Est. Population _____ As of _____

Name of Person Completing questionnaire _____

Telephone Number _____ Extension _____

1. **In what zones are self-storage facilities permitted?** (Check all appropriate)

   _____ Light Industrial
   _____ Light Manufacturing
   _____ Light Commercial
   _____ Heavy Industrial
   _____ Heavy Manufacturing
   _____ Heavy Commercial
   _____ Low Density Residential
   _____ Medium Density Residential
   _____ High Density Residential
   _____ Commercial/Residential

2. **What is the maximum permitted lot coverage?**

   _____ 30 % _____ 40 % _____ 50 % _____ 60 %
   _____ Other % _____ No maximum

3. **Lot Sizes**:

   Maximum Lot Size: _____ Acres Minimum Lot Size: _____ Acres
   No Maximum _____ No Minimum _____

4. **Do you permit a resident manager?** (A resident manager is someone who lives on-site and serves customers and provides some security)

   _____ Yes, is permitted _____ Yes, is required _____ Is not permitted

5. **What is the maximum height permitted for buildings?**

   _____ Feet or _____ stories _____ no height limit

   Comments: _____

   _____

   _____

6. **How much parking is required for the resident manager and customers who are visiting the leasing office <u>only</u> to inquire about space, pay rent, etc. but not to store or remove goods?**

   # _____ spaces per _____ square feet of office minimum of _____ spaces

   _____ none required _____ not designated separately

   Comments: _____

   _____

7. **How much parking is required for customers who are storing or removing goods from rented storage units?** Please feel free to attach a copy of your city's ordinance.

   # _____ Parking spaces per _____ gross square feet of storage area

   Comments: _____

   _____

   _____

8. **What are your minimum set back requirements?**

   Front Yard _____ feet Side Yard _____ feet Rear Yard _____ feet

9. **Which of the following types of signs are permitted?** (Check all appropriate)

   _____ Free Standing _____ Roof _____ Projecting _____ Wall

   _____ Single Faced _____ Double Faced _____ Illuminated

10. **What are the maximum permitted sizes and heights of signs?**

    Size _____ square feet Height _____ feet

    Comments: _____

    _____

    _____

11. **Does your city permit more than one free standing and/or roof sign?**

    _____ Yes, is permitted Maximum number of signs _____

    _____ No, is not permitted

    Comments: _____

    _____

    _____

12. **Does your city permit recreational vehicle and boat storage as an ancillary use?**

_____ Yes _____ No

Comments: _____

_____

_____

13. **Does your city permit or require perimeter fencing?**

_____ Yes _____ No

If yes, please answer the following:

Maximum height _____ feet

_____ Concrete block permitted _____ Chain link permitted

_____ Top mounted barbed wire or other security wire permitted

14. **Does your city require landscaping?**

_____ Yes _____ No

If yes, briefly describe the requirements

Description: _____

_____

_____

15. **What kind of permits are required before an applicant can submit plans for a self-storage facility?**

_____ Conditional Use Permit _____ Special Use Permit

Other _____

16. **Please list the approximate amounts of time required for the permit process.**

Prior to plans submission _____ days

After plans submission _____ days

17. **What are the costs for the various permits?**

Simply attach a fee schedule if one is readily available.

CUP $ _____ SUP $_ _____ Building $ _____

18. *Additional general comments, if any.*

_____

_____

PLEASE ATTACH A COPY OF YOUR SELF-STORAGE ORDINANCE,
IF THERE IS A SEPARATE ONE FOR SELF-STORAGE FACILITIES.

Appendix 3:
Traffic Generation Anaysis

Traffic Generated by Self Storage Facilities

Prepared by:
Economic Consulting Associates
201 E. Southern Avenue, Ste. 206
Tempe, AZ 85282-5140

Overview

Economic Consulting Associates, Inc. conducted a study to determine how much traffic is generated by self storage. The study was performed under the sponsorship of the Self Storage Association.

Questionnaires were prepared and made available to members. An independent analysis of the results was performed. Respondents ranged from very small to very large facilities throughout the United States.

Details of our study report follow.

Purpose

The aim of this study is to accurately measure and determine how much traffic is generated by self storage facilities. To this end, the Self Storage Association (SSA) contracted with Economic Consulting,Tempe, AZ, a firm with experience in this field, to conduct an independent study.

Approach

The SSA prepared a standard questionnaire that self storage operators could use to record traffic data. The form was delivered to all members of the SSA and was also publicized on the Internet, in meetings with operators, and through other distribution channels (see form in Appendix B, Page B-1).

Completed questionnaires were returned to the association and were provided to us for analysis. ECA inspected the questionnaires, obtained additional information by calling respondents when data were incomplete or required clarification, checked the addition on the forms, assembled and analyzed the data and provided this report of the results.

Certain questionnaires were not used in the study for a variety of reasons, which included illegibility, they were incomplete or the respondent's facility was not a typical self storage business. The latter included a combination self storage and office warehouse and another which was primarily an RV storage, for example. Since only one questionnaire was received for Canada, it was also excluded. Only facilities that had seven day a week access were included in the analysis, since nearly all of the respondents were open for business Sunday through Saturday. To include others that did not operate seven days a week would have been inconsistent, in our opinion. Finally, data was based on computerized gate entries during the months of April through June of 2001.

Respondent Profile

This study contained 158 usable responses. While this is a small fraction of the 35,000 plus facilities in the U.S., it is the second largest response of any publicly available study on this subject. ECA conducted a prior self storage traffic analysis on behalf of the Mini-Storage Messenger magazine in February 1996 ("Dispelling the Self-Storage Traffic Myth") that was based on data from over 250 facilities. The SSA study is believed to be more representative of the industry, because this current data is based on the average sized facility of 45,000 square feet from over 90 cities in the United States. The response in the earlier study was based on information from facilities smaller than the average project.

The mode of respondent facilities in this current study contained 500 to 599 spaces and nearly one-third (31.65 %) had 600 or more spaces, for example (see Table 1).

Table 1
Respondents By Number of Spaces

Spaces	Number	% Of Total
100-199	4	2.53
200-299	7	4.43
300-399	22	13.92
400-499	34	21.52
500-599	41	25.95
600-699	23	14.56
700-799	12	7.59
800-899	4	2.53
900-999	4	2.53
1,000-1099	2	1.27
1,100-1,199	2	1.27
1,200-1,299	2	1.27
1,300-1,399	0	0
1,400-1,499	0	0
1,500-1,599	0	0
1,600-1,699	0	0
1,700-1,799	1	0.63
Total	158	100.0 %

Source: Total and percentage computed by Economic Consulting Associates.

The average size of respondents was 59,451 rentable sq. ft. (see Table 2).

Table 2
Average Size of Respondents

(In Rentable Sq. Ft.)

Total Rentable Sq. Ft.	9,279,113
No. of Respondents	156*
Average Size	59,481

**Two did not provide rentable sq. ft.*

Source: Average computed by Economic Consulting Associates.

Respondents facilities ranged in size from 13,000 rentable sq. ft. to over 160,000. An analysis of respondents by rentable sq. ft. is shown in Table 3. It shows that the mode was between 50,000 and 59,999 rentable sq. ft. The greatest concentration of respondents were in the 40,000 to 70,000 range.

Table 3
Average Size of Respondents

(In Rentable Sq. Ft.)

	Number	% of Total
10,000-19,999	3	1.92
20,000-29,999	6	3.85
30,000-39,999	18	11.54
40,000-49,999	29	18.59
50,000-59,999	33	21.15
60,000-69,999	27	17.31
70,000-79,999	13	8.33
80,000-89,999	12	7.69
90,000-99,999	8	5.13
100,000-109,999	4	2.56
110,000-119,999	1	0.64
120,000-129,999	1	0.64
160,000-169,999	1	0.64
Total	156	99.99 % *

**Does not total 100 % due to rounding.*

The Western Region of the Self Storage Association had the largest number of respondents, followed by the Southeast region (see Table 4). This is consistent with fact that the former is the largest, in terms of membership. A list of states by SSA Region is provided in Appendix 2

Table 4
Response By Region

	Number	% of Total
Northeast	25	15.82
Central	29	18.35
Southeast	48	30.38
West	56	35.44
Total	158	99.99 % *

**Does not total 100 % due to rounding.*

There were some differences in by region in the average size of respondents in rentable sq. ft. when compared to the total response. The Central and Western Region respondents were larger than those in the Northeast and Southeast Regions (see Table 5).

Table 5
Respondent Size By Region

(In Rentable Sq. Ft.)

	Sq. Ft.	No. Responses	Av. Size
Northeast	1,402,884	25	56,115
Central	1,797,708	29	61,990
Southeast	2,694,203	47*	57,323
West	3,384,318	55*	61,533
Total	9,279,113	156	59,481

**One respondent from each of these regions did not list sq. ft.*

Source: Totals and percentages computed by Economic Consulting Associates.

They also had more spaces (see Table 6).

Table 6
Respondent Size

(In Number of Spaces)

	Spaces	No. of Responses	Av. Size In Spaces
Northeast	12,489	25	500
Central	15,736	29	543
Southeast	25,182	48	525
West	34,006	56	607
Total	87,413	158	553

Source: Ibid.

Traffic Generation

An average of 6.82 vehicles per day entered these facilities for every 100 self storage spaces, according to our study results (see Table 7).

Table 7
Traffic Generated By Self Storage

Vehicles Entering Facilities/Day	5,965
Total Spaces In Facilities	87,413
Average R/T's Per Space/Per Day	.0682
Av R/T's Per Day/Per 100 Storage Spaces	6.82

This means that if a facility had 500 storage spaces, it would generate an average of 34 cars per day. For 700, it would average 48 (see Traffic Generator Calculator in Table 8).

Table 8
Traffic Generator Calculator

(Based On 6.80 vehicles per 100 self storage spaces)

Number of Spaces	Av. Vehicles Generated
100	7
200	14
300	20
400	27
500	34
600	41
700	48
800	55
900	61
1,000	68
1,100	75
1,200	82
1,300	89
1,400	95
1,500	102
1,600	109
1,700	116

This is less than the 8.33 vehicles per day per 100 spaces that we found in our 1996 study performed for the 0.

There is little difference among three regions in traffic generated per 100 vehicles. The fourth, Central Region, shows somewhat higher vehicular traffic generated (see Table 9). But, the overall amount of traffic generated for any region is small.

Table 9
Traffic Generated By Region

	Car/Day	Spaces	Av. Cars/Space/Day	Av./Cars/Day/100 Spaces
Northeast	805	12,489	.0644	6.44
Central	1,273	15,736	.0809	8.09
Southeast	1,619	25,182	.0643	6.43
West	2,268	34,006	.0665	6.65
Total	5,965	87,413	.0682	6.82

It should be noted that data should be considered in total despite the previous regional analysis. This is because the number of questionnaires for individual some regions are relatively small.

Factors Affecting Traffic Generation

Several factors can influence the amount of traffic generated by self storage. They include whether businesses are operated from a storage facility, their type and size of spaces offered, for instance.

Certain businesses can affect the volume of traffic through a self storage facility. They include auto body shops and those selling merchandise directly to the public from a storage space. However, they normally do not operate from these facilities, because of storage operator restrictions on storing hazardous materials and local zoning ordinances prohibiting such customers from operating from these facilities.

Another factor that can affect traffic generation is the size of spaces offered. It is generally recognized in the industry that small spaces turnover more often, therefore generating more traffic. The reverse can also be said about larger spaces (10x20 and larger). Those who rent them normally stay longer and there is less turnover of these spaces.

Conclusion

The data shows that self storage generates little traffic and is consistent with a prior studies.

[5] Proprietary research conducted by Economic Consulting Associates, Tempe, AZ.

Appendix 4:

What is a Self Storage Facility?

"Self-service Storage Facility" means any real property designed and used for the purpose of renting or leasing individual storage spaces to occupants who are to have access to such for the purpose of storing and removing personal property. A self-service storage facility is not a warehouse for purposes of Article 7 of the Uniform Commercial Code.

What is a self storage facility? This important little question is seldom asked. Few storage operators carefully read their state law to determine if his or her storage business is being operated within the legal definition of self storage facility. Yet the answer to this question can have significant impact on a storage operator's legal rights and duties. Forty-six states have enacted statutory definitions of a self storage facility. These definitions are similar but contain subtle differences that cannot be ignored. A self storage facility in Ohio is not the same business as one in California.

So, what is a self storage facility? In all states real property with 50 or more enclosed spaces rented to individuals and businesses for storage purposes is a self storage facility. But what if you also have covered parking for recreational vehicles or open lot storage. Are these operations self storage? They may not be. The starting point is the legal definition of a self storage facility. The following is a typical definition:

"Self-service Storage Facility" means any real property designed and used for the purpose of renting or leasing individual storage spaces to occupants who are to have access to such for the purpose of storing and removing personal property. A self-service storage facility is not a warehouse for purposes of Article 7 of the Uniform Commercial Code. If an owner issues any warehouse receipt, bill of lading, or other document of title for the personal property stored, the provisions of this Act do not apply.

This definition from Illinois is typical of most states, but be careful. If you do business in Ohio the law places an additional requirement that there be at least 50 storage units to qualify as a self storage facility. Other states require that the spaces be rented pursuant to a written rental agreement. As noted above a business that simply rents storage spaces in buildings and otherwise qualifies comes within this definition. However, it is less clear that renting covered parking spaces is self storage, even less certain if open lot parking is self storage, and unlikely that the storage-to-go business is self storage as defined.

The definition requires that the customer rent a specified "individual storage space" that is part of a larger piece of real property. This seems to exclude the rental of undefined space where individuals can park their Recreational Vehicles (RV's) or the rental of a storage container which is brought to the customer's home or business, filled and then returned to a warehouse. The definition of self storage could include the rental of a defined parking space. It probably includes a covered parking space.

Why is this important? It can directly affect your lien rights when customers fail to pay rent. If your business fits within the definition of self storage facility, you have a lien on the stored property. If your business does not, you cannot use the self storage lien remedy. A storage-to-go business is not a self storage facility as defined and cannot use the self storage lien in most states. California and Florida are exceptions to this rule because the self storage lien law was amended to specifically include containerized storage within the remedy. Open lot storage, where customers simply park a vehicle in any available area, does not seem to qualify as self storage and so the lien remedy is unavailable.

There is no judicial guidance as to the scope of the self storage lien law or the effect of misuse. No court has ever ruled on what a self storage facility is or is not, nor has there been a court ruling on the effect of the use of the self storage lien remedy by a business that is not a self storage facility. So what should a storage operator do who is conducting a business that may not fit precisely within the definition of self storage facility?

Make an appointment with your attorney and discuss alternative remedies that may be available. Most states give storers of vehicles a lien for non-payment of rent or fees. You may be able to easily use this remedy. If no satisfactory statutory remedy exists, consider creating a contractual lien. A contractual lien is created by the parking or storage agreement and describes how the operator will enforce it. There may be other remedies available if you look for them. What you do not want to do is to simply ignore the issue. Look all aspects of your business and ask yourself and your attorney: "Is this a self storage business?"

A Balanced Approach to Storage in the Modern Community:

A Guide for Professional Planners & Developers