

**A MESSAGE TO THE NEIGHBORHOOD!**  
**FAMILY ENTERTAINMENT CENTERS ARE GOOD NEIGHBORS!**  
**By Peter F. Olesen P.E.**

**Introduction:**

This article has been prepared to provide informed information for the neighbors of the family entertainment center (FEC) being proposed for your local neighborhood. It is intended to tell you in as honest a manner as possible what is being proposed and what is not. Hopefully it will minimize any misconceptions the neighbors will have. The facility being planned is one that will be an asset to the neighborhood and the community as a whole. As this article is generic in format, it may discuss some elements not included in the specific project planned for your community. This does not detract from the primary premise of this article, that FECs are good neighbors.

Most family entertainment centers are owned and operated by individuals living in the same community. As such they have the same values and expectations as their neighbors. It is in their best interest that they reflect the expectations of the local community in terms of providing clean, safe and entertaining recreation for their guests. They cannot survive without a positive acceptance by the local community.

For those who do not live in your community, the need for a positive local acceptance by its neighbors is just as great. Without the support of the local community, this business cannot survive, let alone be successful. The fact that the developer is circulating this letter is a strong indication of a willingness to be open with the site's neighbors. In this way you have an early opportunity to become aware of what the proposed facility actually consists of, and what it doesn't.

Typically, people learn about the possibility that a family entertainment facility is planned for their community either through newspaper articles or from an acquaintance. Often the information gained in either way is very limited and may actually not be very accurate. This writer has often experienced the reaction of neighbors that were unaware of what was happening until the time of the first public hearings where planning and zoning approvals were being held. Sometimes this was the result of poor public relations on the part of developers, or in some cases the reviewing agencies themselves. As a result, miss-information rather than information often established a reaction against what in reality was a very beneficial addition to the community. This is why this letter was developed and is being distributed. You deserve to be informed of this proposed development, as it will be a permanent part of your community.

If you don't have an FEC in your community, or haven't visited one, you may not know what one is. This is not uncommon. These facilities are now becoming more popular and vary in size and scope. They are designed to attract people like you and your neighbors and to establish a long and successful relationship with many members of the community. Their success depends on a comfortable association between the facility and its neighbors. This makes it important for the owner/operator to be aware of and respond to, his/her neighbors and their concerns. The FEC cannot succeed if it doesn't provide a positive image in the community and a rewarding experience for its guests.

Many people have never visited a modern family entertainment center (FEC) and therefore may have formed misguided opinions as to the impact an FEC will have on the local neighborhood in which it is proposed to be constructed. It is hoped that the information presented in this article is read with an open mind. Once you have had the opportunity to read and evaluate the information presented herein, you should have a better understanding as to what an FEC is and what it is not.

FECs may consist of a concession go-kart track and arcade building, a miniature golf course, bumper boats, additional go-kart tracks, miniature golf courses, bumper boat ponds, batting cages, ropes courses, zip lines and other attractions.

Other FECs are entirely indoors. These facilities may center on bowling, mini-lane bowling, laser tag, indoor go-karts, game rooms with redemption and video games, indoor trampoline parks, escape rooms, soft play, toddler play, various levels of food and beverage service, and similar attractions. The attraction mixes may vary, but the underlying concept of providing family oriented entertainment remains the same.

An FEC depends upon maintaining a cordial relationship with its neighbors and the community in which it is built. It is a small business created to serve the entertainment needs of a broad cross section of its neighbors. In addition, it provides job opportunities for local citizens, attracts potential customers for other local businesses and becomes a customer for services and products from other local businesses. It also will be a source of real estate taxes and sales taxes it generates.

Today's FEC is designed to attract families and individuals throughout the community. Its focus is on family entertainment and therefore must create a sense of comfort and security. The developer is fully aware of the adjacent neighbors as well as the overall community's concerns with respect to maintaining a clean well maintained environment and a family friendly atmosphere in any entertainment or recreational facility that proposes to become part of the community.

The success of every FEC depends on its being able to become the destination of families and other positive individuals. This can only occur if management actively discourages all individuals that seek to be disruptive, anti-social or in any way diminish the family environment. In establishing this standard from the start, the proposed FEC will not have an adverse impact on the quality of the community and it certainly will not increase the crime rate or attract undesirable individuals or groups.

The developer is committed to assuring this will be the case by making a commitment to the community that they will work diligently to maintain a clean, safe, entertaining family oriented environment that will not tolerate its becoming location for unsocial society dropouts or other disruptive individuals or a source of loud disturbing music or attractions that alienate the neighbors.

The vast majority of FEC operators are people with a strong desire to be a positive factor in the life and development of their local community. A well-conceived FEC will be developed in full concert with all local agencies, creating safety and emergency programs to insure that public safety, security and health concerns are properly addressed and maintained. A close cooperation with enforcement agencies will assure action rather than reaction is addressing any potential concerns.

The goal of providing clean wholesome entertainment for its neighbors and surrounding community must be met or the FEC cannot thrive. In other words, it has to provide clean wholesome surroundings, a safe and enjoyable environment and a good return on the entertainment dollars spent there. The experience must be positive for guests to return time and again. If this isn't accomplished, failure will follow.

This article is based on factual technical information as well as this writer's long experience with numerous new and existing FECS around the country. Most facilities are properly operated, do not accept disruptive behavior by their guests and are positive factors in their communities. The FEC of today is not the poorly conceived, ill maintained, dingy, hang-outs for socially maladjusted teens that existed in a few areas twenty or thirty years ago. The vast majority of today's FECs are safe clean, well managed and well received and supported by their local communities.

Please read this article with an open mind. Once you have read the information contained herein, visited existing facilities or contacted other communities to find out their experiences, we are confident that you will see that the modern FEC is a family oriented, friendly and enjoyable facility. This positive attitude toward the concept should leave you with an open mind with respect to your review of developer's proposed project.

It is unfortunate that there are times when "the fear of the unknown" generates opposition to one of the potentially best family oriented attractions that can be developed within your community. Properly conceived, designed, constructed and operated facilities will provide positive experiences for the entire community, including families, youths, adults and senior citizens.

In every community there exists a desire for family entertainment and recreation beyond the local theaters, fast food outlets, organized sports, school and church activities. While some communities are fortunate to have available a wide range of such activities, both publicly funded and private, this is not the usual situation.

Most communities lack outside activities for almost every age group, especially pre-teen and teenagers. This is reflected in the form of recreation normally present in many communities. Many provide baseball, softball, football, soccer and related team oriented facilities or swimming pools and golf courses. This addresses the needs of team oriented individuals, swimmers and golfers. Unfortunately this only benefits approximately 20 percent of the population. Communities usually fail to address the entertainment and recreational needs of almost 80% of the population. This concentration on organized sports and the costs associated with providing for them, results in little if any funding for facilities to accommodate the rest of the community. . This is especially true with the lack of facilities that address the diverse interests of various age groups that comprise family outings. Family entertainment centers offer recreational, participatory entertainment for the rest of us.

A serious concern in many communities revolves around the individual or peer group activities pre-teens and teenagers participate in when not part of family units. The introduction of an FEC into the community can be a positive action in providing wholesome recreation as well as possible employment for many of them. As any well run FEC is based on positive control of guests, the environment is not conducive to anti-social behavior. Without wholesome outlets, such as FECs, these unsupervised activities can easily revert to antisocial actions elsewhere in the community.

Many families take outings to regional and destination theme parks and related facilities. This is not the type of activity that can easily be done on impulse or on short notice. It takes planning. The problems with this solution include the following:

1. It requires a major time commitment.
2. The cost per family unit is very high for both travel and admission costs.
3. For destination facilities, food, lodging and travel costs must be added.

For many families, visits to destination facilities are not economically feasible. Even for those families that can afford them, such trips are usually taken on an annual or longer spacing. As such they cannot serve the need for shorter time constraints, tight budgets, work commitments or any of dozens of reasons that prevent visiting destination theme parks.

The modern FEC is the logical and very viable alternative in terms of time commitment and cost. It is also a desirable alternative to doing nothing, hanging out at the mall, becoming couch potatoes or becoming involved in antisocial activities. FECs take many forms and provide countless opportunities for family and other group activities governed by time constraints, economics, personal preference and physical limitations.

Outdoor or combined indoor/outdoor facilities offer the potential of providing the greatest variety of activities. Properly conceived, they can provide entertainment opportunities over the complete age range from toddler to grandparent. Proper conception, design and construction enable FECs to become valuable assets to any community. By their nature, they are happy places where people enjoy themselves. Integral to their success is becoming attractive additions to their neighborhood.

Indoor facilities may have certain restrictions in terms of scale, but they can be designed to include most of the elements of an outdoor facility as well as introducing a wide variety of entertainment venues not suited for inclusion in outdoor environments. Specific attractions to be included in the mix provided will be governed to some degree by space constraints, budget considerations, local preferences and existing competition.

Careful selection of attractions assures that they appeal to both individuals and groups, providing opportunities to observe or participate as they choose. Enjoyment can be gained from both approaches. Success of the FEC also depends on acceptance by the local community. As a result, planning must include consideration of its impact on the surrounding community. This includes consideration of appearance, the people attracted, existing and site generated traffic on adjacent streets, parking, noise, lighting, drainage and related issues.

In developing an FEC in any community, both the developer and the designer seek to create an appealing, comfortable and entertaining environment for families. To be successful, the facility must attract repeat attendance. These characteristics are the same ones that will generate a good neighbor image for the surrounding community. Often, people associate FECs with the old time amusement parks that came into being more than a hundred years ago. These facilities were usually a collection of hard rides and a midway consisting of individual games and rides managed by separate owners. Often they were staffed by, and attracted unsavory people. Most were not well maintained or policed. The lack of coordinated efforts to make the facilities more attractive to families contributed to the closing of many.

Modern FECs, on the other hand, follow the example of the modern theme park industry in seeking to provide clean, wholesome, family oriented entertainment in an attractive environment. They discourage attendance by troublemakers and gangs through positive training of their staff, sound security programs, and, where necessary, working with local police departments.

Creation of a comfortable and enjoyable facility spans assembling attractions that provide entertainment for the whole family, establishing an appealing physical environment, and controlling noise and lighting levels.

#### **Impact on the Community:**

A properly designed FEC will have a positive impact on the community it serves. This includes providing an elective activity, generating additional revenue for other businesses in the area, increasing tax revenue, providing jobs for

residents and related benefits. The partnership experienced by local businesses should not be overlooked. As the community has more local business, the more the FEC becomes a part of the community, the more they will patronize local firms. Having a local entertainment facility can result in families shopping locally while their children visit the FEC. Other families will combine a shopping trip with a stop at the FEC to carryout a planned day with both business and pleasure. A family that plays together is more likely to stay together in terms of close relationships.

Obviously an FEC will generate more traffic, but not in the concentrated volumes that would result from many other businesses allowed under the existing zoning classification for the site. Further, the traffic it does generate will not be concentrated during peak hour traffic periods on the adjacent highway system. As the site has certain capacity constraints due to the number of attractions, available parking and related elements, people attending the FEC will vary their times to avoid overcrowding. This will, in effect, reduce peak period traffic volumes.

Having an FEC in the community will keep many younger members of the community closer to home. This can help parents in knowing where their children are, which is not the case when they have to travel many miles to obtain the same form of entertainment and recreation.

Having a local FEC results in more of the community's available disposal income being spent in the community, as well as attracting revenue from neighboring communities.

### **Appearance of Facility:**

There is no single formula for creating an attractive facility that will appeal to everyone. This is equally true in terms of homes, schools, churches, shopping centers, offices, municipal buildings, stores, parks and so on. In recognition of this, most communities have established guidelines, ordinances or other controls to assure acceptable designs.

It is important, however, that the FEC be attractive to the vast majority of its guests, or it will not be successful. Therefore, appearance must be an integral part in the development of the concept plan, which includes the individual attractions and related facilities. Consideration must also be given to what is visible from off-site, as this contributes to the generation of attendance.

On-site design must include the development of attractive looking facilities, the synergism of each attraction in terms of its relationship to other attractions and the ability to maximize usage. Landscaping plays a major element in creating visually attractive facilities and is, therefore, an integral part of any concept planning. In today's environmentally concerned community, the use of green space, planting of trees and shrubs and the use of water in the total site configuration can help gain community support. Proper planning will result in the visual enhancement of both the overall site and its individual components.

### **Modern Lighting of Family Entertainment Centers:**

Proper lighting is an integral part of the design of any FEC. It affects the safety and operation of the individual attractions and the total facility. Lighting also has an impact on the facility's acceptance by the local community.

It is unfortunate that many misconceptions exist in the average community with respect to the lighting proposed by individual FEC developments. Lighting can be both friend and foe of everyone, depending upon how it is being considered. We all want our personal environment to have sufficient light for comfort and security, but none of us want to feel imposed on by light generated by others. This difference must be an important consideration of both designer and developer in the creation of a successful FEC concept. The sense of security at any given FEC is enhanced by provision of sufficient levels of lighting throughout the facility. This is true in the parking lot, arcade building, go-kart track, bumper boat pond, miniature golf course, walkways, etc.

Obviously, it is impossible to create a facility with lights that cannot be seen from the surrounding area. Even a single 100-watt light bulb can be seen for miles when there are no physical obstructions. What can be controlled are the number of tall light standards that are installed and the method of light distribution.

Whenever luminaires are mounted at significant heights, sharp cut-off units (lighting units with shrouds to control the direction of the light distribution) are recommended. In this manner it is possible to reduce light "spill" at the boundaries of the site to zero foot-candles, if required. Average light levels of 20 foot-candles at the surface level should be provided on go-kart tracks and bumper boat ponds to permit safe operation. This does not mean that the light has to spill over on adjacent property. Light spill-over can be avoided through the use of sharp cut off luminaires, such as described above, to reduce resulting light levels to zero foot-candles at the property lines. Modern improvements in LED lighting enable better lighting distribution and reduced energy consumption.

Proper planning will enable lower lighting levels in many areas of any given facility to better blend the lighting impact on neighboring property. Ongoing developments in the lighting industry will continue to enable FEC operators to be even better neighbors in the future, providing more appealing outdoor visual impact and better compliance with local codes and regulations.

**Relative Noise Levels at Family Entertainment Centers:**

Every facility generates noise, as does every vehicle, person, pet, appliance and machine in the surrounding community. They do so over a wide range of sound levels. Recognizing this, each well-designed FEC will give consideration of the impact individual attractions will have on the surrounding neighborhood, in developing the best configuration of attractions.

As attractions go, FECs are low-level noise generators, especially when compared to noise levels at sporting events, carnivals, fairs and other outdoor activities are much higher, as are the ambient noise levels of most adjacent streets and highways.

Most FECs use music as a muted background and use loudspeakers judiciously. These can be set at levels acceptable to the neighbors. As a comparison, even the lowly lawn mower generates a much higher noise level than the concession go-kart.

Available noise studies for Honda go-kart engines, which to this writer's knowledge are used by all current concession go-kart manufacturers, show that their generated noise levels do not result in levels that could be considered unacceptable when compared to other noise generators.

One of the most detailed sound studies we have seen was based on the Honda GX 160, the most widely used concession go-kart engine. This study found that the sound level generated by 10 go-karts running at full-throttle, projected to a distance of 150 feet from the center of the track, was 61 decibels. This is equivalent to the sound level of normal conversation in a room with several people.

The studies we've seen are based on projections of sound at various distances from the point of noise measurement at the source, rather than actual measurements taken at the distances referred to in the study. Most have been based on the projection of sound measurements taken 10 feet from the kart, with the engine at full throttle (it should be noted that the average go-kart engine is governed to not exceed 60% of its rated engine speed, which means they do not operate at full throttle). The projected sound levels were then computed, assuming a flat surface with no obstructions. These conditions would not occur, other than on an empty airport runway. Any obstructions, including vegetation, which interrupt the direct movement of sound, reduce its level.

Under actual site conditions, sound levels are further reduced or mitigated by a variety of existing conditions and site elements, including the following:

1. Existing natural and landscaped vegetation.
2. Ambient noise levels from nearby streets and highways.
3. Physical features such as buildings, berms, fences, automobiles and countless other features that may stand in the line of generated noise.

**Site Generated Traffic:**

There will, of course, be additional traffic generated by an FEC. Without additional traffic, there would be no facility. This is equally true for any commercial or residential development developed on the property. The total volume of traffic, as well as the peak hour volumes, will not be as heavy as the volumes generated by most other uses permitted under the specific zoning classification. This includes commercial, business or industrial zoning classifications that govern the specific site being developed. Due to the nature of FECs, including long hours of operation, restricted total capacity, wide range of visitor preference in terms of attendance times and related factors, site generated traffic will be distributed over a longer period of time than most other uses.

To illustrate the volumes of traffic that could impact on the local flow of traffic, we have developed the information presented in the table below for a typical facility in an average community. It assumes 60,000 visits during a summer season that spans Memorial Day through Labor Day at an outdoor FEC located in a small to medium city area. The representative facility consists of an arcade, point of sales and snack bar building, go-kart track, miniature golf course and either a bumper boat pond or batting cage. Peak hours of operation for FECs normally occur in the evenings from 7:00 PM till 9:00 PM and on weekend days from 1:00 Pm till 3:00 PM and from 7:00 PM till 9:00 P.M.

We arbitrarily adjusted the assumed total days of full operation during this period to 80, to allow for inclement weather. Using these numbers we arrive at 750 visitors per day. Assuming 2.5 visitors per automobile, we compute 300 vehicles arriving at the site on an average day. As peak attendance varies by day and hour, we have developed the tabulation below to present the projected peak number of vehicles arriving at the FEC at different times. Projected peak attendance occurs Friday evenings and on weekends.

<b>REPRESENTATIVE TRAFFIC FLOW CHARACTERISTICS FOR TYPICAL FAMILY ENTERTAINMENT CENTER</b>				
<b>Day of Week</b>	<b>Daily Percentage of Weekly Traffic</b>	<b>Daily Vehicle Movements Entering Facility</b>	<b>Peak Hour Percentage of Daily Traffic</b>	<b>Peak Hour Vehicle Movements Entering Facility</b>
<b>Monday Thru Thursday</b>	<b>11</b>	<b>230</b>	<b>20</b>	<b>46</b>
<b>Friday</b>	<b>16</b>	<b>336</b>	<b>20</b>	<b>67</b>
<b>Saturday and Sunday</b>	<b>20</b>	<b>420</b>	<b>15</b>	<b>63</b>

For communities, the existing afternoon peak traffic volumes on community streets would occur in the time range from 4:00 P.M. to 6:00 P.M. and on Saturdays from 11:00 A.M. to 1:00 P.M. Peak hours on Sundays can vary greatly depending on the specific highway or street adjacent to the site. The specific adjacent roadway network serving the facility and the location of the primary market population, will dictate the directional distribution of the peak hour volumes shown above

During the non-summer months, peak hour and daily traffic movements will be lower than those projected above. This will occur due to the impact of school functions, high school, college and professional sports, homework and related events on the attendance at the facility.

The above table demonstrates the anticipated peak hour traffic movements for the FEC. These historically do not occur concurrently with the peak hour traffic periods that occur on the adjacent street system. In most situations, they are different. For most communities, the peak hour traffic flows occur between 7:00 AM and 9:00 AM in the morning and between 4:00 PM and 6:00 PM in the evenings, whereas most FECs don't open for operation before 11:00 AM in the mornings and their peak hour weekday traffic movements occurring after 6:00 PM in the evenings.

**Conclusions:**

FECs are a beneficial addition to the community, providing the local equivalent of a small theme park, in terms of operations and atmosphere. Most, if not all of the attractions are participatory in nature rather than spectator in nature. Not team oriented, individuals as well as groups can enjoy them. FECs attract a cross section of the local residents and provide a clean, happy and entertaining form of family and individual recreation. They are not the reincarnation of the old amusement parks or freestanding go-kart facility of years gone by.

The impact of a well-conceived, constructed and operated FEC on its neighboring community will be positive. It increases the number of jobs available to local residents, provides an attractive, clean and wholesome outlet for the entire age range within the community and will blend into the community landscape.

*Peter is a registered Professional Engineer in Illinois and Wisconsin and President of Entertainment Concepts, Inc., Mount Prospect, Illinois. For more than 34 years the firm has been providing consulting services to the family entertainment industry, having provided services on more than 550 industry projects covering 45 States, five Canadian provinces and 10 foreign countries. Services span preliminary site evaluations and selection, feasibility studies, concept development, master planning, final design and construction engineering services for projects that include indoor and outdoor family entertainment centers, theme parks concession go-kart tracks, miniature golf courses, bumper boat ponds and related attractions. These services apply to new facilities as well as renovation or expansion of existing facilities. Mr. Olesen has written many magazine articles on the industry and has made presentations at numerous industry*

*seminars, including 45 consecutive sessions of Foundations Entertainment University. For more information on the firm and the services it offers, see their web page at [www.fecdesigners.com](http://www.fecdesigners.com) or contact them at [peteolesen@yahoo.com](mailto:peteolesen@yahoo.com) or 847-561-7013.*

Copyright 2018 Entertainment Concepts, Inc.