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A CASE STUDY FOR SOLON TOWNSHIP, LEELANAU COUNTY

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FOR THE BEAUTIFUL CAMPUS AND FRIENDLY PEOPLE

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A Raised Question

The public polls showed that from fifty percent to eighty percent Americans prefer to live in small towns over cities (Lingman 1980). Though there is no uniform definition of a small town, it is generally a center surrounded by a rural community. The center could be the downtown, or a commercial center of the rural community, where the most major land use is farming or forestry and agriculture forms a large portion of the local economy. The reasons that so many people like to live there may be that the small towns have a better environment, less crime, and lower living expenses. This in spite of the fact that most small towns have fewer job opportunities and fewer public service facilities such as schools, shopping centers, hospitals and emergency services. It may be the reason that today the majority of people still live in city areas, because jobs and better public services are the most important issues for most families. Urban areas still attract lots of people to move in, but the poll does show that small town development has huge potential for growth.

The differences between a large urban area and a small town are not only in physical size but in living quality and standards. Of course, people at different ages have their distinct life styles as well as their basic standard. Elderly or retired people prefer to live in small towns or rural communities. They have less income than they used to, most of them do not seek employment, and they have little concerns about

their children's schooling. Many of them expect to leave cities and move to rural communities to enjoy the countryside life style in their affordable housing.

Many young farmers are tired of their farming business. With a decrease of farming income, some of the farmers wish to change their future by opening new ventures in city areas, where they may have better jobs and better lives for themselves and their families. Those farmers hope to make a change and to have more economic opportunity in their rural community.

These two movements that are against each other generate lots of conflict in small towns. One side wants "zero" increase to keep everything as it is. The other side wants more land use development to create jobs. Both sides, however, have some common concerns such as poor public services, especially the emergency service, losing farm land, and, the most important, they are worried about increasing the cost of living.

In the north, around Lake Michigan, there are many small towns that have similar problems. If their problems are well treated, the controversy will be minimized, and it can generate a positive economic growth in the region.

This paper will concentrate on one case study. The purpose of the study is to try to find a possible solution for the small community.

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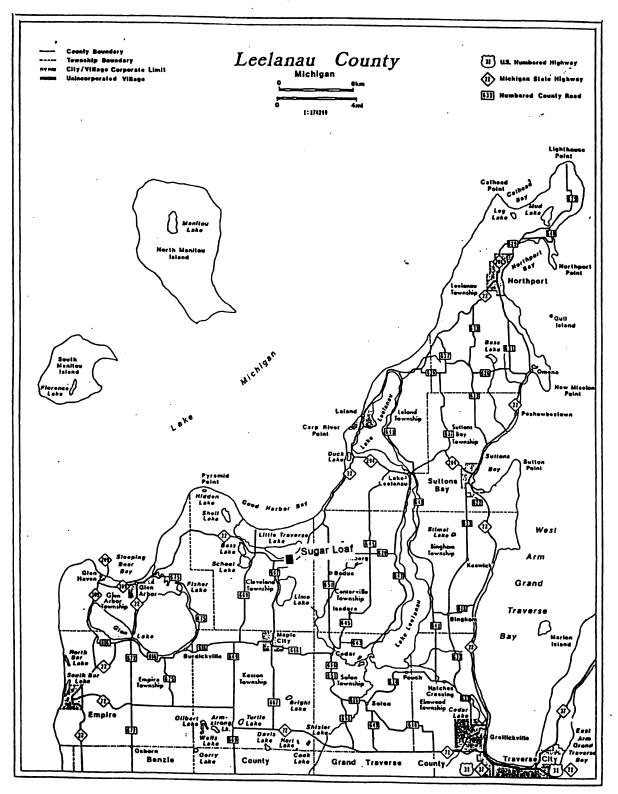
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A Small Community

Solon Township, Leelanau County (see the location maps next page) contains roughly twenty-nine square miles of territory, and in 1990 the Census Bureau counted 1268 souls in the township. This population is virtually fifty percent male and fifty percent female and is predominantly middle-aged. There are 441 households. Approximately twenty-five percent of households are part time residents: they stay in the township less than six months every year. Most of them own their homes, which contain roughly three individuals. Compared to the county, the township's population is considerably younger with a greater proportion of children under 18 years of age and a lesser number of people over 65. A large portion of the population had college degrees. The township's population increased twenty-nine percent in the last decade, versus eighteen percent for Leelanau County and about 0.4 percent for the state of Michigan. In the 1960's Solon Township's population increased about fourteen percent. In the 1970's it increased about twenty-four percent. The trend appears clear.

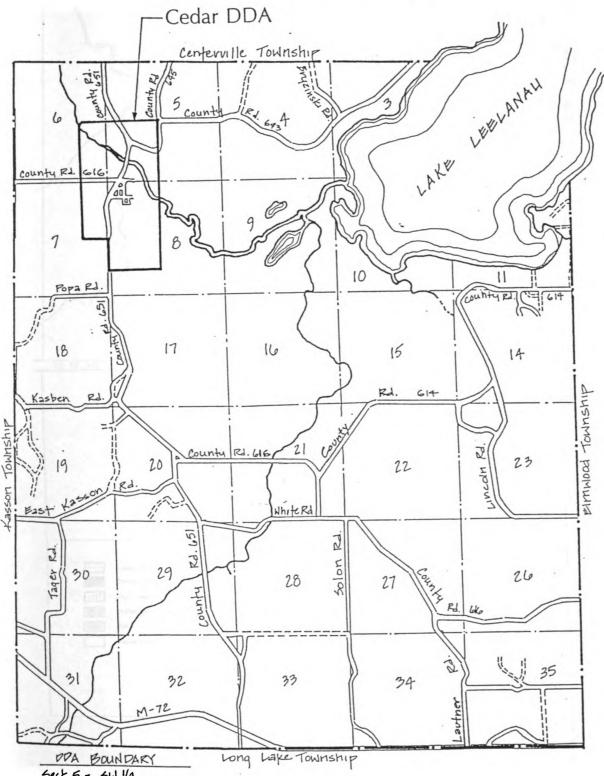
Cedar, the downtown and the political center of the township, was an old Polish community. It still has strong Polish traditions. Every year, there is a grand Polish Festival attracting thousands of Polish-Americans from all over the country. They usually spend a long weekend there to celebrate their holiday with a variety of activities. This tradition started in the last century.

The small town of Cedar has obvious location advantages



This map was prepared by Timothy J. Dolehenty, Cartographer, Lesianau County Planning Department, Leiand, Michigan. / 5. 5. 5. 5.

Solon Township



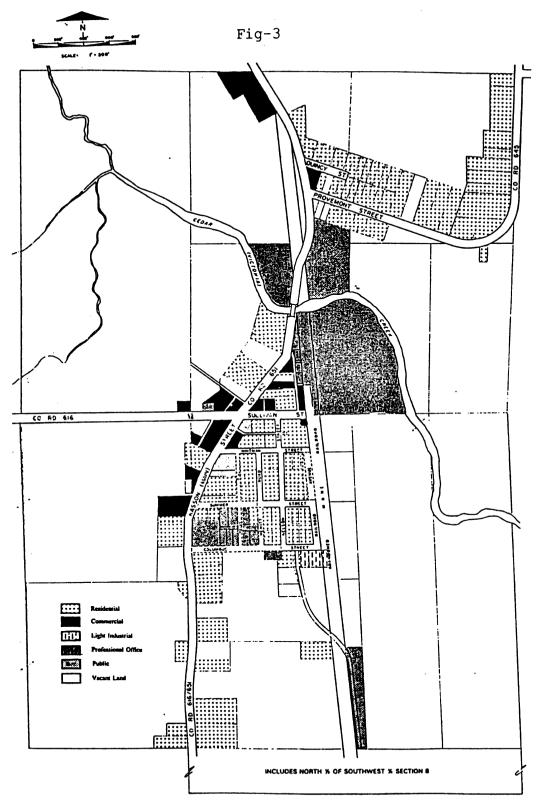
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Sect 7 - E'12 of NE 1/4

Sect 8 - NW 1/4 and N 1/2 of SW 1/4

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Existing Land Use Map Cedar Area Loelenau County, Michigan Horyanher 1993

compared to the other areas of the township. Drive 20 to 25 minutes southeast, you reach Traverse City, where most residents do their weekly shopping; drive west and you reach Sleeping Bear Dunes National Lakeshore to enjoy the view of Lake Michigan. Within a five minute drive from Cedar there are many recreation places like Lake of Leelanau, Long Lake, and Sugar Loaf Ski Resort, a famous resort that attracts many people during the golfing and skiing seasons (see the map Fig-1 "•") Cedar is also the largest residential and commercial area in the township. Many newcomers are still moving to this area. From 1991 to 1992 fifteen families moved to the township. Eight of them resided in Cedar. Because most people moved in downtown Cedar area recently, its development has become a focus of all discussions.

Solon Township is famous for cherries, apples, grapes, and for its natural beauty. It is surrounded by mountains, forest, wetland, lakes, and streams, all with abundant wildlife. The main geographic feature of the township is the Cedar Swamp, a vast drainage basin that covers much of the northern part of the township. The swamp draws from both Grand Traverse County and Leelanau County. It goes into Lake Leelanau at the northwest corner of the township. The major water carriers are the Cedar Run and Victoria Creeks. A large piece of wetland is located by the basin, which covers one third of the township land. The wetland provides undevelopable open space for the residents.

Farms and forests take advantage of soil conditions and the climatic conditions created by the Great Lakes on all sides of

the Leelanau peninsula. These conditions allow for various types of agriculture, especially orchards and vineyards. Land outside of the swamp and its watershed is largely forested with northern hardwoods. Oak and red pine are precious species which exist in few places of the world. Forestry covers about another one third of total land use.

The residents call all of these "rural character" . They believe that these elements are the most important features for them.

Unfortunately, rural character has its problems. In the same community, some children have difficulty getting to schools, because of the poor schooling conditions (transportation system and schools). Some parents have to teach their children at their homes. Some local stores are closed, or only open seasonally. Water supply and municipal sewage systems do not exist. To provide those systems in a low density residential area like the township would cost too much. Because ground water there was found contaminated in early 1980's, the township tried to install a water supply and drainage system in downtown Cedar, but the cost at that time was over three million dollars.¹ Today, water pollution problems still exist. Many families buy grocery water for drinking and the well water is only for other purposes.

Shopping at local grocery stores, the residents pay much

Department of Natural Resource, Michigan State University was involved in this project at that time. The township had funds from the state government. Unfortunately, the project was not put into practice.

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more than they pay in the shopping centers at Traverse city. The choices and services for goods are very limited in the community. A lack of emergency services, such as hospitals and fire fighting services, causes many residents to feel that they have less security. People have difficulty finding jobs because there are so few economic activities.

Cherries, apples, and grapes are the unique products that are produced in Leelanau County. Selling those products is the major income for most farmers, but these fruits are seasonal products. They have to be sold in a short time when they are fresh, though the prices are the cheapest at that time. Farmers know that they are very hard to keep fresh for a longer time due to lack of equipment and technology. Sometimes, these products are sold below cost². The County statistics showed that the average personal income earned in agriculture was \$5218 per year in 1990,³ which was far below the state average level of \$8751 per year.

The property tax received every year can only maintain the basic operation of the township. Solon Township planned to hire a full time planner for a long time, but it did not have an adequate budget. The economic status of the township does not allow it to do a basic public facility improvements even if the

Most fruit trees are controlled by the large fruit cooperations. These cooperations guarantee to purchase those fruits every year, but the prices are decided by international markets and the profit of the cooperations.

[&]quot;Michigan Rural Development Strategy Data Book," Michigan Department of Commerce, 1991.

residents may want it.

Due to a shortage of capital, the township could not afford to update its buildings, even in the downtown commercial area. The sidewalks, the walls of the buildings and the streets were not well maintained. In some places, weeds were growing in the streets and cracks in the walls. Trees, signs and lighting systems disappears in many places where they should be. In short, the downtown Cedar does not look compatible with its nice natural environment.

Thousands of cars pass through downtown Cedar during weekends, especially in the winter and summer time. Few of them stop there. Their destination is Sugar Loaf. All those disadvantages worry the residents.

On April 14, 1991, Sunday, a community meeting was held in downtown Cedar. About 30 people participated. Most of them were local small business owners, a few were farmers and other individuals.

Business owners worried about their businesses. They all were concerned about the increase of closed businesses in the downtown area, which had a serious negative impact on their own business. The other concern addressed was lack of customers. A grocery owner said that though the goods in her store were priced higher, she just barely could afford the operation. If all the

⁴ For this project, I have been Cedar, Solon township three times. Every time I participated in their community meetings and talked to the business groups as well as residents. April 1991 was my first time visiting the community.

neighbors were shopping at Traverse City, she might have to close the store. Even the restaurant owner, there is only one restaurant in downtown Cedar, said that he thought his site had a great location, but few new comers patronized there.

They said that if the township encouraged more economic development, the property value would be raised, which would not be good news for them, because they would have to pay more. And they did not have any plans to move to other places to make money on their real estate. Additionally, they wished that the community could provide more jobs for their children.

The retired residents thought that life in this community was cheap, because most of them were from big cities such as Chicago and Detroit. Many of them were willing to pay more to get basic home services and emergency services.

In the meeting most participants thought that this community was an agricultural community. It has a large number of senior residents. It needs more basic service businesses to meet the basic needs. They believed that Solon has excellent natural resource to make it a better place. It was said that if their location advantage had been taken by another community such as Maple City, Solon would be the loser.

The residents indicated that there were many chances to improve their community economic conditions. For instance, they could hold cross country skiing activities to draw tourists in the winter time; introduce all kinds of tradition events in the

Polish Festival such as original food, clothing, farmer tools, and art works; have sport activities such as a mountain bike competition.

Most the residents hoped to improve their living conditions. They also realized that making the change was a long term and difficult process, because they mainly depended on themselves, and they were not economically powerful. Some of the business owners even thought that they needed fast growth. They pointed out that it was frustrating to see that thousands of cars pass by each day at the weekends, but few of them stop and go shopping in their stores.

They did care about changing the "rural character" resulting from any economic development, too. "Rural" is the base of their being in this community. They worried that more people moving in this area would bring "traffic" and "crowds." Because of this concern some individuals stated that no growth should be the goal of the community.

"Rural character" is a relative concept. To have some additional economic activities would change some existing conditions as many of the residents mentioned. This change may have some negative impact to a certain area or to certain citizens. This group of people might feel that their countryside

⁵ The Home Port Real Estate Co. organized this research. The research counted traffic volumes on the road segment between Cedar and Sugar Loaf twenty four hours a day for several weeks. It was found that between Friday and Sunday, there were more than six thousands vehicles passing through. The rush hours were Friday late afternoon and Sunday late afternoon hours.

life styles had changed, but they might also realize that the change would have positive impacts on their living conditions. Compared to suburban areas, or the surrounding communities, this township may still be a rural community, because they are changing every day. Additionally, it is almost impossible to keep the community at "zero" growth unless the rest of areas were to have no growth. It is impossible to have ideal achievement without the compensation. Furthermore, to have a certain amount of manageable growth is much better than decline.

Survey Before Plan

Community meetings, though they are useful to get first impressions, do not provide enough information to obtain a complete picture of the township. For example, it is hard to know the differences between different groups. This information will help the community set up its priorities.

Starting with a survey before drawing up the plan is a traditional method introduced in 1915 by Mr. Patrick Geddes, who thought that a survey "gave understanding of an active experienced environment." This environment "was a motor force of human development." He explained further that a survey "provides the basis for the total reconstruction of social and political life." In fact, survey information has the function of exchanging the concepts. It may reduce some differences in the community, because the majority opinions might become accepted by persons who previously had different ideas. On the other hand, the minority suggestions might impact the majority opinions, too.

To get the whole picture of the township, a full coverage survey was done in the Solon township in January 1992 (the survey form was designed by the township). The survey had two purposes. One was to get the general idea of the community from the citizens. The other was to get the individual bias.

Four hundred forty-four forms were mailed using addresses from property address records. Two hundred ninety four survey forms were received within one month. The return rate is about sixty-six percent. Because many households lived in this area

only seasonally, or some of them owned only vacant lots, the return rate was lower than expected. The survey consisted of two parts, one is multiple choice questions. The other is the written questions. Both parts have been tabulated.

The tabulations of the survey have applied several statistical methods. First was frequency. It calculated every item listed on the form. Through this process general ideas of the community have been derived.

Because the survey form has many choices per subject, only using regular frequency calculation would not give reliable results. For example, question number 1 on the survey form "what do you feel are the four most important problems facing Cedar" has fourteen subjects. Using regular frequency calculation, the results would be based on 293 forms and every individual choice. If only 12 forms responded that the most important problem was traffic (question number 1 item 12), then the tabulation form would show that the valid percentage of the frequency for this answer is 27.9 percent (it was a high percentage), which ignored that at this item there was 250 missing values (see Tab 1 & Appendix p1).

Tab-1 Frequency Calculation Example

| PROBLM12 TRAFFIC | | | | | |
|--|------------------|----------------------------|----------------------------------|--|---------------|
| Value Label | Value | Frequency | 7 % | Valid % | Cum % |
| 1ST IMPORTANT PROBLE 2ND IMPORTANT PROBLE 3RD IMPORTANT PROBLE 4TH IMPORTANT PROBLE | 1 2 3 4 | 12 13 10 8 250 | 4.1 4.4 3.4 2.7 85.3 | 27.9 30.2 23.3 18.6 MISSIN | 81.4 100.0 |
| | TOTAL | 293 | 100.0 | 100.0 | _ |
| Valid Cases 43 | Missing | g Cases | 250 | | |

To protect this misunderstanding from happening again, a multiple response frequency calculation was introduced in question number 4 "What type of community do you think Cedar is" (number 5, too).

Tab-2
Multi-response Frequency Calculation Example

| CEDAR TYPE OF COMM. YOU | THINK CEDAR | IS | 0 - C | 0 - 0 |
|--|--------------------------------|------------------------------------|---|---|
| Category label | Code | Count | % of Responses | % of Cases |
| *AGRI COMMUNITY *RESIDENTIAL COMMERCIAL COMMUNITY LIGHT INDUSTRIAL *RECREATION/TOURIST *RETIREMENT | 1 2 3 4 5 | 199 172 2 24 170 89 | 29.7 25.6 .3 3.6 25.3 13.3 | 69.8 60.4 .7 8.4 59.6 31.2 |
| | 8 l responses alid cases | 15 671 | 2.2 100.0 | 5.3 235.4 |

Multiple response frequency calculation method takes whole responses as total sample size, then it computes the frequency according to the new total sample size (see Tab 2 & Appendix question number 3 and 4), then it counts the percentage of the frequency based upon the new sample size and the original sample size. In order to know the difference between different age groups, Chi-Square and Lambda statistics methods (the crosstabulation) were applied. The age groups were divided by five levels. They were the eighteen to twenty five group, twenty six to thirty five group, thirty six to forty five group, forty six to fifty five group and over fifty five groups.

According to the cross-tabulation table, the different opinions among the different age groups are not significant. Also, a frequency less than 5 in a cell takes 48 percent (See next page). This means the sample size is still relatively small. Had the calculation not taken the age group from eighteen to twenty five into account, however, it only had one sample, the result would not have changed. Lambda value shows that the differences among the age groups are not significant.

 $\label{eq:tab-3} The \ \mbox{Growth rate comparisons by Age groups}^{\varepsilon}$

| rosstabula | tion: By | GROWTH AGE | HOW MUC AGE GRO | CH GROWTH JP | YOU LIKE | TO IN CE | DAR |
|------------|-----------------|----------------------------|--------------------------------------|--------------------------------------|-------------------------------------|--------------------------------------|-----------------------|
| AGE-> | | YRS | 26-35 YRS 2 | | | OVER 55 YRS 5 | Row Total |
| NONE | 0 | 0 .1 .0% .0% | 5.7 10.58 9.58 -1.7 | 10 10.9 26.38 12.58 9 | 2 5.0 5.38 5.48 -3.0 | 22 16.3 57.98 18.38 5.7 | 36 13.6% |
| A LITTLE | 1 | 0 .3 .08 .08 3 | 18 12.8 21.28 42.98 5.3 | 29 24.3 34.18 36.38 4.7 | 9 11.2 10.68 24.38 -2.2 | 29 36.4 34.18 24.28 -7.4 | 85 30.4% |
| MODERATE | 2 | 1 .5 .88 100.08 | 16 20.0 12.0% 38.1% -3.9 | 36 38.0 27.18 45.08 -2.0 | 23 17.6 17.38 62.28 5.4 | 57 57.0 42.98 47.58 | 133 47.5% |
| A LOT | 3 | 0 .1 .0% .0% | 2 2.3 13.3% 4.8% 3 | 3 4.3 20.0% 3.8% -1.3 | 3 2.0 20.08 8.18 1.0 | 7 6.4 46.78 5.88 | 15 5.4% |
| UNLIMITED | 4 | 0 .0 .08 .08 | 2 1.4 22.28 4.88 .6 | 2 2.6 22.28 2.58 6 | 0 1.2 .0% .0% -1.2 | 5 3.9 55.68 4.28 1.1 | 9 3.2% |
| | Column Total | 1 .48 | 42 15.0% | 80 28.6% | 37 13.28 | 120 42.9% | 280 100.0% |
| Chi-Square | | | nificance | | n E.F. | Cells | with E.F.< 5 |
| 16.05504 | | | .4491 | | .032 | | 25 (48.0%) |
| Sta | itistic | | Symme | etric | With GROW Depender | WTH nt | With AGE Dependent |
| Lambda | | | .006 | | .0136 | | .00000 |

 $^{^6\}mathrm{Tab}\text{--}1$, Tab-2 and Tab-3 are imported from SPSS result text file.

The survey showed that the residents of Solon Township strongly support improvement of the community. They see their community as a small, peaceful, and enjoyable rural place in beautiful, natural, and agricultural surroundings. Most citizens want the community to grow and change to provide more jobs, services, and economic opportunities while preserving its natural resources. but to do so without increasing taxes where true and specific benefits are not realized.

Several questions have higher answer rates. Forty-five percent of the respondents thought that "shortage of shopping opportunity" was a problem; forty-six percent thought that a higher property tax was a problem; forty-two percent thought that a lack of job opportunities in the community was a problem; and twenty-seven percent thought that a lack of medical service was a problem.

For the questions of "job opportunity" and "medical service" the response rates were impacted by two things. First was that this community has a large potion of retired persons (their population in terms of the sample size was more than 31%). They might not feel that employment was a problem there. The second, on the other hand, was that many people would not have the same needs of medical treatment as the senior citizens in the township. They might not think that the medical services should be an important issue either, because they could get the

⁷ The percentage is counted the total frequency from first important problem to fourth important problem.

services from other places, unlike an elderly person who might have difficulty reaching a medical facility.

Many residents did not like to have more multi-family housing and low cost housing projects. Forty-six percent of the population voted against multi-family housing projects, while thirty-three percent favored them. Forty-five percent voted against and thirty-five percent favored low cost housing projects. This suggests that many residents do not think the housing stock is priced so high that people could not afford a house; however, according to the Northwest Michigan Data Center, the median value of owner occupied housing in that area (as estimated by owners vs. actual selling price) was \$66,700. Compared with ten years ago, this value has increased \$15,274 (in 1980 the value was \$51,428). The reason was that during the last ten years much small farm land has been converted to industrial and commercial land use. This change is driving up the value of residential properties often occupied by lower income permanent residents. Even the Leelanau County Planning Commission agreed that this was creating a rising property tax burden on existing residents, making them less able to afford it. On the other hand, most seasonal residents thought that they are using public service for only a portion of the year and paying for them year around. Also, they are providing a steady flow of construction activity with its attendant job and income benefits.

Though some residents did not want to have any population growth, the majority still thought that growth was necessary. The

survey showed that about twenty-nine percent agreed a little growth was needed, forty-six percent agreed a moderate growth and eight percent wanted a lot of growth. In other word, eighty-four percent of the responses thought that growth was necessary in this community (Appendix pp5).

Agriculture was the original source of development in the community. Forty-five percent of the forms indicated that their community should be an agricultural community. Fifty-nine percent of them said that it should be a residential area. Fifty-three percent said that it could be a recreation and tourist area. Forty two percent thought that this community should have some light industries. Five of the responses marked that even heavy industries could be located in the area.

Most residents did their shopping out of the community. Downtown Cedar, a commercial and residential center, provided very limited shopping opportunity for the residents. Taking groceries as an example, seventy-nine percent of the residents bought their groceries outside of Cedar, but they do want to have some services in the community. Three items that had higher percentage rates marked by the residents were groceries (26%), auto services (22.8%) and medical services (10.4%). Those percentages are based on the total of five hundred and eight response records (multi-response frequency). If taking the responded households as a total sample size, the results would be fifty-eight percent of the residents hoped to get groceries; fifty-one percent hoped to have auto services and thirty-two

percent wished to get medical services in this community (see Appendix pp6-8, the item "others" responded to things not listed in the question). Forty-three forms stated that they did not need anything there.

Twenty two activities were chosen by the residents in the previous community meeting. These activities covered recreation, small business opportunities, industrial development, basic public services, and housing. They were listed on the form (see appendix pp8). Some important results are:

- (1) Most people agreed that the tradition festivals like the Polka Festival, summer farmer market (arrange from 64.2% to 87.3%) shall be kept or be developed.
- (2) Seventy percent of the citizens thought that the small businesses should be developed in this community. Those businesses included restaurants, drug stores, motels, grocery stores, and gas stations.
- (3) Fifty-seven percent of the residents supported having light industries there (28.3% of the population disagreed). Sixty- eight percent of the people were against any heavy industries. Only ten percent favored heavy industries.
- (4) Seventy-five percent thought that agricultural development was important. The community should keep it.
- (5) Almost sixty percent of the answers hoped to have health service there. Compared to question number seven, it showed an obvious difference. In question number seven only twenty-three percent people thought that they needed medical services. The

reason was that in this question (Appendix p8), the survey form only provided three choices for all the activities. Many residents thought that "grocery," "gas" and other specific needs were more important. It seemed that most retired persons stated that medical services were important, because their portion (about 29.7%) fitted the responding rate of the question.

- (6) Recreation activities, historical activities, reservation parks were treated as the key events by most residents.
- (7) Over sixty to seventy percent of the residents did not want to work as volunteers to organize those activities. At least twenty percent of the respondents, however, were willing to work for the public for free.
- (8) When asked if they were willing to pay for realizing those activities, fifty-five percent had no response. Eighteen percent of them clearly stated that they would not pay, while twenty-seven percent stated that they would.
- (9) This community has a long history. The longest residents had lived there for 84 years. From 1988 to 1992, twenty-four percent of the households moved to the community. Forty percent of the households had lived there for 10 years. Fourteen percent of the residents had just moved in 1991. Twenty nine percent of house household lived there less than six months a year. Eight percent them did not live in the community, they only own property.
 - (10) Only one percent of the household were tenants.

Seventy-two percent of the respondents worked outside of the township. Among them, forty-one percent worked in Traverse City area. The unemployment rate in the township was 8.6 percent in 1990, which was higher than the average level for the State of Michigan (7.5%) and Leelanau County (6.9%). It was the third highest unemployment rate in the eleven townships in all of Leelanau County.8

(11) The survey data showed that in this community, average persons per household was 2.553. Almost one third of them (29.7%) were retired residents. The largest portion of the population was the age group over fifty five years. This population accounts for forty-two percent. In reality, the average household size should smaller than the survey data. It should be about 2.349, because a certain portion of the property owners (8%) did not live there, but they were still counted as a "household".

Though the full coverage survey provided satisfactory data, there were some obvious weaknesses. First of all, the survey has many repeated questions. Second, one question has too many choices. This indicates the survey did not concentrate on the most important issues that were discussed in the community meetings. The third is that some important information is not included such as income⁹ and education.

 $^{^{8}}$ "Economic Development, The Leelanau General Plan", May 1992 Tab 2-4, pp2-8

⁹ There was a survey covered the income of the residents. Since the survey only included the downtown Cedar area, it cannot represented the whole township. According to the survey, the average income per family was about 20,000-25,000 yearly.

The written questions were tabulated according to the subjects. These subjects were grouped into 99 categories. The top three problems written by residents were "no gas station" (54 respondents), "lack of shopping/grocery (44 respondents) and "high tax" (33 respondents). On the other hand, the three things that were most liked by the residents were "friendliness" (58 respondents), "small" (52 respondents) and "peace" (50 respondents). Very few forms mentioned the things like lack of fire station, sewage and water supply systems, because the residents knew that to solve these large problems would be a long term goal and would need resources from federal or state government.

This is a growth community, and most residents have chosen to continue the growth. The growth is not, however, because of the job location or economic opportunity there. It results from, in recent years, many retired citizens, and temporary residents who moved there. The community is facing two challenges. One is that the community asks for further economic development so that there were more jobs, more basic services, as well as more conveniences. The other is that the residents want to keep the "rural character." To meet these two requirements is the target that the community defined for itself.

Achieving the goal is rather difficult work, because in practice, it is not only a land use and economic development issue, but also a policy issue. It is not only a goal to satisfy the majority, but also should be accepted by all residents.

Historic Review

Reviewing the history will provide some perspective to help the community solve these problems.

Few planners or economists paid much attention to the problems of rural small towns until the late 1970's (Cohen, 1979). Cohen also addressed the differences between the small towns and the small "cities." Because of differences in the size (population), small towns have very limited demand and limited economic power. These make the quality of services and facilities rather poor. Cohen indicated two things. The first was that it had to be treated differently from a city. The second was that it had to be treated individually in terms of its own situations.

Lingemam (1980) said that small towns changed too fast to be managed. This is another difficulty beyond planners' control. A very small economic opportunity could become a significant input to stimulate its development. A small negative impact could cause its decay, because to a small town this impact could be a large influence.

A small town is neither like small communities in the city nor like small communities in the suburbs. A community in the city or in a suburb has more connections with the city. Its growth or decline relates to the city's going up or down. A rural small town, however usually has little connection with cities. It is a relatively independent community both geographically and economically. This means that a small town's survival or development has to count mainly on itself.

Many early studies concluded that a small town's development depended on its physical location and external impacts. Those included: the following,

- (1) transportation system change. This basically means the changes in location character, and changes in accessibility of small towns. For instance, a railway center (New York Jefferson County), Denhoff, was down to about fifty people in 1970. Most of them were old or retired, because the railroad had been replaced by a new highway system, which was not passing by the town. At the same time a lot of towns which had transportation linkages became cities or large towns.
- (2) basic economic change. A shift of a prevailing industry will raise or demote a small town's economic status. With declining agriculture, many small towns, which had often been the central places of agricultural products, became worse.

 Cupertino, a farm land 20 years ago, now has more population than E. Lansing because the computer industry become a prevailing industry world wide, and because of its location near the center of Silicon Valley in California.
- (3) access to capital. Typically, capital plays a key role for community development. With a large capital investment, it would be difficult for a small town to start a business, to construct community facilities, to improve the infrastructure and attract other investments. Without a large initial capital input, however, community development is a long and difficult process.

Maple City, several miles away from downtown Cedar, which had the same condition as Cedar had 25 years ago, benefitted from one company's investment. Today it has much better infrastructure conditions and more taxable companies.

(4) population age structure change. Population getting older, means the young laborers are moving out. Therefore there is less attraction for new industry. A stable young population structure in the community would generate more new business opportunities. In the United States, labor cost is the second largest cost for enterprises. It consumes more than thirty-four percent of total business cost (Hoover and Giarratani 1984, p267). For small businesses, the labor cost will be over forty percent. Lack of labor force (young population) means that labor cost may be much higher. Businesses may not be willing to be located there.

Those elements have influenced economic growth for many years. Though they are very important, they only emphasize the physical conditions. These statements seem to have ignored the role played by the residents, which cannot be fully replaced by physical location and external impacts, because today the planning issue is part of political issue. Cooperation with neighborhood, building coalitions, and gathering information to support or oppose a plan becomes more and more important (Krumholz and Forester 1990, p232).

For many years, experts believed that the physical environment was the key point to control towns and communities,

and so a rational model was often used in small town development.

The rational model was very fashionable in the U.S. This theory "consists in instrumental problem solving made rigorous by the application of scientific theory and technique" (Schon 1983). It stresses the need to use professional knowledge and scientific technique to solve problems and to reach a certain end. It tries to transfer all problems, both scientific and institutional, to its rigorously instrumental framework. It then uses a "general principle" such as mathematics to solve them.

One of the serious problems with applying the model was that it overlooked community opinions and the basic needs of the community. It believed that experts were always right. Different professionals, however, had their own points of view. Those different points fought against each other all the time. Many people thought that using the rational model would create much more trouble than the ones it could solve. The rational model, though criticized since the 1960's, did provide information for describing community development. One of the good examples is Central Place Theory, developed by Water Christaller (1933).

Central Place Theory attempts to explain the spatial patterns of trade and service centers. In ideal situations the

¹⁰There are only two activities in this model: one rural and one arban. The rural activity is an extensive land user, such as agriculture, having no significant economics of agglomeration. The arban activity is subject to substantial agglomeration economies with intensive land use operation. All land is of uniform quality and transfer costs are operational and have linear function with distance in any direction. The rural activities, and the consequent demand for the output of the urban activity, is well distributed. (Hoover & Giarratani 1984, p205).

market areas would be hexagons and have a uniform size determined by transfer costs on the output, density of demand per unit area, and scale economies in the production and/or marketing of the output.

Because of external economies of agglomeration and the economies of channeling transfer along high-volume routes, many different kinds of trade are conducted in a single central place; there has evolved a rough hierarchy of central places from large cities to small towns. Central Place Theory has many limitations in practice; however, it reveals spatial and economic internal relationships between the center and its region. It is still a good reference in land use and regional economic development.

Incremental planning model believes a dialogue with communities to develop a goal of general public interests can be set up, because it thinks that "policy decisions are better understood, and better arrived at in terms of the push and tug of established institutions that are adept at getting things done through decentralized bargaining processes best suited for free market and a democratic political economy¹¹." The major criticism was that the method had "its insensitivity to existing instrumental performance capabilities" (Sternlieb 1978). It was criticized for its bias towards central control -- in definition of problems and solutions, too (Hudson 1979).

¹¹ Barclay M. Hudson, "Comparison of Current Planning Theories: Counterparts and Contradictions" Journal of American Planning Association, 45, 4: Oct 1979, p389.

In the 1970's, planning theories tried to change from a physical dimension to a human dimension, from centralized process to decentralized process. Transactive planning, advocacy planning, and radical planning theories were introduced at this time.

Transactive planning "focuses on the intact experience of people's lives revealing policy issues to be addressed" (Friedmann 1973). There is no certain objective of the community, instead there is a face-to-face talk with the people to make the decision. The data analysis and field survey are minimized in the plan. Transactive planning also "refers to the evolution of decentralized planning institutions that help people take increasing control over the social processes of governing their welfare" (Hudson 1979). This means the planning process not only concerns social goods and service delivery but also their effects on the community. Transactive planning almost denies that planning is a professional activity. It assumed that decision making for a community is its own business. It has little concern for minority needs and the costs to realize the goal, which are the big issues in a small community.

Instead of paying too much attention to general public interests, the advocacy planning model strongly represents the interest of small groups. It emphasizes pluralism and coordination of a planner (Hall, 1988). The advocacy planning movement began in 1960's. It is usually applied to defending the interests of weak against strong community groups (Alinsky 1971,

Heskin 1977). It focuses on the equal distribution of social and economic interests. Advocacy planning thinks that the general economic goals and economic efficiency are not essential problems, but social profit distribution is the most important issue.

This model is suitable for big cities like Cleveland, 12 because a big city has many minority groups. Each has its own interest, which may not be consistent with the majority interest.

The Solon Township is not such a divers community, though there are different opinions. The most important issues today do not concern social welfare distribution.

Radical planning model has two mainstreams. One, just as transactive planning, emphasizes spontaneous activism, the importance of personal growth. On the other hand, it takes a major critical look at the whole social process such as class structure, historical dynamics of a social movement (Hudson, 1979).

Though these five planning schools of thought have so many differences, they represent a certain direction at a certain time. Today, a bottom to top planning process is considered a main direction. Citizen participation, planners involving the communities, negotiation, all are becoming very important tools

¹² In 1971, Mr. Krumholz as a Planning Director, City of Cleveland, prepared a speech for the Mayor Stokes to deliver at the 1971 convention of the American Society of Planning Officials in New Orleans was a great example of advocacy planning model. (Krumholz and Forester 1990, p31).

in community development processes.

In this case study, it is thought that the Solon Township needs a model to coordinate the differences, instead of making a judgement of saying which is right or wrong. This is more meaningful work in the community.

Guy Benveniste, a professor at the University of California, Berkeley, developed a new method. His approach tries to minimize the previous planning weaknesses to reach the community goal.

He believed that the key question facing a planner was, besides the professional skills, how to apply politics of planning, which could build a "multiplier effect," a "resonant effect." This effect is able to drive an entire community to support the plan. The process of building multiplier effects is the process of persuading important people (stakeholders) to accept the ideas. If they believe that the plan is the best one for the community, those stakeholders are able to use their influences to reach the goals. Of course, the persuading process has its scientific base.

Benveniste was a physical scientist. According to physics, when a resonance happens the system will have its greatest energy. He believes that multiplier effect will have the same result. Multiplier effect can enlarge the plan impact many times. On the other hand, if your persuasion has failed, the multiplier effect may have a negative impact. To solve this problem, Benveniste introduced a support system which covers network and coalition. The system could guarantee the multiplier effect will

apply a positive result. This is the dissipation structure system. According to the physics definition, when an open system exchanges energy, information with outside, it will form a systematic new structure with a coordination force. This force can resist a fluctuation from inside the system and a disturbance from outside the system. It is called dissipation. A dissipation structure has the similar physical pattern as a network. When some of the links become loose, it is still a whole body, and it moves forward to the same direction, because other links will replace the loose links. These features have been approved by scientists. They can also be applied in planning field.

Taking a society as an example, in a region, if the resource conditions remain the same everywhere, the people will have a fairly well distributed living pattern. It should have the same population density everywhere. Because there was an exchange and because the society is an open system, cities occurred where people integrated.

If several ideas can be focused at a certain direction, it will multiply the functions of the idea. A community could be a dissipation system, if it is an open system. In the system, every individual has his own idea about the future of the community. When there is a place (network or channels) for citizens to exchange their ideas with planners and the other authorities (local or state politicians) then it could be a dissipation system. Through the exchange (participation, education, and communication process) planners will be able to coordinate and

share the ideas that the residents present. It is able to point an idea to a certain direction. This is a positive multiplier effect.

Benveniste believed the goals and objectives are not the most important aspects. They can be modified from time to time. The most important thing is how to define a worthwhile change and make it happen.

In fact, to build the multiplier effect there are two major alternatives. One is participation of the residents and communication with the authorities. The other is an education process in which residents and planners are involved. How to make the exchange happen is the work on which a professional planner has to focus.

A large cost of building positive multipliers may be a problem. In practice, building a positive multiplier effect is a complex procedure. Some difficulties are even out of a planner's control. Benveniste thought that time and resources were the main barriers. Choosing the right time to set up the system and maintain enthusiasm of the citizens and politicians can speed up the construction of a coalition. This method contains a new professional way, both politically and technically to guide the community to achieve a worthwhile change based on its resource, cost, and opportunity. It provides a scientific concept to implement the plan. And it is relatively easily applied in a small community like Solon Township.

Information Exchange

Three highlighted issues in the survey were brought to public discussion in the township. One was should this community continue its growth? Another was how fast should the growth be? The third was what direction should it take (what kind of businesses)?

The first question is the most important. If it has not been answered, then there is no need to answer the rest.

Fourteen percent of the citizens did want any growth, though eighty-three percent of them confirmed that the growth was necessary. For those fourteen percent, the real issue was not the growth itself but the impact of the growth, which could lead to a large population to destroy "the rural and the small," could lead to higher property taxes, and could create higher living costs. These were the concerns that the whole community expressed. However, the other eighty-six percent of the population has also seen that the growth can be managed to minimize the negative influence. They believed that the growth could bring job opportunities for their sons and daughters, bring services and convenience for all residents, though they did not know what impact would really happen to the environment. To explain the concerns, several issues have to be understood.

Number one is land use. In this township, over ninety percent of the land is regulated as an undeveloped, such as farm land, forestry, and wetland. Within about six percent residential area, a large portion of land is regulated as a low density area,

which varies from five acres per dwelling unit to one acre per dwelling unit. The multi-family housing land use is less than 0.6 percent of land use. Commercial and industrial land use is less than four percent.

Number two is the regional conditions. Leelanau County has the largest agricultural income in the north west counties of the state (not including North Peninsula, see the table below).

Tab-4 .

<u>Earnings By Agriculture</u>

| | Antrim | Benzie | Grand Traverse | Leelanau | Michigan |
|-------------|---------|---------|-------------------|----------|-------------|
| Agriculture | 1.3% | 3.2% | 0.8% | 5.9% | 0.9% |
| Total | \$87568 | \$62376 | \$777211 | \$66469 | \$112060839 |

Source: Michigan Rural Development Strategy Data Book, Michigan Department of Commerce, 1991

According to the estimation done by the Michigan Department of Management Budget, to the year 2000, Leelanau County's total population may reach to 18,653. This represents an increase of 200 persons in the county every year. Compared to the historic growth record of the county, this is fast growth, but it would not become a significant change to the county, because the population increase is only about 1.5 square miles per person yearly. Most of these new comers are residing in Elmwood and Bingham townships.

Number three is the growth rate. The speed of an economic development does not fully depend on how people expect that it

should be but depends upon the input and output from both inside and outside, too. These inputs include the size of the capital investment, the market, the supply, the work force, and the prevailing industries. Several examples are given to represent fast growth communities.

Georgia, Vermont, was a bedroom community before the 1980's. It has experienced fast growth resulting from industrial development in Essex and Berligton in 1983. Large industries chose to locate 15 miles away from the town. During that time, many people moved into Georgia. The population increased by fifty three percent from 1,711 in 1970 to 2,818 in 1980. The fast population growth encouraged the real estate business. A relatively low price in the land market and more opportunity to find a job were the major growth factors. Now the rural atmosphere has disappeared in the area.

Silicon Valley, California, benefitted by attracting prevailing industries-computer industry in the 1980's. Many small communities like Fremont and Milpitas in the 1970's only had populations the size of Solon Township. International markets, excellent labor force and cheaper land (compared with cities like San Francisco and San Jose) at that time put the computer industry in the area. Now these two places have been urbanized. The population both of cities is in the tens of thousands. The development of the computer business contributed to urbanization

¹³ King and Harris, "Local Responses to Rapid Rural Growth", American Planning Associate Journal Spring, 1989, p183. Georgia Town was developed in 1983.

of the whole region. 14

Solon Township has not had these stimulation factors. Its major products are agricultural products. It does not have an industry that can generate a number of job.

The growth speed of the township is partially controlled by Leelanau County and Traverse City, too.

In this region, the economic growth basically depends on service industries. This conclusion was brought from the study of Economic Development on the Leelanau Peninsula (prepared by Planning & Zoning Center Inc. in May 1992). The study showed that the big three industries in the county were services (34.4% including tourist industry), construction (19%) and retail (16.5%). Also, the study said that the scales and the size of those industries are very small. Most businesses in the county only had several employees. The economy base study of the whole county indicated that the service sector had Location Quotient (LQ) 15 value 1.91, construction LQ value was 1.73, and retail LQ value was 1.11 (The data included the Traverse City area). In

¹⁴ Because of the development of the computer industry, Jose, a small city in 1970's, has become the second largest city in California. Its population is more than that of San Francisco.

¹⁵ LQ = (Pij /Pj) / (Pin / Pn).

Pij = population at i business in j region.

Pj = total population at j region.

Pin = population at i business in whole nation

Pn = total population in whole nation.

If LQ > 1 then it is assumed that the i business is a export industry; if LQ <= 1 then it assumed that the i business is a import industry in the region.

fact, a large portion of service businesses, construction jobs, and especially retail stores are located in the Traverse City area. The rest of the townships only had a small portion, because the Traverse City is still a growth city. It has much better location advantages compared to other townships, which allows Traverse City to continue to draw more and higher income businesses first. Thus, the township areas of the County are not economically fast growth areas. The average per-capita income in Leelanau County has been below the state average for more than 40 years (see Tab-5)¹⁶.

Tab-5
Per Capita Personal Income Comparison

| | Michigan | Leelanau |
|------|----------|----------|
| 1959 | \$2,269 | \$1,604 |
| 1968 | \$3,681 | \$3,131 |
| 1978 | \$8,738 | \$8,369 |
| 1989 | \$17,535 | \$16,732 |

Source: U.S. Department of Commerce, Bureau of Economic Analysis.

Solon Township is not the township that has the best location advantages in the County. Many townships in the county have been considered bedroom communities of Traverse City, because in the current decade, the city "has experienced a

¹⁶ From 1958 to 1989, the average income increase speed of the Leelanau County is about 2.3% yearly. According to the trend, to reach the average income of the state (2.2% increase) needs a long time.

(Leelanau General Plan, May 1992, pp1-2). The Solon Township is one of the bedroom townships. However, it is not the first candidate. The Elmwood and Bingham townships are closer to the Traverse City and they have longer lake frontages. More people moved to these towns during the last two decades (see Tab-6 the population change table below).

Tab-6
Population Change for Tri-Township

| | | | | Changes | | % Change | |
|--------------------|-------|-------|-------|---------|-------|----------|-------|
| Township | 1970 | 1980 | 1990 | 70-80 | 80-90 | 70-80 | 80-90 |
| Bingham | 916 | 1546 | 2051 | 630 | 505 | 68.8% | 32.7% |
| Elmwood | 2240 | 3004 | 3427 | 764 | 423 | 43.1% | 14.1% |
| Solon | 798 | 987 | 1268 | 189 | 281 | 23.7% | 28.5% |
| Leelanau County | 10872 | 14007 | 16572 | 3135 | 2520 | 28.8% | 18.0% |

Source: Bureau of the Census, Department of Commerce 1990

The regional growth will impact the development of Solon Township. Although the township had a higher growth rate (28.5%) from 1980 to 1990, the number of persons increased in the ten years was not large. It was approximately one family per year. At the same time, the number of jobs increased did not meet the need of the community. In 1990, the Solon Township had a labor force of 600, and unemployed persons numbered 52. This distress has agitated the township for more than 40 years. Without a certain economic growth it would not be able to solve the

problem.

It is reasonable to believe that this township should have a certain economic growth that will not affect the rural characters. The development, in term of the needs, should concentrate on providing more basic services and creating more jobs for the community.

But a basic service needs community support, which is the demand. If there were not enough demand, the businesses would not survive. To increase the demand, the community has several alternatives. One is to attract new residents and the other is to attract the visitors, or both.

Solon Township does have rich tourist resources and abundant space both for the newcomers and visitors. Most people understand that the tourist related businesses are suitable for them. Additionally, Solon Township is part of the Leelanau peninsula, a destination area. People come there for visiting or recreation. But many residents do not agree that the new residents should continue to move in. In fact, the retired new residents also have positive impact.

Many small and remote towns in the state of Illinois have benefited from retired people. Those senior citizens moving from cities to the small rural communities bring the money as well as new service jobs in the community. In 1992, State of Illinois had a project to provide census information with geographic information for the public. The purpose was to give guidance

both for the retired people and the small communities17.

Solon Township has experienced similar events. According to the statistics, in the last twenty years, the Leelanau County social security recipients increased over eight times from less than 200,000 in 1971 to a about 1,600,000 in 1990. To attract part of this money in this community is one of the great opportunities to create jobs.

Since Cedar has the largest portion of retired persons with the best facilities and the most commercial activities in the community, how to put its growth first became an agenda. In theory, development of downtown prior to its region is a model which evolved from Central Place Theory. This model takes the current advantages of downtown and makes the development more efficient.

With the tremendous information exchange, many concerns and questions have been given answers. The community has been recognized as much better by all the people. This process has been repeated in the community several times.

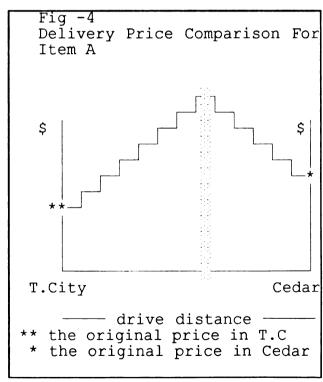
^{17 &}quot;Application of Arc/Info in Demographic Information System" Geo/Info System, March 1992.

Search the Opportunities

The model to establish the Downtown as a development center and to drive the rest of area requires certain conditions. For example, it has to be known whether there is an existing market, and whether there is a potential market. Downtown Cedar has both these advantages.

Several studies have documented that the great majority of shopping trips by automobiles take no more than 7 minutes travel time (one way) for convenience goods, which includes food and small hardware items, and no more than 15 minutes for shopping goods, which includes hardware items, small electronic items, and auto parts.

Bureau of labor
Statistics showed that,
nationally, approximately
50 percent of consumer
expenditures for
convenience goods are for
taxable goods; approximately
90 percent of consumer
expenditures for shopping
goods are for taxable
items. According to
Central Place Theory, any



Burchell, Listokin and Dolphin, "The New Practitioner's Guide to Fiscal Impact Analysis", 1989, pp. 45.

central place should have its market boundary though this market place is covered by the higher level central place. Any individual shopping in a central place will consider the delivery price and the original price of a product. This means that if one item purchased in Cedar is cheaper than it is purchased in Traverse city plus the transportation cost and time spent, then there should be a market.

Figure 4 demonstrates the relationship between delivery price and distance from Cedar to Traverse City. For instance, the price of item A in Cedar is higher than in Traverse City. But if a person considers that to drive to Traverse City will cost more than to drive to Cedar to get item A, the person may buy the item in downtown Cedar. Therefore, shopping goods with prices located at right side of the dotted line may be considered to be suitable in Cedar.¹⁹

During 1992, total Disposable Income (the amount of money people have left after taxes to spend on goods and services) for residents of Leelanau County was estimated to be \$248 millon. An estimated \$220 million of this total was spent on consumer items. What was purchased is shown in the table on the next page:

¹⁹ Hoover and Giarratani, "An introduction to Regional Economics", Third Edition, 1984, pp45.

Tab-7
What Was Purchased

| Category | Millions (\$) |
|-------------------------------|---------------|
| Food(at home) | 18.9 |
| Food(outside home) | 12.0 |
| Housing | 66.2 |
| Apparel | 8.5 |
| Entertainment | 11.1 |
| Transportation | 38.2 |
| Heath Care | 10.7 |
| personal Care Products and Se | rvice 3.0 |
| Tobacco/Smoking Supplies | 1.9 |
| Education | 3.0 |
| Reading | 1.2 |
| Personal Insurance and Pensio | ns24.0 |
| Housekeeping Supplies | 3.2 |
| Subtotal: | 201.9 |
| Others | 18.1 |
| Total: | 220.0 |

Source: See next page.

Of this \$220 million, \$84.3 million was spent in 128 retail businesses in Leelanau County. Where this money was spent is shown in the following table on the next page:

Tab-8
Where Money Was Spent

| Type of Store | NO. of Stores | Millions \$ in Sales |
|--------------------------------|------------------|----------------------|
| Foods Stores Total | 17 | 28.2 |
| Supermarket Only | 14 | 27.1 |
| Eating and Drinking | 37 | 16.8 |
| General Merchandise | 2 | 0.2 |
| Apparel and Accessories | 18 | 5.9 |
| Furniture and Home Furnishing. | 2 | 1.2 |
| Auto Dealers | 4 | 0.6 |
| Gasoline | 9 | 5.8 |
| Building Material & Hardware | 8 | 16.0 |
| Drug Stores | 2 | 1.7 |
| Subtotal: | 99 | 76.4 |
| Others ²⁰ | 29 | 7.9 |
| TOTAL: | 128 | 84.3 |

Source: 1990 Census and reports from two national private market research firms: CACI, Inc. and SBP Demographics USA.

The difference between the estimated \$220 million total expended and the \$84.3 million expended at identified local businesses may indicate that for Leelanau County economic leaks could be total at least \$136 million per year. Even one percent of this spending would be located in Cedar, it is a large support

²⁰In 1992 there were 27 Finance, Insurance and Real Estate firms in Leelanau County as well as 126 other service businesses.

for the small town and it is possible, because in the entire county, there are only 11 commercial centers and Cedar is one of the large centers. Potential demand will depend on the visitors and the newcomers. Visitors should be considered as the major source.

Sugar Loaf, as mentioned before, is a potential market. It has a multi-million dollar business. If ten percent or fifteen percent of it could be attracted to the Solon township, that will be very good and very possible result. (of course this market analysis is not accurate enough. But it does provide a confident information to the residents) The downtown development should concentrate on making up the economic leaks.

The opportunities for the hinterland, the township rural areas, also, are positive. Agriculture and tourism industries are still the advantage. As noted previously, agricultural business is declining in significance compared with other sectors.

Decline is not always a failure. In the township, since more new businesses are setting up, the percentage of agricultural income has decreased. On the other hand, that lack of new technology and equipment makes the products overdependent on seasonal demand is the real issue that should be considered. Since orchards, maple and oak are the unique output in the whole United States, therefore, the agricultural development program should target economic activities that add value to locally produced commodities for export, as well as identifying and promoting target agricultural light industries to improve the old

technologies for the products.

In addition to being among the most unique and prime agricultural land in the nation, agricultural operations are a critical part of the township's rural character.

Large portions of farm land, forest, wetland, and lakes provide a great opportunity for the tourism business, the fastest growing business in the county.

National Park Service and the road traffic count stations had a report. It said that in the Leelanau County from 1984 to 1990 the total visitors increased from 853,186 times/per person to 1,216,870 times/per person. (see Tab-9).

Tab-9
National parks Annual Public Use

| Year | Total Visitor | Year | Total Visitor |
|------|---------------|------|---------------|
| 1984 | 853,186 | 1988 | 1,317,530 |
| 1985 | 897,512 | 1989 | 1,250,416 |
| 1986 | 634,435 | 1990 | 1,216,870 |
| 1987 | 1,222,811 | | |

Source: National Park Service, Sleeping Bear Dunes National Lakeshore Traffic Counts.

Tourism generates many jobs in the area. According to the source from Michigan State University, Travel Tourism & Recreation Resource Center (TTRRC), in Leelanau County the annual average number of jobs that can be attributed to tourism related

jobs²¹ have generally increased from 347 in 1974 to 539 in 1986 (see Tab-10).

Tab-10

Annual Number of Jobs in Tourism-Related Business
Leelanau County

Source: TTRC, MSU, 1986, 1990

Since service and retail sectors are closely tied to tourism, between 1977 and 1987 the county experienced a nearly 108 percent increase in total retail sales from \$26,693,000 to \$55,435,000. The three fastest growth businesses are Hotel Dining, Family Restaurant and Hotel & Motel (see Tab-11).

²¹ The related jobs are defined by Michigan employment Security Commission (MESC). They are jobs in service incidental to water transportation, gasoline service station, boat dealers, eating and drinking places, hotel, motel and tourist counts, parks...

Tab-11

Sales Tax Collections
Leelanau County

| | Traver. & Clubs | Hotel Dining | | Fast Food Rest. | Sporting goods | Hotel Motel |
|------|--------------------|-----------------|----------|--------------------|-------------------|----------------|
| 1983 | \$128,249 | \$5,881 | \$69,640 | \$12,704 | \$9,418 | \$95,587 |
| 1985 | 64,582 | 22,004 | 16,9956 | 29,009 | 10,584 | 117,702 |
| 1987 | 118,817 | 31,027 | 206,872 | 19,308 | 15,064 | 130,728 |
| 1989 | 149,168 | 39,387 | 297,564 | 31,787 | 16,732 | 135,794 |

Source: MSU Travel And Tourism Research Center 1986 & 1991

There is a successful example about the hotel development near the township.

K.C Log Home a private company did a subdivision in the Long Lake area 30 minutes from Cedar in 1990, where they put log houses on the ground. The original purpose of the company was to sell these houses, but it failed. Now the log houses have become the hotel rooms, because there are so many visitors year around. Instead of paying the same amount of money to stay at a formal inn, many travellers prefer to stay in a log house. Since the log home hotel has provided some unique services which many families may not have the opportunity to enjoy in their own home, K.C Log Home company has a good business all year. Even in the spring time, the slow time, they only have less than twenty days to maintain the facilities. In the Spring of 1991, many log houses had been rented, though some ground work had not been finished.

This community has a better condition than Long Lake, because except hotels, there is lake, mountain, and the town,

which does not exit in Long Lake.²² In addition, hundreds of tourists stay in the regular inns in Sugar Loaf for skiing, golfing, and boating. Obviously, there is a demand for lodge.

For those water, mountain, and snow related out-door recreation activities, the Solon Township has all these natural advantages. Specifically, if winter time could be well managed, it will generate more opportunities for the community.

Having these advantages does not mean that they have been utilized. How to draw visitors and investment in the community is an essential issue. To reach this target, a management plan and a physical improvement of the downtown are important steps.

There is only one four-bed "Bed & Breakfast" inn in Cedar.

Establish a Headquarter

Construction of Cedar downtown economy needs an institute to transfer the information, connect political powers, gather resources, and guaranty the operations. The township and all other government agencies are part of them. In reality, the Solon Township, though it is one of the most important leadership in this community, is not powerful enough economically and politically to implement the wishes that the residents have presented. It has to have a "headquarter" directly from the residents.

One form which the headquarter can adopt is Downtown

Development Authority (DDA).²³ Downtown Development Authority of

Cedar was established in August 1991.

Three factors caused the Solon Township Board to initiate the action:

- 1. The deterioration of the downtown area of Cedar, including vacant businesses, inadequate physical infrastructure and a general lack of vitality, have prevented local businesses from sharing in the increased levels of commercial activity seen in surrounding communities.
- 2. The Township Board realized that to remedy those distresses, the solutions, to be successful, must originate and be directed by the businesses and citizens in the community.
- 3. A substantial number of low and moderate income families in

 $^{^{23}}$ The formal procedure to build a DDA has to follow the law. For the further information, please see State of Michigan 78th Legislature Regular Session of 1975.

the downtown area asked for improving their situations.

The DDA of Cedar has three major functions:

It has legislative and administrative authority in certain area. In this area the DDA has the superiority to regulate the activities, boundaries and quality of the development.

It is a major assistant of the township. The Authority has initiated a number of new activities and has been analyzing the needs for rejuvenating the community such as to help the Township compile the Comprehensive Development Plan and the Community Recreation Plan. Besides, the Authority has established its network and coalition to the public as well as to the state and federal political organizations.

It is one of the capital accesses for the downtown development, one of most important activities in this township economic development. The Authority has successfully got the support for their activities from the Michigan Department of Commerce through the Community Development Block Grant Program. Besides, it is able to issue bonds for the downtown water and sewer system or for other capital improvements.²⁴

Notably, there are 105 downtown development authorities in Michigan, none of which is in the Leelanau County except for the DDA of Cedar. Many of those 105 DDAs, do not function specifically in rural communities, because the level of economic development opportunities was insufficient to warrant their

²⁴ The DDA of Cedar was planning to have Potential for a Tax Increment Financing Plan. In this Plan, The DDA would borrow and invest about \$100,000 for the downtown development.

continued activity at the local level. Even in some big cities, economic development efforts have slowed due to reductions in funding of state and federal programs.

To prevent the DDA from becoming inactive, the DDA of Cedar must consistently look for opportunities to promote prosperity, to engage in cooperative coordinated activities with like minded organizations, both in and outside the community, and to develop ongoing sources of financial support.

An inactive DDA is a huge cost for a community. Since in a certain area, the DDA is a exclusive management, if this management loses its functions, the other economic activities might not be able to locate there. And to restore the function is a long time and costly process, because to set up a coalition for the community is difficult work.

Lighting the Downtown

Nice places bring businesses; messy places take them away.

This is the American custom. In reality, most economic developments start at a physical improvement of the downtowns.

This first step provides a good environment for stimulating the economic vitality. There are many examples followed by this custom from "White City Movement" to the "Community Development Block Grant" program.

For a small town like Cedar, its improvement may, at least, prevent existing businesses from moving out as well as encourage new businesses and visitors.

The physical problems identified in the downtown were two classes: functional and visual. The functional problems were the traffic, traffic circulation in and around the downtown businesses; parking, both on and off-street parking; sidewalk, quide signs and mixed land use problems.

This number of functional problems in the village downtown has produced visual confusion as well. Vehicles scattered everywhere. Broken sidewalks started and stopped in various spots. Building deterioration, due to a lack of repairs, gave a very disagreeable impression. Street trees, landscaping, effective lighting, benches and guide signs were missing. All this is not a pleasant sign for both local residents and for passing visitors. These visitors may even not know that there is a village town or may not want to stop and shop there, because Cedar does not even look safe.

Fixing all these functional problems are a relatively long term task which would be influenced by the financial stages. But improvement of the visual problems is the urgent work that the residents should implement immediately, because it is not a large money spending project. It is a job that can be accomplished by both the residents in the downtown area and the township, and it may have quick positive effects for the community. For instance, a simple, effective sign at the entrance point of the downtown could make passing visitors notice the town and chose to stop and visit. Appropriate landscaping may help attract people to downtown Cedar. A good first impression may become a long term benefit from the travellers.

The other important factor is the lighting system, which mainly indicate street lighting. In 1991 a group of business people in the Cedar area did a study of the lighting system. One of the results was that because the poor existing lighting situation in the downtown, many visitors ignored the existence of the small town. The study found that many visitors headed for Sugar Loaf arrived there in late afternoon. The darkness of the downtown was a locked door to close them from the community. Lighting is an important part of the streetscape and ambience for the town during the evenings. For many months of the year, much of day is spent in darkness. Consequently a well-lit downtown could add greatly to the attractiveness of Cedar for shopping and other activities, and for local residents, too.

Winter weather lasts 6 months in the area. In the winter,

day time is relatively shorter than the rest of seasons. A dark landscape will decay all positive factors that the small town has. Also, the dark place will make people reluctant to visit from their bright hotel rooms. A simple concept is that in the gloom of winter times lights symbolize warmth and prosperity.

Financial supports are always a critical factor both for fixing the functional and visual problems. With diminishing funds available from both federal and state governments, the community must be as creative and resourceful in gathering money needed from all the sources to implement some of the large projects such as parking, street lighting, storm water drainage and other development. But much of this work should be done by the individuals and business owners. Fixing, lighting, landscaping and cleaning their own sites are much more significant work for the community.

Conclusions

The Solon township, though facing many problems, has good conditions and the ability to improve itself. In this community, almost every citizen is in one way or another, concerned about the local economy. Many of them who are specialized in economic development issues, provided technical and financial assistance to try to maximize economic opportunities.

After analyzing existing trends and conditions some "critical issues" are identified:

- 1.) the services provided are too limited to meet the residents' needs;
- 2.) the job opportunities are too small to solve the higher unemployment rate distress;
- 3.) the property tax burden is located on certain people such as farmers and retired permanent residents and
- 4.) the deterioration of downtown area (Cedar) is considered a signal of decline.

With efficient communications among the community and the State, the residents have reached agreement on these issues. This agreement provides a platform to base future "worthwhile" chances.

To modify the situation and improve the quality of life the community must start at fixing downtown to keep the existing businesses active and stable. Of course, maintaining a successful business requires an adequate market demand. This demand can be supported by the local residents and the visitors who will be

attracted to the friendly community and its rich natural environment. Those resources should be converted to a wealth shared by the community.

Development of local business ought to increase job opportunity; however, it may not avoid increasing the property tax as well. To minimize the problem, the township should separate the property tax rate between the business district and other areas, especially it should keep farm land, forests and senior citizen residential areas at a low tax rate.

On the other hand, increasing property taxation is not always a negative issue. It really depends on how to spend this tax money. If this increase will help the parents get rid of the privation of unemployment for their sons and daughters, it will provide the convenience for the residents, especially the senior residents, to get their basic needs in the town without traveling long distance. If they can accomplish this, the higher tax rate would be worthwhile.

There are some other issues that still need further discussion, such as the fire station, schools, hospitals. With proper economic development focusing on the "worthwhile changes" these problems will be solved in the future. For a temporary remedy, the township could share these facilities with other communities to establish a better school situation and emergency services together.

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Appendix

| Survey | data | Analy | ses. | • • | • • • | • • | • • | | • • • | • • | 1 |
|--------|-------|-------|------|---------|-------|-----|---------|------|-----------|---------|----|
| Survey | form. | | | | | | | | | | 42 |

1. What do you feel are the 4 most important problems facing Cedar PROBLM1 NO ENOUGH AFFORDABLE HOUSING

| PROBLM1 NO ENOUGH AFFO | RDABLE HOU | SING | problems | rucing co | auı |
|--|-----------------------|-------------------------------|----------------------------------|---|-------------------------------|
| Value Label | Value | Frequency | Percent | Valid Percent | |
| 1ST IMPORTANT PROBLE 2ND IMPORTANT PROBLE 3RD IMORTANT PROBLEM 4TH IMPORTANT PROBLE | 1 2 3 4 | 15 12 13 23 230 | 5.1 4.1 4.4 7.8 78.5 | 23.8 19.0 20.6 36.5 MISSING | 23.8 42.9 63.5 100.0 |
| | TOTAL | 293 | 100.0 | 100.0 | |
| Valid Cases 63 | Missing C | ases 230 | | | |
| **PROBLM2 JOB OPPORTUN | ITY | | | | |
| Value Label | | Frequency | | | Percent |
| 1ST IMPORTANT PROBLE 2ND IMPORTANT PROBLE 3RD IMORTANT PROBLEM 4TH IMPORTANT PROBLE | | 46 36 22 20 169 | | | 37.1 66.1 83.9 100.0 |
| | TOTAL | 293 | 100.0 | 100.0 | |
| Valid Cases 124 | Missing C | ases 169 | | | |
| PROBLM3 LACK O FRECREA | TION FACIL | ITY | | | |
| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
| 1ST IMPORTANT PROBLE 2ND IMPORTANT PROBLE 3RD IMORTANT PROBLEM 4TH IMPORTANT PROBLE | 1 2 3 4 • | 5 7 11 13 257 | 2.4 3.8 4.4 87.7 | 13.9 19.4 30.6 36.1 MISSING | 13.9 33.3 63.9 100.0 |
| Valid Cases 36 | Missing C | ases 257 | | | |
| PROBLM4 LACK OF PUBLIC | SERVICE | | | Valid | Cum |
| Value Label | Value | Frequency | Percent | | |
| 1ST IMPORTANT PROBLE | 1 | 13 | 4.4 | 27.1 | 27.1 |

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|--|------------------|----------------------------|----------------------------------|---|-------------------------------|
| 1ST IMPORTANT PROBLE 2ND IMPORTANT PROBLE 3RD IMORTANT PROBLEM 4TH IMPORTANT PROBLE | 1 2 3 4 | 13 15 7 13 245 | 4.4 5.1 2.4 4.4 83.6 | 27.1 31.3 14.6 27.1 MISSING | 27.1 58.3 72.9 100.0 |
| | TOTAL | 293 | 100.0 | 100.0 | |

Valid Cases 48 Missing Cases 245

PROBLM5 NO VITALITY

| PROBLM5 NO VITALITY | | | | | |
|--|------------------|-----------------------------|----------------------------------|---|-------------------------------|
| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
| 1ST IMPORTANT PROBLE 2ND IMPORTANT PROBLE 3RD IMORTANT PROBLEM 4TH IMPORTANT PROBLE | 1 2 3 4 | 27 15 13 17 221 | 9.2 5.1 4.4 5.8 75.4 | 18.1 23.6 | 37.5 58.3 76.4 100.0 |
| | TOTAL | 293 | 100.0 | 100.0 | |
| Valid Cases 72 | Missing C | ases 221 | | | |
| PROBLM6 FEW SENIOR CIT | TIZEN ACTIV | ITY | | | |
| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
| 1ST IMPORTANT PROBLE 2ND IMPORTANT PROBLE 3RD IMORTANT PROBLEM 4TH IMPORTANT PROBLE | 1 2 3 4 | 6 10 11 5 261 | 2.0 3.4 3.8 1.7 89.1 | 34.4 | 18.8 50.0 84.4 100.0 |
| | TOTAL | 293 | 100.0 | 100.0 | |
| Valid Cases 32 | _ | ases 261 | | | |
| PROBLM7 NO ENOUGH YOUT | TH ACTIVITY | | | | |
| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
| 1ST IMPORTANT PROBLE 2ND IMPORTANT PROBLE 3RD IMORTANT PROBLEM 4TH IMPORTANT PROBLE | 1 2 3 4 | 9 15 14 8 247 | 3.1 5.1 4.8 2.7 84.3 | 19.6 32.6 30.4 17.4 MISSING | 19.6 52.2 82.6 100.0 |
| | TOTAL | 293 | 100.0 | 100.0 | |
| Valid Cases 46 | Missing C | ases 247 | | | |
| PROBLM8 QUALITY OF EDU | JCATION | | | | |
| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
| 1ST IMPORTANT PROBLE 2ND IMPORTANT PROBLE 3RD IMORTANT PROBLEM 4TH IMPORTANT PROBLE | 1 2 3 4 | 8 11 9 5 260 | 2.7 3.8 3.1 1.7 88.7 | 24.2 33.3 27.3 15.2 MISSING | 24.2 57.6 84.8 100.0 |
| | TOTAL | 293 | 100.0 | 100.0 | |
| Valid Cases 33 | Missing C | ases 260 | | | |

**PROBLM9 LACK OF SHOPPING

| | | | | 37-34-4 | C |
|--|---|--|---|---|--|
| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
| 1ST IMPORTANT PROBLE 2ND IMPORTANT PROBLE 3RD IMORTANT PROBLEM 4TH IMPORTANT PROBLE | 1 2 3 4 | 39 47 31 14 162 | 13.3 16.0 10.6 4.8 55.3 | 29.8 35.9 23.7 10.7 MISSING | 29.8 65.6 89.3 100.0 |
| Valid Cases 131 | Missing C | ases 162 | | | |
| PROBLM10 FEW COMMUNITY | | Para | | Valid | Cum |
| Value Label | Value | Frequency | Percent | Percent | Percent |
| 1ST IMPORTANT PROBLE 2ND IMPORTANT PROBLE 3RD IMORTANT PROBLEM 4TH IMPORTANT PROBLE | 1 2 3 4 | 5 11 10 11 256 | 1.7 3.8 3.4 3.8 87.4 | 13.5 29.7 27.0 29.7 MISSING | 13.5 43.2 70.3 100.0 |
| | TOTAL | 293 | 100.0 | 100.0 | |
| Valid Cases 37 | Missing C | ases 256 | | | |
| | | | | | |
| **PROBLM11 TAXES | | | | | |
| **PROBLM11 TAXES Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
| | 1 2 3 4 | 82 22 20 12 157 | 28.0 7.5 6.8 4.1 53.6 | 60.3 16.2 14.7 8.8 MISSING | |
| Value Label 1ST IMPORTANT PROBLE 2ND IMPORTANT PROBLE 3RD IMORTANT PROBLEM | 1 2 3 | 82 22 20 12 | 28.0 7.5 6.8 4.1 | Percent 60.3 16.2 14.7 8.8 | Percent 60.3 76.5 91.2 |
| Value Label 1ST IMPORTANT PROBLE 2ND IMPORTANT PROBLE 3RD IMORTANT PROBLEM | 1 2 3 4 | 82 22 20 12 157 | 28.0 7.5 6.8 4.1 53.6 | 60.3 16.2 14.7 8.8 MISSING | Percent 60.3 76.5 91.2 |
| Value Label 1ST IMPORTANT PROBLE 2ND IMPORTANT PROBLE 3RD IMORTANT PROBLEM 4TH IMPORTANT PROBLE | 1 2 3 4 • | 82 22 20 12 157 | 28.0 7.5 6.8 4.1 53.6 | Percent 60.3 16.2 14.7 8.8 MISSING 100.0 | Percent 60.3 76.5 91.2 100.0 |
| Value Label 1ST IMPORTANT PROBLE 2ND IMPORTANT PROBLE 3RD IMORTANT PROBLEM 4TH IMPORTANT PROBLE Valid Cases 136 | 1 2 3 4 • | 82 22 20 12 157 293 ases 157 | 28.0 7.5 6.8 4.1 53.6 | Percent 60.3 16.2 14.7 8.8 MISSING 100.0 | Percent 60.3 76.5 91.2 |
| Value Label 1ST IMPORTANT PROBLE 2ND IMPORTANT PROBLE 3RD IMORTANT PROBLEM 4TH IMPORTANT PROBLE Valid Cases 136 PROBLM12 TRAFFIC | 1 2 3 4 • TOTAL Missing C | 82 22 20 12 157 293 ases 157 | 28.0 7.5 6.8 4.1 53.6 | Percent 60.3 16.2 14.7 8.8 MISSING 100.0 | Percent 60.3 76.5 91.2 100.0 |
| Value Label 1ST IMPORTANT PROBLE 2ND IMPORTANT PROBLE 3RD IMORTANT PROBLEM 4TH IMPORTANT PROBLE Valid Cases 136 PROBLM12 TRAFFIC Value Label 1ST IMPORTANT PROBLE 2ND IMPORTANT PROBLE 3RD IMORTANT PROBLEM | 1 2 3 4 TOTAL Missing C | 82 22 20 12 157 | 28.0 7.5 6.8 4.1 53.6 100.0 Percent 4.1 4.4 3.4 2.7 | Percent 60.3 16.2 14.7 8.8 MISSING 100.0 Valid Percent 27.9 30.2 23.3 18.6 | Cum Percent 27.9 58.1 81.4 |

**PROBLM13 LACK OF MEDICAL SERVICES

| Value Label | Value Fred | quency | Percent | Valid Percent | |
|--|------------------|----------------|------------|---|--------------|
| 1ST IMPORTANT PROBLE 2ND IMPORTANT PROBLE 3RD IMORTANT PROBLEM 4TH IMPORTANT PROBLE | | 19 27 16 | 6.5 9.2 | 21.5 24.1 34.2 20.3 MISSING | 45.6 79.7 |
| | TOTAL | 293 | 100.0 | 100.0 | |
| Valid Cases 79 | Missing Cases | 214 | | | |
| PROBLM14 OTHERS | | | | | |
| Value Label | Value Fred | quency | Percent | Valid Percent | |
| 1ST IMPORTANT PROBLE 2ND IMPORTANT PROBLE 3RD IMORTANT PROBLEM 4TH IMPORTANT PROBLE | 1 2 3 4 | 12 8 | 4.1 2.7 | 48.4 19.4 12.9 19.4 MISSING | 67.7 80.6 |
| | TOTAL | 293 | 100.0 | 100.0 | |
| Valid Cases 62 | Missing Cases | 231 | | | |

2. Do you think Cedar should have multi-family house and low cost house

HOUSE1 MULTI-FAMILY HOUSE

| Value Label | | Value Fr | requency | Percent | Valid Percent | Cum Percent |
|-----------------------|-----|--------------|-----------------------|-----------------------------|---------------------------------|-----------------------|
| NO YES NOT SURE | | 0 1 8 | 135 96 52 10 | 46.1 32.8 17.7 3.4 | 47.7 33.9 18.4 MISSING | 47.7 81.6 100.0 |
| | | TOTAL | 293 | 100.0 | 100.0 | |
| Valid Cases | 283 | Missing Case | es 10 | | | |

HOUSE2 LOW COST HOUSE

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|-----------------------|-------------|-----------------------|-----------------------------|---------------------------------|-----------------------|
| NO YES NOT SURE | 0 1 8 | 131 103 50 9 | 44.7 35.2 17.1 3.1 | 46.1 36.3 17.6 MISSING | 46.1 82.4 100.0 |
| | TOTAL | 293 | 100.0 | 100.0 | |

Valid Cases 284 Missing Cases 9

3. What type of community Cedar is

CEDAR TYPE OF COMM. YOU THINK CEDAR IS

| Category label | Code | Count | Pct of Responses | Pct of Cases |
|--------------------------------------|-----------|----------|---------------------|-----------------|
| *AGRI COMMUNITY | 1 | 199 | 29.7 | 69.8 |
| *RESIDENTIAL COMMERCIAL COMMUNITY | 2 | 172 2 | 25.6 .3 | 60.4 .7 |
| LIGHT INDUSTRIAL | 4 | 24 | 3.6 | 8.4 |
| *RECREATION/TOURIST | 5 | 170 | 25.3 | 59.6 |
| *RETIRMENT | 6 | 89 | 13.3 | 31.2 |
| OTHERS | 8 | 15 | 2.2 | 5.3 |
| Total | responses | 671 | 100.0 | 235.4 |
| 08 missing cases; 285 valid cases | - | | | |

4. What kind of community do you wish Cedar to be

LIKE TYPE OF COMM. YOU LIKE CEDAR ITO BE

| Category label | Code | Count | Pct of Responses | Pct of Cases |
|--|--------------------------------------|---|--|---|
| *AGRI COMMUNITY COMMERCIAL BASE *LIGHT INDUSTRIAL HEAVY INDUSTRIAL *RECREATION OR TOURIST *RESIDENTIAL RETIREMENT OTHERS | 1 2 3 4 5 6 7 9 | 159 13 123 5 154 172 72 17 | 22.2 1.8 17.2 .7 21.5 24.0 10.1 2.4 | 54.3 4.6 42.0 1.8 52.6 58.7 25.4 6.0 |
| Total 9 missing cases; 284 valid cases | responses | 715 | 100.0 | 251.8 |

5. How much growth do you like in Cedar in next 10 years.

| GROWTH | MOH | MIICH | CROWTH | TIOY | T.TKF | TΩ | TN | CEUVB |
|--------|-----|-------|--------|------|-------|----|----|-------|

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|--|-----------------------|----------------------------|---|---|---------------------------------------|
| NONE A LITTLE MODERATE A LOT UNLIMITED | 0 1 2 3 4 | 39 86 134 15 9 | 13.3 29.4 45.7 5.1 3.1 3.4 | 13.8 30.4 47.3 5.3 3.2 MISSING | 13.8 44.2 91.5 96.8 100.0 |
| | TOTAL | 293 | 100.0 | 100.0 | |

Valid Cases 283 Missing Cases 10

6. In what area do you shop for following thins

| ITEM1 | GROCERIES |
|----------|-----------|
| 1 1 EP11 | GRUCERIES |

| ITEMI GRO | CERTES | | | | | |
|--|-------------|--------------------|-----------------------|----------------------------|--------------------------------|-----------------------|
| Value Label | | Value | Frequency | Percent | Valid Percent | |
| OUT CEDAR IN CEDAR CEDAR & OTHER | PLACES | 0 1 8 | | | 6.9 9.4 | 83.8 90.6 100.0 |
| | | TOTAL | 293 | 100.0 | 100.0 | |
| Valid Cases | 277 | Missing C | ases 16 | | | |
| ITEM2 AUT | O SERVICE | | | | | |
| Value Label | | Value | Frequency | Percent | Valid Percent | |
| OUT CEDAR IN CEDAR CEDAR & OTHER | PLACES | 0 1 8 | | 62.8 18.4 8.9 9.9 | 20.5 | 90.2 |
| Valid Cases | 264 | TOTAL Missing C | 293 ases 29 | 100.0 | 100.0 | |
| ITEM3 ENT | ERTAINMENT | | | | | |
| Value Label | | Value | Frequency | Percent | Valid Percent | |
| OUT CEDAR IN CEDAR CEDAR & OTHER | PLACES | 0 1 8 | 199 14 32 48 | 4.8 10.9 | 5.7 13.1 | 81.2 86.9 100.0 |
| | | TOTAL | 293 | 100.0 | 100.0 | |
| Valid Cases | 245 | Missing C | ases 48 | | | |
| ITEM4 FIN | ANCIAL SERV | ICE | | | | |
| Value Label | | Value | Frequency | Percent | Valid Percent | |
| OUT CEDAR IN CEDAR CEDAR & OTHER | PLACES | 0 1 8 | 203 29 23 38 | 69.3 9.9 7.8 13.0 | 79.6 11.4 9.0 MISSING | 79.6 91.0 100.0 |
| | | TOTAL | 293 | 100.0 | 100.0 | |
| Valid Cases | 255 | Missing C | ases 38 | | | |
| ITEM5 HOU | SEHOLD ITEM | ıs | | | | |

Valid Cum

| Value Label | Value F | requency | Percent | Percent | Percent |
|---|---------------------------|--------------------------|-------------------------------|----------------------------------|-----------------------|
| OUT CEDAR IN CEDAR CEDAR & OTHER PLACES | 0 1 8 | 227 10 22 34 | 77.5 3.4 7.5 11.6 | 87.6 3.9 8.5 MISSING | 87.6 91.5 100.0 |
| | TOTAL | 293 | 100.0 | 100.0 | |
| Valid Cases 259 | Missing Cas | es 34 | | | |
| ITEM6 IMPROVEMENT M | ATERIALS | | | | |
| Value Label | Value F | requency | Percent | Valid Percent | |
| OUT CEDAR IN CEDAR CEDAR & OTHER PLACES | 0 1 8 | 201 14 34 44 | 68.6 4.8 11.6 15.0 | 80.7 5.6 13.7 MISSING | 80.7 86.3 100.0 |
| Valid Cases 249 | TOTAL Missing Cas | | 100.0 | 100.0 | |
| ITEM7 GIFTS | | | | | |
| Value Label | Value F | requency | Percent | Valid Percent | |
| OUT CEDAR IN CEDAR CEDAR & OTHER PLACES | 0 1 8 • TOTAL | 229 1 22 41 | 78.2 .3 7.5 14.0 | 90.9 .4 8.7 MISSING | 90.9 91.3 100.0 |
| Valid Cases 252 | Missing Cas | es 41 | | | |
| ITEM8 MEDICAL SERVI | CE | | | | |
| Value Label | Value F | requency | Percent | Valid Percent | Cum Percent |
| OUT CEDAR CEDAR & OTHER PLACES | 0 8 • | 244 18 31 | 83.3 6.1 10.6 | 93.1 6.9 MISSING | 93.1 100.0 |
| | TOTAL | 293 | 100.0 | 100.0 | |
| Valid Cases 262 | Missing Cas | es 31 | | | |

7. WHich item/service that you wish were availabe in Cedar.

| Category label | Code | Count | Pct of Responses | Pct of Cases |
|-----------------------|-------------|-------|---------------------|-----------------|
| NOTHING | 0 | 43 | 8.5 | 18.9 |
| *GROCERY | 1 | 132 | 26.0 | 57.9 |
| *AUTO SERVICE | 2 | 116 | 22.8 | 50.9 |
| ENTERTAINMENT | 3 | 37 | 7.3 | 16.2 |
| FINANCIAL SERVICE | 4 | 11 | 2.2 | 4.8 |
| HOUSEHOLD ITEM | 5 | 17 | 3.3 | 7.5 |
| IMPROVEMENT MATERIALS | 6 | 6 | 1.2 | 2.6 |
| GIFT | 7 | 25 | 4.9 | 11.0 |
| *MEDICAL SERVICE | 8 | 53 | 10.4 | 23.2 |
| *OTHERS | 9 | 68 | 13.4 | 29.8 |
| Tota | l responses | 508 | 100.0 | 222.8 |

65 missing cases; 228 valid cases

8. How much would you like to see follow things in Cedar

ACT1 MORE FESTIVALS LIKE THE POLKA FESTIVAL

| ACT1 | MORE | FESTIVALS | LIKE THE | POLKA FESTI | VAL | | |
|---|-------------|-----------------|-----------------------|---------------------------------|------------------------------------|---|-------------------------------------|
| Value I | abel | | Value | Frequency | Percent | Valid Percent | |
| NO FESTIV A LITTIL SOME FEST A LOT FES | FESTIVIVALS | | 0 1 2 3 4 | 1 62 90 57 41 42 | .3 21.2 30.7 19.5 14.0 | .4 24.7 35.9 22.7 16.3 MISSING | .4 25.1 61.0 83.7 100.0 |
| | | | TOTAL | 293 | 100.0 | 100.0 | |
| Valid Cas | es | 251 | Missing C | ases 42 | | | |
| ACT2 | DOWN | TOWN REVI | ralization | Ī | | | _ |
| Value I | abel | | Value | Frequency | Percent | Valid Percent | Cum Percent |
| NO DOWN TA LITTLE SOME DOWN A LOT DOWN | DOWN TOWN | TOWN R REVIT | 1 2 3 4 | 25 40 51 134 43 | 13.7 17.4 45.7 | 16.0 20.4 | 10.0 26.0 46.4 100.0 |
| | | | TOTAL | 293 | 100.0 | 100.0 | |
| Valid Cas | es | 250 | Missing C | ases 43 | | | |
| ACT3 | SUMM | ER FARMER I | MARKET | | | | |
| Value I | abel | | Value | Frequency | Percent | Valid Percent | |
| NO SUMMER | FARM | ER MAR | 1 | 9 | 3.1 | 3.4 | 3.4 |

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|------------------|----------------------------|------------------------------------|--|------------------------------|
| NO SUMMER FARMER MAR A LITTLE SUMMER FARM SOME SUMMER FARMER M A LOT SUMMER FARMER | 1 2 3 4 | 9 32 69 155 28 | 3.1 10.9 23.5 52.9 9.6 | 3.4 12.1 26.0 58.5 MISSING | 3.4 15.5 41.5 100.0 |
| | TOTAL | 293 | 100.0 | 100.0 | |

Valid Cases 265 Missing Cases 28

| ACT4 | CITITEN | PARTICIPATIONS |
|------|---------|----------------|
| AC14 | CITIAEN | PARTICIPATIONS |

| Value Label | Value | Frequency | Percent | Valid Percent | |
|---|--|--|---|--|--|
| NO CITIZEN PARTICIPA A LITTLE PARTICIPATI SOME PARTICIPATIONS A LOT PARTICIPATIONS | | 19 56 80 78 60 | 6.5 19.1 27.3 26.6 20.5 | 8.2 24.0 34.3 33.5 MISSING | 8.2 32.2 66.5 100.0 |
| | TOTAL | 293 | 100.0 | 100.0 | |
| Valid Cases 233 | Missing C | ases 60 | | | |
| ACT5 RESORTS/TO | URIST RELATED | ACTIVITIES | | | |
| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
| NO RESORTS ACTIVITIE A LITTLE RESORTS ACT SOME RESORTS ACTIVIT A LOT RESORTS ACTIVI | 1 2 3 4 | 66 81 56 45 45 | 22.5 27.6 19.1 15.4 15.4 | 26.6 32.7 22.6 18.1 MISSING | 26.6 59.3 81.9 100.0 |
| | TOTAL | 293 | 100.0 | 100.0 | |
| Valid Cases 248 | Missing C | ases 45 | | | |
| | | | | | |
| ACT6 AGRICULTUR | AL DEVELOPMENT | • | | | |
| ACT6 AGRICULTUR | AL DEVELOPMENT Value | Frequency | Percent | Valid Percent | Cum Percent |
| | Value 1 2 3 4 | Frequency 29 64 92 63 45 | 9.9 21.8 31.4 21.5 15.4 | 11.7 25.8 37.1 25.4 MISSING | |
| Value Label NO AGRICULTURAL DEVE A LITTLE AGRICULTURA SOME AGRICULTURAL DE | Value 1 2 3 4 . TOTAL | 29 64 92 63 45 | 9.9 21.8 31.4 21.5 | 11.7 25.8 37.1 25.4 | 11.7 37.5 74.6 |
| Value Label NO AGRICULTURAL DEVE A LITTLE AGRICULTURAL SOME AGRICULTURAL DE A LOT AGRICULTURAL D | Value 1 2 3 4 . TOTAL Missing C | 29 64 92 63 45 | 9.9 21.8 31.4 21.5 15.4 | 11.7 25.8 37.1 25.4 MISSING | 11.7 37.5 74.6 |
| Value Label NO AGRICULTURAL DEVE A LITTLE AGRICULTURAL SOME AGRICULTURAL DE A LOT AGRICULTURAL D Valid Cases 248 | Value 1 2 3 4 • TOTAL Missing C | 29 64 92 63 45 | 9.9 21.8 31.4 21.5 15.4 | 11.7 25.8 37.1 25.4 MISSING | Percent 11.7 37.5 74.6 100.0 |
| Value Label NO AGRICULTURAL DEVE A LITTLE AGRICULTURAL SOME AGRICULTURAL DE A LOT AGRICULTURAL D Valid Cases 248 ACT7 LIGH INDUS | Value 1 2 3 4 • TOTAL Missing C | 29 64 92 63 45293 | 9.9 21.8 31.4 21.5 15.4 | 11.7 25.8 37.1 25.4 MISSING 100.0 | Percent 11.7 37.5 74.6 100.0 |
| Value Label NO AGRICULTURAL DEVE A LITTLE AGRICULTURAL DE A LOT AGRICULTURAL DE A LOT AGRICULTURAL DE A LOT AGRICULTURAL DE Valid Cases 248 ACT7 LIGH INDUSTRIES A LITTLE LIGH INDUSTRIES A LITTLE LIGH INDUSTRIES SOME LIGH INDUSTRIES | Value 1 2 3 4 . TOTAL Missing C TRIES Value 1 2 3 | Frequency 29 64 92 63 45 293 Fases 45 Frequency 83 66 43 59 | 9.9 21.8 31.4 21.5 15.4 100.0 Percent 28.3 22.5 14.7 20.1 | Percent 11.7 25.8 37.1 25.4 MISSING 100.0 Valid Percent 33.1 26.3 17.1 23.5 | Percent 11.7 37.5 74.6 100.0 Cum Percent 33.1 59.4 76.5 |

ACT8 HEAVY INDUSTRIES

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|--|------------------|-----------------------------|--------------------------------------|---|-------------------------------|
| NO HEAVY INDUSTRIES A LITTLE HEAVY INDUS SOME HEAVY INDUSTRIE A LOT HEAVY INDUSTRI | 1 2 3 4 | 198 19 8 9 59 | 67.6 6.5 2.7 3.1 20.1 | 84.6 8.1 3.4 3.8 MISSING | 84.6 92.7 96.2 100.0 |
| | TOTAL | | 100.0 | 100.0 | |
| Valid Cases 234 | Missing Ca | .ses 59 | | | |
| ACT9 OPPORTUNITY F | OR SMALL BUS | INESS | | | |
| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
| NO SMALL BUSINESS A LITTLE SMALL BUSIN SOME SMALL BUSINESS A LOT SMALL BUSINESS | 1 2 3 4 | 19 42 66 112 54 | 22.5 | 7.9 17.6 27.6 46.9 MISSING | 7.9 25.5 53.1 100.0 |
| | TOTAL | 293 | 100.0 | 100.0 | |
| Valid Cases 239 | Missing Ca | ses 54 | | | |
| ACT10 SHOPPING | | | | | |
| Value Label | Value | Frequency | Percent | Valid Percent | |
| NO SHOPPING A LITTLE SHOPPING SOME SHOPPING A LOT SHOPPING | 1 2 3 4 | 34 49 56 103 51 | 11.6 16.7 19.1 35.2 17.4 | 14.0 20.2 23.1 42.6 MISSING | 14.0 34.3 57.4 100.0 |
| | TOTAL | 293 | 100.0 | 100.0 | |
| Valid Cases 242 | Missing Ca | ses 51 | | | |
| ACT11 RESTAURATS | | | | | |
| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
| NO RESTAURATS A LITTLE RESTAURATS SOME RESTAURATS A LOT RESTAURATS | 1 2 3 4 | 34 49 68 88 54 | 11.6 16.7 23.2 30.0 18.4 | 14.2 20.5 28.5 36.8 MISSING | 14.2 34.7 63.2 100.0 |
| | TOTAL | 293 | 100.0 | 100.0 | |
| Valid Cases 239 | Missing Ca | ses 54 | | | |

| 10 | |
|-------|-------|
| ልሮሞ12 | MOTEL |

| Value Label | | Value F | requency | Percent | Valid Percent | Cum Percent |
|---|-----|------------------|----------------------------|--------------------------------------|---|-------------------------------|
| NO MOTEL A LITTLE MOTEL SOME MOTEL A LOT MOTEL | | 1 2 3 4 | 79 71 39 41 63 | 27.0 24.2 13.3 14.0 21.5 | 34.3 30.9 17.0 17.8 MISSING | 34.3 65.2 82.2 100.0 |
| | | TOTAL | 293 | 100.0 | 100.0 | |
| Valid Cases | 230 | Missing Cas | se s 63 | | | |

ACT13 RESIDENTIAL DEVELOPMENT

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|--|------------------|----------------------------|--------------------------------------|---|-------------------------------|
| NO RESIDENTIAL DEVEL A LITTLE RESIDENTIAL SOME RESIDENTIAL DEV A LOT RESIDENTIAL DE | 1 2 3 4 | 41 89 56 46 61 | 14.0 30.4 19.1 15.7 20.8 | 17.7 38.4 24.1 19.8 MISSING | 17.7 56.0 80.2 100.0 |
| | TOTAL | 293 | 100.0 | 100.0 | |

Valid Cases 232 Missing Cases 61

ACT14 WATER ACCESS IMPROVEMENT

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|--|------------------|----------------------------|--------------------------------------|---|-------------------------------|
| NO WATER ACCESS IMPR A LITTLE WATER ACCES SOME WATER ACCESS IM A LOT WATER ACCESS I | 1 2 3 4 | 40 61 59 74 59 | 13.7 20.8 20.1 25.3 20.1 | 17.1 26.1 25.2 31.6 MISSING | 17.1 43.2 68.4 100.0 |
| | TOTAL | 293 | 100.0 | 100.0 | |

Valid Cases 234 Missing Cases 59

ACT15 PARK/RECREATION

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|------------------|----------------------------|--------------------------------------|---|-------------------------------|
| NO PARK/RECREATION A LITTLE PARK/RECREA SOME PARK/RECREATION A LOT PARK/RECREATIO | 1 2 3 4 | 32 72 71 56 62 | 10.9 24.6 24.2 19.1 21.2 | 13.9 31.2 30.7 24.2 MISSING | 13.9 45.0 75.8 100.0 |
| | TOTAL | 293 | 100.0 | 100.0 | |

Valid Cases 231 Missing Cases 62

ACT16 SUBSIDIZED HOUSING

| ACT16 SUBSIDIZED HOU | JSING | | | | |
|--|--|--|--|--|--|
| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
| | varue | rrequency | rercent | rercenc | rercent |
| NO SUBSIDIZED HOUSE | 1 | 119 | 40.6 | 52.0 | 52.0 |
| A LITTLE SUBSIDIZ. H SOME SUBSIDIZ. HOUSE | 2 3 | 57 34 | 19.5 11.6 | 24.9 14.8 | 76.9 91.7 |
| A LOT SUBSIDIZ. HOUS | 4 | 19 | 6.5 | 8.3 | 100.0 |
| | • | 64 | 21.8 | MISSING | |
| | moma t | 202 | 100.0 | 100.0 | |
| | TOTAL | 293 | 100.0 | 100.0 | |
| Valid Cases 229 | Missing C | ases 64 | | | |
| ACT17 SENIOR CITIZEN | CENTER | | | | |
| 77 · 1 · · · · · 7 · · · · 1 | ** 1 | . | | Valid | Cum |
| Value Label | Value | Frequency | Percent | Percent | Percent |
| NO SENIOR CENTER | 1 | 49 | 16.7 | 21.0 | 21.0 |
| A LITTLE CENIOR CENT SOME CENIOR CENTER | 2 3 | 72 | 24.6 | 30.9 | 51.9 |
| A LOT CENIOR CENTER | 3 4 | 69 43 | 23.5 14.7 | 29.6 18.5 | 81.5 100.0 |
| | | 60 | 20.5 | MISSING | 200.0 |
| | | | | | |
| | TOTAL | 293 | 100.0 | 100.0 | |
| Valid Cases 233 | Missing C | ases 60 | | | |
| | | | | | |
| ACT18 YOUTH ACTIVITY | CENTER | | | | |
| ACT18 YOUTH ACTIVITY | CENTER | | | Valid | Cum |
| ACT18 YOUTH ACTIVITY Value Label | CENTER Value | Frequency | Percent | | Cum Percent |
| Value Label | Value | _ | | Percent | Percent |
| | Value 1 2 | Frequency 37 58 | 12.6 19.8 | Percent 16.2 25.3 | |
| Value Label NO YOUTH CENTERT A LITTLE YOUTH CENTE SOME YOUTH CENTER | Value 1 2 3 | 37 58 77 | 12.6 19.8 26.3 | 16.2 25.3 33.6 | 16.2 41.5 75.1 |
| Value Label NO YOUTH CENTERT A LITTLE YOUTH CENTE | Value 1 2 | 37 58 77 57 | 12.6 19.8 26.3 19.5 | 16.2 25.3 33.6 24.9 | Percent 16.2 41.5 |
| Value Label NO YOUTH CENTERT A LITTLE YOUTH CENTE SOME YOUTH CENTER | Value 1 2 3 4 | 37 58 77 57 64 | 12.6 19.8 26.3 19.5 21.8 | 16.2 25.3 33.6 24.9 MISSING | 16.2 41.5 75.1 |
| Value Label NO YOUTH CENTERT A LITTLE YOUTH CENTE SOME YOUTH CENTER | Value 1 2 3 | 37 58 77 57 | 12.6 19.8 26.3 19.5 | 16.2 25.3 33.6 24.9 | 16.2 41.5 75.1 |
| Value Label NO YOUTH CENTERT A LITTLE YOUTH CENTE SOME YOUTH CENTER | Value 1 2 3 4 | 37 58 77 57 64 | 12.6 19.8 26.3 19.5 21.8 | 16.2 25.3 33.6 24.9 MISSING | 16.2 41.5 75.1 |
| Value Label NO YOUTH CENTERT A LITTLE YOUTH CENTE SOME YOUTH CENTER A LOT YOUTH CENTERT | Value 1 2 3 4 . TOTAL Missing C | 37 58 77 57 64 293 ases 64 | 12.6 19.8 26.3 19.5 21.8 | 16.2 25.3 33.6 24.9 MISSING | 16.2 41.5 75.1 |
| Value Label NO YOUTH CENTERT A LITTLE YOUTH CENTE SOME YOUTH CENTER A LOT YOUTH CENTERT Valid Cases 229 | Value 1 2 3 4 . TOTAL Missing C | 37 58 77 57 64 293 ases 64 | 12.6 19.8 26.3 19.5 21.8 | 16.2 25.3 33.6 24.9 MISSING | 16.2 41.5 75.1 |
| Value Label NO YOUTH CENTERT A LITTLE YOUTH CENTE SOME YOUTH CENTER A LOT YOUTH CENTERT Valid Cases 229 | Value 1 2 3 4 . TOTAL Missing C | 37 58 77 57 64 293 ases 64 | 12.6 19.8 26.3 19.5 21.8 | Percent 16.2 25.3 33.6 24.9 MISSING 100.0 | Percent 16.2 41.5 75.1 100.0 |
| Value Label NO YOUTH CENTERT A LITTLE YOUTH CENTE SOME YOUTH CENTER A LOT YOUTH CENTERT Valid Cases 229 ACT19 HISTORIC ACTIV | Value 1 2 3 4 TOTAL Missing C VITY DEVELO Value 1 | 37 58 77 57 64 | 12.6 19.8 26.3 19.5 21.8 | Percent 16.2 25.3 33.6 24.9 MISSING 100.0 | Percent 16.2 41.5 75.1 100.0 |
| Value Label NO YOUTH CENTERT A LITTLE YOUTH CENTE SOME YOUTH CENTER A LOT YOUTH CENTERT Valid Cases 229 ACT19 HISTORIC ACTIV Value Label NO HISTORIC ACT DEVE A LITTLE HISTORIC AC | Value 1 2 3 4 TOTAL Missing C VITY DEVELO Value 1 2 | 37 58 77 57 64 | 12.6 19.8 26.3 19.5 21.8 100.0 | Percent 16.2 25.3 33.6 24.9 MISSING 100.0 Valid Percent 21.4 32.8 | Percent 16.2 41.5 75.1 100.0 Cum Percent 21.4 54.1 |
| Value Label NO YOUTH CENTERT A LITTLE YOUTH CENTE SOME YOUTH CENTER A LOT YOUTH CENTERT Valid Cases 229 ACT19 HISTORIC ACTIV Value Label NO HISTORIC ACT DEVE A LITTLE HISTORIC AC SOME HISTORIC ACT DE | Value 1 2 3 4 TOTAL Missing C VITY DEVELO Value 1 2 3 | 37 58 77 57 64 | 12.6 19.8 26.3 19.5 21.8 100.0 Percent 16.7 25.6 18.8 | Percent 16.2 25.3 33.6 24.9 MISSING 100.0 Valid Percent 21.4 32.8 24.0 | Percent 16.2 41.5 75.1 100.0 Cum Percent 21.4 54.1 78.2 |
| Value Label NO YOUTH CENTERT A LITTLE YOUTH CENTE SOME YOUTH CENTER A LOT YOUTH CENTERT Valid Cases 229 ACT19 HISTORIC ACTIV Value Label NO HISTORIC ACT DEVE A LITTLE HISTORIC AC | Value 1 2 3 4 TOTAL Missing C VITY DEVELO Value 1 2 | 37 58 77 57 64 | 12.6 19.8 26.3 19.5 21.8 100.0 Percent 16.7 25.6 18.8 17.1 | Percent 16.2 25.3 33.6 24.9 MISSING 100.0 Valid Percent 21.4 32.8 24.0 21.8 | Percent 16.2 41.5 75.1 100.0 Cum Percent 21.4 54.1 |
| Value Label NO YOUTH CENTERT A LITTLE YOUTH CENTE SOME YOUTH CENTER A LOT YOUTH CENTERT Valid Cases 229 ACT19 HISTORIC ACTIV Value Label NO HISTORIC ACT DEVE A LITTLE HISTORIC AC SOME HISTORIC ACT DE | Value 1 2 3 4 . TOTAL Missing C VITY DEVELO Value 1 2 3 4 . | 37 58 77 57 64 293 ases 64 PMENT Frequency 49 75 55 50 64 | 12.6 19.8 26.3 19.5 21.8 | Percent 16.2 25.3 33.6 24.9 MISSING 100.0 Valid Percent 21.4 32.8 24.0 21.8 MISSING | Percent 16.2 41.5 75.1 100.0 Cum Percent 21.4 54.1 78.2 |
| Value Label NO YOUTH CENTERT A LITTLE YOUTH CENTE SOME YOUTH CENTER A LOT YOUTH CENTERT Valid Cases 229 ACT19 HISTORIC ACTIV Value Label NO HISTORIC ACT DEVE A LITTLE HISTORIC AC SOME HISTORIC ACT DE | Value 1 2 3 4 TOTAL Missing C VITY DEVELO Value 1 2 3 | 37 58 77 57 64 | 12.6 19.8 26.3 19.5 21.8 100.0 Percent 16.7 25.6 18.8 17.1 | Percent 16.2 25.3 33.6 24.9 MISSING 100.0 Valid Percent 21.4 32.8 24.0 21.8 | Percent 16.2 41.5 75.1 100.0 Cum Percent 21.4 54.1 78.2 |

ACT20 NATURAL & SCENIC AREA

| ACIZO NATURAL & SCENIC AREA | | | | | | |
|--|------------------|-----------------------------|-------------------------------------|---------------------------------------|-------------------------------|--|
| Value Label | Value | Frequency | Percent | Valid Percent | | |
| NO NATURAL & SCENIC A LITTLE NATURAL & S SOME NATURAL SCENIC A LOT NATURAL SCENIC | 1 2 3 4 | 25 34 77 101 56 | 8.5 11.6 26.3 34.5 19.1 | 14.3 32.5 42.6 | 10.5 24.9 57.4 100.0 | |
| | TOTAL | 293 | 100.0 | 100.0 | | |
| Valid Cases 237 | Missing Ca | ases 56 | | | | |
| ACT21 HEALTH SERVICE | | | | | | |
| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent | |
| NO HEALTH SERVICE A LITTLE HEALTH SERV SOME HEALTH SERVICE A LOT HEALTH SERVICE | 1 2 3 4 | 29 50 69 82 63 | | 35.7 | 12.6 34.3 64.3 100.0 | |
| | TOTAL | 293 | 100.0 | 100.0 | | |
| Valid Cases 230 | Missing C | ases 63 | | | | |
| ACT22 OTHERS | | | | | | |
| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent | |
| NO OTHERS A LITTLE OTHERS SOME OTHERS A LOT OTHERS | 1 2 3 4 | 3 1 1 17 271 | 1.0 .3 .3 5.8 92.5 | 13.6 4.5 4.5 77.3 MISSING | 13.6 18.2 22.7 100.0 | |
| | TOTAL | 293 | 100.0 | 100.0 | | |

8. Would you be willing to volunteer for follow thinhs

VOLNT1 VOLUNTEER FOR ACTIVITY PLAN

Valid Cases 22 Missing Cases 271

| Value Label | | Value F | requency | Percent | Valid Percent | Cum Percent |
|-------------|-----|-------------|-----------------|----------------------|-------------------------|----------------|
| NO YES | | 0 1 • | 150 90 53 | 51.2 30.7 18.1 | 62.5 37.5 MISSING | 62.5 100.0 |
| | | TOTAL | 293 | 100.0 | 100.0 | |
| Valid Cases | 240 | Missing Cas | es 53 | | | |

VOLNT2 VOLUNTEER FOR PARK IMPROVEMENT

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|-----------------------|-------------|----------------------|----------------------------|-------------------------------|-----------------------|
| NO YES NOT SURE | 0 1 8 | 160 81 1 51 | 54.6 27.6 .3 17.4 | 66.1 33.5 .4 MISSING | 66.1 99.6 100.0 |
| | TOTAL | 293 | 100.0 | 100.0 | |
| | | | | | |

Valid Cases 242 Missing Cases 51

VOLNT3 VOLUNTEER FOR FUND RAISINGN

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|-----------------------|-------------|----------------------|----------------------------|-------------------------------|-----------------------|
| NO YES NOT SURE | 0 1 8 | 174 66 2 51 | 59.4 22.5 .7 17.4 | 71.9 27.3 .8 MISSING | 71.9 99.2 100.0 |
| | TOTAL | 293 | 100.0 | 100.0 | |

Valid Cases 242 Missing Cases 51

9. Would you be willing to pay for additional activities/ facilities PAYMENT WILLING TO PAY FOR FACILITY

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|-----------------------|-------------|-----------------------|------------------------------|---------------------------------|-----------------------|
| NO YES NOT SURE | 0 1 8 | 53 79 124 37 | 18.1 27.0 42.3 12.6 | 20.7 30.9 48.4 MISSING | 20.7 51.6 100.0 |
| | TOTAL | 293 | 100.0 | 100.0 | |

Valid Cases 256 Missing Cases 37

10. How many years have you lived in Cedar.

YRS HOW LONG HAVING LIVED IN CEDAR

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|-------------|-------|-----------|------------|------------------|----------------|
| | 0 | 15 | 5.1 | 5.6 | 5.6 |
| | 2 | 8 10 | 2.7 3.4 | 3.0 3.7 | 8.5 12.2 |
| | 3 | 8 | 2.7 | 3.0 | 15.2 |
| | 4 | 4 | 1.4 | 1.5 | 16.7 |
| | 5 | 21 | 7.2 | 7.8 | 24.4 |
| | 6 | 10 | 3.4 | 3.7 | 28.1 |
| | 7 | 7 | 2.4 | 2.6 | 30.7 |
| | 8 | 13 | 4.4 | 4.8 | 35.6 |
| | 9 | 3 | 1.0 | 1.1 | 36.7 |

15

| 10 112 13 14 15 16 17 18 19 10 112 12 12 12 12 12 12 12 12 12 12 12 12 | 10 26 9 4 11 4 8 2 1 1 1 1 1 1 1 1 1 1 2 3 1 2 1 3 1 2 1 2 | 3.4 2.0 3.1 1.4 3.8 1.4 2.7 3.8 3.3 3.3 1.0 1.0 3.7 4.4 1.0 3.7 4.4 1.0 3.7 4.4 1.0 3.7 1.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3 | 3.7 2.2 3.3 1.5 4.1 1.5 3.7 4.1 4.4 4.1 4.4 1.5 1.1 1.1 4.7 4.8 1.1 1.1 2.6 4.7 1.5 7.7 1.5 7.7 1.4 2.2 4.4 1.1 4.7 1.4 1.4 1.1 1.4 1.4 1.4 1.4 1.4 1.4 1.4 | 413.7.1.27.7.4.8.9.2.6.0.3.8.9.0.4.1.0.1.4.6.7.0.6.4.7.5.0.7.4.8.9.3.0.1.5.3.6.0.4.1.0.1.4.6.7.0.6.4.7.5.0.7.4.8.9.3.0.1.5.3.6.0.4.1.0.1.4.6.7.7.7.7.7.7.7.7.7.7.7.7.7.7.7.7.7.7 |
|--|---|---|---|--|
| TOTAL | 293 | 100.0 | 100.0 | |

Valid Cases 270 Missing Cases 23

MONTH HOW MANY MONTH LIVE IN CEDAR EACH YEAR

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|-------------|-------|-----------|---------|------------------|----------------|
| | 0 | 21 | 7.2 | 8.3 | 8.3 |
| | 1 | 7 | 2.4 | 2.8 | 11.1 |
| | 2 | 6 | 2.0 | 2.4 | 13.4 |
| | 3 | 10 | 3.4 | 4.0 | 17.4 |
| | 4 | 2 | .7 | .8 | 18.2 |
| | 5 | 6 | 2.0 | 2.4 | 20.6 |
| | 6 | 10 | 3.4 | 4.0 | 24.5 |
| | 7 | 2 | .7 | .8 | 25.3 |
| | 8 | 4 | 1.4 | 1.6 | 26.9 |
| | 9 | 1 | .3 | . 4 | 27.3 |
| | 10 | 3 | 1.0 | 1.2 | 28.5 |
| | 11 | 2 | .7 | .8 | 29.2 |
| | 12 | 179 | 61.1 | 70.8 | 100.0 |
| | • | 40 | 13.7 | MISSING | |
| | TOTAL | 293 | 100.0 | 100.0 | |

Valid Cases 253 Missing Cases 40

Valid Cases 265 Missing Cases 28

11. Do you own or rent your home

| Value Label | | Value 1 | Frequency | Percent | Valid Percent | Cum Percent |
|----------------|-----|-------------|----------------|--------------------|------------------------|----------------|
| RENAL OWNER | | 0 1 | 3 262 28 | 1.0 89.4 9.6 | 1.1 98.9 MISSING | 1.1 |
| | | TOTAL | 293 | 100.0 | 100.0 | |
| Valid Cases | 265 | Missing Cas | ses 28 | | | |

12. Where do you work WKAREA WORK AREA

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|------------------|------------------------------|-----------------------------------|--|------------------------------|
| CEDAR SOLON TWP TRAVERSE CITY OTHERS | 1 2 3 4 | 26 29 109 101 28 | 8.9 9.9 37.2 34.5 9.6 | 9.8 10.9 41.1 38.1 MISSING | 9.8 20.8 61.9 100.0 |
| | TOTAL | 293 | 100.0 | 100.0 | |

13. How far do you drive to work

DISTANCE HOW FAR DO YOU DRIVE TO WORK

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|-------------|----------------------------|------------------------|--------------------------|---------------------------|------------------------------|
| | 0 1 2 | 39 5 2 1 | 13.3 1.7 .7 | 19.5 2.5 1.0 | 19.5 22.0 23.0 |
| | 1 2 3 4 5 6 | 4 6 5 | .3 1.4 2.0 1.7 | .5 2.0 3.0 2.5 | 23.5 25.5 28.5 31.0 |
| | 7 8 9 10 | 10 9 9 20 | 3.4 3.1 3.1 6.8 | 5.0 4.5 4.5 10.0 | 36.0 40.5 45.0 55.0 |
| | 11 12 13 | 7 17 4 | 2.4 5.8 1.4 | 3.5 8.5 2.0 | 58.5 67.0 69.0 |
| | 14 15 16 17 | 5 22 2 5 2 | 1.7 7.5 .7 1.7 | 2.5 11.0 1.0 2.5 | 71.5 82.5 83.5 86.0 |
| | 18 20 22 25 | 2 13 1 1 | .7 4.4 .3 | 1.0 6.5 .5 | 87.0 93.5 94.0 94.5 |
| | 26 27 30 | 1 1 2 1 | .3 .3 .3 .7 | .5 .5 1.0 | 95.0 95.5 96.5 |
| | 34 35 40 50 | 1 1 2 1 | .3 .3 .7 .3 | .5 .5 1.0 .5 | 97.0 97.5 98.5 99.0 |
| | 58 60 | 1 1 93 | .3 .3 31.7 | .5 .5 MISSING | 99.5 100.0 |
| | TOTAL | 293 | 100.0 | 100.0 | |

Valid Cases 200 Missing Cases 93

14. Households

HOSHOLD HOW MANY PEOPLE IN YOUR HOUSEHOLD

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|-------------|-----------------------|-----------------------------|------------------------------------|-------------------------------------|--------------------------------------|
| | 1 2 3 4 5 | 29 123 39 44 25 | 9.9 42.0 13.3 15.0 8.5 | 10.8 45.7 14.5 16.4 9.3 | 10.8 56.5 71.0 87.4 96.7 |
| | 6 7 • | 6 3 24 | 2.0 1.0 8.2 | 2.2 1.1 MISSING | 98.9 100.0 |
| | TOTAL | 293 | 100.0 | 100.0 | |

Valid Cases 269 Missing Cases 24

15. Your age group.

| | | ~ ~ ~ ~ ~ ~ ~ |
|-----|-----|---------------|
| AGE | AGE | GROUP |

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|-----------------------|---------------------------------|---|---|-------------------------------------|
| 18-25 YRS 26-35 YRS 36-45 YRS 46-55 YRS OVER 55 | 1 2 3 4 5 | 1 42 82 39 123 6 | .3 14.3 28.0 13.3 42.0 2.0 | .3 14.6 28.6 13.6 42.9 MISSING | .3 15.0 43.6 57.1 100.0 |
| | TOTAL | 293 | 100.0 | 100.0 | |

Valid Cases 287 Missing Cases 6 16. Gender of the person(s) who fill up the form

| SEX | MALE/FEMALE | | | | Valid | C |
|------------------------|-------------|-------------|----------------------|----------------------------|--------------------------------|-----------------------|
| Value | Label | Value | Frequency | Percent | Percent | Cum Percent |
| FEMALE MALE BOTH | | 0 1 2 | 94 179 12 8 | 32.1 61.1 4.1 2.7 | 33.0 62.8 4.2 MISSING | 33.0 95.8 100.0 |
| | | TOTAL | 293 | 100.0 | 100.0 | |

Valid Cases 285 Missing Cases 8

17. (OCPCY) OCCUPATIONS

| ir. (ocici) occornitons | | | | Valid | Cum |
|---|---------|-----------|-------------|-------------------|--------------|
| Value Label | Value | Frequency | Percent | Percent | Percent |
| AGRICULTURE | 1 2 | 12 | 4.1 | 4. 3 | 4.3 |
| CONSTRUCTION FINANCE/INSURANCE/R.ESTATE | 3 | 25 12 | 8.5 4.1 | 4.3 | 13.1 17.4 |
| GOVERNMENT MANUFACTURING | 4 5 | 11 21 | 3.8 7.2 | 3.9 7.4 | 21.3 28.7 |
| RETIRED | 6 | 87 19 | 29.7 6.5 | 30.9 6.7 | 59.6 66.3 |
| EDUCATION RETAIL | 8 | 24 | 8.2 | 8.5 | 74.8 |
| TRASPORTATION TOURISM | 9 10 | 6 3 | 2.0 1.0 | $\frac{2.1}{1.1}$ | 77.0 78.0 |
| OTHER | 11 | 62 11 | 21.2 | 22.0 MISSING | 100.0 |
| | • | | | | |
| | TOTAL | 293 | 100.0 | 100.0 | |

Valid Cases 282 Missing Cases 11

GROWTH HOW MUCH GROWTH YOU LIKE TO IN CEDAR AGE GROUP Crosstabulation:

By AGE --- Page 1 of 5

| | | | | | | | - |
|------------|---------------------|--------------|----------------|----------------|----------------------|----------------|-----------------------|
| | Count Exp Val | | | | | | |
| BCD > | Row Pct | | | 36-45 YR | | OVER 55 | _ |
| AGE-> | Col Pct Residual | S 1 | S 2 | S 3 | S 4 | 5 | Row Total |
| GROWTH | 0 | 0 | 4 | 10 | 2 | 22 | 38 |
| NONE | | .1 | 5.7 10.5% | 10.9 26.3% | 5.0 5.3% | 16.3 57.9% | 13.6% |
| | | .0% | 9.5% | 12.5% | 5.4% -3.0 | 18.3% | |
| | - | | | | | | |
| A LITTLE | 1 | .3 | 18 12.8 | 29 24.3 | 9 11.2 | 29 36.4 | 85 30.4% |
| | | .0% .0% | 21.2% 42.9% | 34.1% 36.3% | 10.6% 24.3% | 34.1% 24.2% | |
| | | 3 | 5.3 | 4.7 | -2.2 | -7.4 | |
| | 2 | 1 | 16 | 36 | 23 | 57 | 133 |
| MODERATE | | .5 | 20.0 12.0% | 38.0 27.1% | 17.6 17.3% | 57.0 42.9% | 47.5% |
| | | 100.0% .5 | 38.1% -3.9 | 45.0% -2.0 | 62.2% 5.4 | 47.5% .0 | |
| | 3 | 0 | 2 | 3 | 3 | 7 | 15 |
| A LOT | - | .1 | 2.3 13.3% | 4.3 | 2.0 20.0% | 6.4 46.7% | 5.4% |
| | | .0% | 4.8% | 3.8% | 8.1% | 5.8% | |
| | = | 1 | 3 | -1.3 | 1.0 | .6 | |
| UNLIMITE | 4 | .0 | 1.4 | 2.6 | 0 1.2 | 5 3.9 | 9 3.2% |
| | | .0% | 22.2% 4.8% | 22.2% | .0% | 55.6% 4.2% | |
| | | 0° | .6 | 6 | -1.2 | 1.1 | |
| | Column | 1 | 42 | 80 | 37 | 120 | 280 |
| | Total | .4% | 15.0% | 28.6% | 13.2% | 42.9% | 100.0% |
| Chi-Square | D.F. | Sign | nificance | Mir | n E.F. | Cells | with E.F.< 5 |
| 16.05504 | 1 16 | | .4491 | | .032 | 12 OF | 25 (48.0%) |
| Sta | atistic | | Symme | etric | With GRO Depender | | With AGE Dependent |
| Lambda | | | | 00651 | .01 | 1361 | .00000 |

ACT1 MORE FESTIVALS LIKE THE POLKA FESTIVAL BY AGE GROUP

.01592 .01242 .01961

--- Page 1 of 5

| AGE-> | Count Exp Val Row Pct Col Pct Residual | 18-25 YR S | 26-35 YR S 2 | 36-45 YR S | 46-55 YR S 4 | OVER 55 5 | Row Total |
|-----------|--|---------------------------------|------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|-----------------------|
| ACII | 0 | 0 .0 .0% .0% | 0 .2 .0% .0% | 0 .3 .0% .0% | 0 .1 .0% .0% | 1 .4 100.0% 1.0% .6 | 1.4% |
| NO FESTI | 1 VALS | 1 .2 1.6% 100.0% .8 | 9.7 9.7% 15.4% -3.7 | 19 19.3 30.6% 24.4% 3 | 12 8.7 19.4% 34.3% 3.3 | 24 24.1 38.7% 24.7% 1 | 62 24.8% |
| A LITTIL | 2 FESTIVA | 0 .4 .0% .0% | 14 13.9 15.7% 35.9% | 24 27.8 27.0% 30.8% -3.8 | 11 12.5 12.4% 31.4% -1.5 | 40 34.5 44.9% 41.2% 5.5 | 89 35.6% |
| SOME FES | 3 TIVALS | 0 .2 .0% .0% | 11 8.9 19.3% 28.2% 2.1 | 22 17.8 38.6% 28.2% 4.2 | 5 8.0 8.8% 14.3% -3.0 | 19 22.1 33.3% 19.6% -3.1 | 57 22.8% |
| A LOT FE | 4 STIVALS | 0 .2 .0% .0% | 8 6.4 19.5% 20.5% 1.6 | 13 12.8 31.7% 16.7% | 7 5.7 17.1% 20.0% 1.3 | 13 15.9 31.7% 13.4% -2.9 | 41 16.4% |
| | Column Total | 1 .4% | 39 15.6% | 78 31.2% | 35 14.0% | 97 38.8% | 250 100.0% |
| Chi-Squar | e D.F. | Sign | nificance | Min | n E.F. | Cells v | with E.F.< 5 |
| 13.0898 | 3 16 | | .6662 | | .004 | 9 OF | 25 (36.0%) |
| St | atistic | | Symmo | etric | With ACT Depender | | With AGE Dependent |

Number of Missing Observations = 43

Lambda

ACT2 By AGE DOWN TOWN REVITALIZATION

AGE GROUP

--- Page 1 of 4 Count Exp Val Row Pct 18-25 YR 26-35 YR 36-45 YR 46-55 YR OVER 55 Col Pct AGE-> S s l s S Row Residual 2 3 4 Total ACT2 0 3 3 17 24 NO DOWN TOWN 4.0 7.5 3.5 8.9 9.7% . 1 REVITALIZATION .0% 4.2% 12.5% 12.5% 70.8% .0% 3.8% 2.4% 8.3% 18.5% -.1 -3.0 -4.5-.5 8.1 3 5.7 39 2 0 4 18 14 A LITTLE 6.4 15.7% . 2 12.3 14.5 .0% 10.3% 35.9% 7.7% 46.2% .0% 17.9% 9.8% 8.3% 19.6% -2.4 -.2 1.7 -2.7 3.5 3 8 9 1 19 14 51 7.4 8.4 18.9 SOME . 2 16.0 20.6% 15.7% 2.0% 37.3% 27.5% 17.6% 100.0% 19.5% 25.0% 24.4% 15.2% .8 3.0 -.4 1.6 -4.94 0 28 21 42 43 134 19.5 .5 42.1 A LOT 22.2 49.7 54.0% .0% 20.9% 31.3% 15.7% 32.1% .0% 68.3% 53.8% 58.3% 46.7% -.5 5.8 -.1 1.5 -6.7 Column 1 41 78 36 92 248 Total .48 16.5% 31.5% 14.5% 37.1% 100.0% Chi-Square Significance Min E.F. Cells with E.F. < 5 D.F. 24.30565 12 .0185 .097 6 OF 20 (30.0%) With ACT2 With AGE Dependent Statistic Symmetric Dependent

Lambda .02222 .00877 .03205

By AGE

ACT3 SUMMER FARMER MARKET AGE GROUP

--- Page 1 of 4

| AGE-> | Count Exp Val Row Pct Col Pct Residual | 26-35 YR S | 36-45 YR S | 46-55 YR S 4 | OVER 55 5 | Row Total |
|-----------------------|--|-------------------------------------|--------------------------------------|-------------------------------------|---------------------------------------|---------------|
| ACT3 NO SUMMER MARKET | 1 R FARMER | 0 1.4 .0% .0% | 0 2.8 .0% .0% -2.8 | 1 1.3 11.1% 2.7% 3 | 8 3.5 88.9% 7.7% 4.5 | 9 3.4% |
| A LITTLE | 2 | 5.1 12.5% 9.5% -1.1 | 7 9.8 21.9% 8.6% -2.8 | 6 4.5 18.8% 16.2% 1.5 | 15 12.6 46.9% 14.4% 2.4 | 32 12.1% |
| SOME | 3 | 10 10.8 14.7% 23.8% 8 | 18 20.9 26.5% 22.2% -2.9 | 7 9.5 10.3% 18.9% -2.5 | 33 26.8 48.5% 31.7% 6.2 | 68 25.8% |
| A LOT | 4 | 28 24.7 18.1% 66.7% 3.3 | 56 47.6 36.1% 69.1% 8.4 | 23 21.7 14.8% 62.2% 1.3 | 48 61.1 31.0% 46.2% -13.1 | 155 58.7% |
| | Column Total | 42 15.9% | 81 30.7% | 37 14.0% | 104 39.4% | 264 100.0% |

| Chi-Square | D.F. | Significance | Min E.F. | | with E.F.< 5 |
|------------|------|--------------|--------------------|------|-----------------------|
| 19.24083 | 9 | .0232 | 1.261 | 5 OF | 16 (31.3%) |
| Stati | stic | Symmetric | With AC Depende | | With AGE Dependent |
| Lambda | | .02974 | .0 | 0000 | .05000 |

ACT4 CITIZEN PARTICIPATIONS
By AGE AGE GROUP

--- Page 1 of 4

| AGE-> | Count Exp Val Row Pct Col Pct Residual | 26-35 YR S | 36-45 YR S | 46-55 YR S | OVER 55 | Row Total |
|---------------------------|--|-------------------------------------|-------------------------------------|-------------------------------------|--------------------------------------|---------------|
| ACT4 NO CITIZE PARTICIPA | | 3.3 21.1% 10.0% | 2 6.1 10.5% 2.7% -4.1 | 3 2.5 15.8% 9.7% .5 | 10 7.0 52.6% 11.6% 3.0 | 19 8.2% |
| A LITTLE | 2 | 5 9.5 9.1% 12.5% -4.5 | 17 17.8 30.9% 22.7% 8 | 7.3 10.9% 19.4% -1.3 | 27 20.4 49.1% 31.4% 6.6 | 55 23.7% |
| SOME | 3 | 15 13.8 18.8% 37.5% 1.2 | 31 25.9 38.8% 41.3% 5.1 | 12 10.7 15.0% 38.7% 1.3 | 22 29.7 27.5% 25.6% -7.7 | 80 34.5% |
| A LOT | 4 | 16 13.4 20.5% 40.0% 2.6 | 25 25.2 32.1% 33.3% 2 | 10 10.4 12.8% 32.3% 4 | 27 28.9 34.6% 31.4% -1.9 | 78 33.6% |
| | Column Total | 40 17.2% | 75 32.3% | 31 13.4% | 86 37.1% | 232 100.0% |

| Chi-Square | D.F. | Significance | Min E.F. | | with E.F.< 5 |
|------------|------|--------------|--------------------|------|-----------------------|
| 12.71700 | 9 | .1758 | 2.539 | 2 OF | 16 (12.5%) |
| Stati | stic | Symmetric | With AC Depende | | With AGE Dependent |
| Lambda | | .05034 | .0 | 3947 | .06164 |

ACT5 RESORTS/TOURIST RELATED ACTIVITIES By AGE AGE GROUP Crosstabulation:

--- Page 1 of 4

| AGE-> | Count Exp Val Row Pct Col Pct Residual | 26-35 YR S | 36-45 YR S | 46-55 YR S | OVER 55 | Row Total |
|-----------|--|-------------------------------------|--------------------------------------|------------------------------------|--------------------------------------|---------------|
| NO RESORT | | 8 10.5 12.3% 20.0% -2.5 | 14 20.8 21.5% 17.7% -6.8 | 12 9.2 18.5% 34.3% 2.8 | 31 24.5 47.7% 33.3% 6.5 | 65 26.3% |
| A LITTLE | 2 | 19 13.1 23.5% 47.5% 5.9 | 28 25.9 34.6% 35.4% 2.1 | 11 11.5 13.6% 31.4% 5 | 23 30.5 28.4% 24.7% -7.5 | 81 32.8% |
| SOME | 3 | 7 9.1 12.5% 17.5% -2.1 | 21 17.9 37.5% 26.6% 3.1 | 7.9 10.7% 17.1% -1.9 | 22 21.1 39.3% 23.7% | 56 22.7% |
| A LOT | 4 | 7.3 13.3% 15.0% -1.3 | 16 14.4 35.6% 20.3% 1.6 | 6.4 13.38 17.18 4 | 17 16.9 37.8% 18.3% | 45 18.2% |
| | Column Total | 40 16.2% | 79 32.0% | 35 14.2% | 93 37.7% | 247 100.0% |

| Chi-Square | D.F. | Significance | Min E.F. | Cells with | i E.F.< 5 |
|------------|------|--------------|------------------------|------------|--------------------|
| 12.02502 | 9 | .2119 | 6.377 | None | |
| Stati | stic | Symmetric | With ACT5 Dependent | | th AGE ependent |
| Lambda | | .04375 | .054 | 22 | .03247 |

ACT6 By AGE

AGRICULTURAL DEVELOPMENT AGE GROUP

--- Page 1 of 4

| AGE-> | Count Exp Val Row Pct Col Pct Residual | 26-35 YR S | 36-45 YR S | 46-55 YR S | OVER 55 | Row Total |
|--------------------------|--|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|---------------|
| ACT6 NO AGRICU DEVELOPME | | 3 4.7 10.3% 7.5% -1.7 | 7 9.4 24.1% 8.8% -2.4 | 3.9 13.8% 12.1% | 15 11.0 51.7% 16.0% 4.0 | 29 11.7% |
| A LITTLE | 2 | 15 10.4 23.4% 37.5% 4.6 | 21 20.7 32.8% 26.3% | 10 8.6 15.6% 30.3% 1.4 | 18 24.4 28.1% 19.1% -6.4 | 64 25.9% |
| SOME | 3 | 13 14.9 14.1% 32.5% -1.9 | 27 29.8 29.3% 33.8% -2.8 | 11 12.3 12.0% 33.3% -1.3 | 41 35.0 44.6% 43.6% 6.0 | 92 37.2% |
| A LOT | 4 | 9 10.0 14.5% 22.5% -1.0 | 25 20.1 40.3% 31.3% 4.9 | 8 8.3 12.9% 24.2% 3 | 20 23.6 32.3% 21.3% -3.6 | 62 25.1% |
| | Column Total | 40 16.2% | 80 32.4% | 33 13.4% | 94 38.1% | 247 100.0% |

| Chi-Square | D.F. | Significance | Min E.F. | Cells | with E.F.< 5 |
|------------|------|--------------|--------------------|-------|-----------------------|
| 10.16584 | 9 | .3372 | 3.874 | 2 OF | 16 (12.5%) |
| Stati | stic | Symmetric | With AC Depende | | With AGE Dependent |
| Lambda | | .03247 | .0 | 1290 | .05229 |

By AGE

ACT7 LIGH INDUSTRIES AGE GROUP

--- Page 1 of 4

| AGE-> | Count Exp Val Row Pct Col Pct Residual | 26-35 YR S | 36-45 YR S | 46-55 YR S | OVER 55 | Row Total |
|---------------------|--|--------------------------------------|--------------------------------------|------------------------------------|--------------------------------------|---------------|
| NO LIGH INDUSTRI | 1 ES | 12 13.3 14.5% 30.0% -1.3 | 32 26.2 38.6% 40.5% 5.8 | 8 11.6 9.6% 22.9% -3.6 | 31 31.9 37.3% 32.3% 9 | 83 33.2% |
| A LITTLE | 2 | 9 10.6 13.6% 22.5% -1.6 | 22 20.9 33.3% 27.8% 1.1 | 13 9.2 19.7% 37.1% 3.8 | 22 25.3 33.3% 22.9% -3.3 | 66 26.4% |
| SOME | 3 | 9 6.7 21.4% 22.5% 2.3 | 11 13.3 26.2% 13.9% -2.3 | 5.9 9.5% 11.4% -1.9 | 18 16.1 42.9% 18.8% 1.9 | 42 16.8% |
| A LOT | 4 | 10 9.4 16.9% 25.0% | 14 18.6 23.7% 17.7% -4.6 | 10 8.3 16.9% 28.6% 1.7 | 25 22.7 42.4% 26.0% 2.3 | 59 23.6% |
| | Column Total | 40 16.0% | 79 31.6% | 35 14.0% | 96 38.4% | 250 100.0% |

| Chi-Square | D.F. | Significance | Min E.F. | | vith E.F.< 5 |
|------------|-------|--------------|------------------------|------|-----------------------|
| 8.58961 | 9 | .4760 | 5.880 | None | |
| Stati | istic | Symmetric | With ACT7 Dependent | | With AGE Dependent |
| Lambda | | .01869 | .029 | 94 | .00649 |

By AGE

ACT8 HEAVY INDUSTRIES AGE GROUP

--- Page 1 of 4

| AGE-> | Count Exp Val Row Pct Col Pct Residual | 26-35 YR S | 36-45 YR S | 46-55 YR S | OVER 55 | Row Total |
|-------------------------|--|--------------------------------------|-------------------------------------|---------------------------------|-----------------------------------|-----------------------|
| ACT8 NO HEAVY INDUSTRIE | 1 ES | 31 33.0 15.7% 79.5% -2.0 | 68 66.0 34.3% 87.2% 2.0 | 28 27.9 14.1% 84.8% | 71 71.1 35.9% 84.5% 1 | 198 8 4. 6% |
| A LITTLE | 2 | 3.2 21.1% 10.3% .8 | 6.3 21.1% 5.1% -2.3 | 3 2.7 15.8% 9.1% .3 | 8 6.8 42.1% 9.5% 1.2 | 19 8.1% |
| SOME | 3 | 3 1.3 37.5% 7.7% 1.7 | 1 2.7 12.5% 1.3% -1.7 | 2 1.1 25.0% 6.1% .9 | 2 2.9 25.0% 2.4% 9 | 8 3.4% |
| A LOT | 4 | 1 1.5 11.1% 2.6% 5 | 3.0 55.6% 6.4% 2.0 | 0 1.3 .0% .0% | 3 3.2 33.3% 3.6% 2 | 9 3.8% |
| | Column Total | 39 16.7% | 78 33.3% | 33 14.1% | 84 35.9% | 23 4 100.0% |

| Chi-Square | D.F. | Significance | Min E.F. | Cells | with E.F.< 5 |
|---------------|-----------|---------------|----------|-------|--------------|
| 8.35240 | 9 | .4991 | 1.128 | 10 OF | 16 (62.5%) |
| | | | With A | ACT8 | With AGE |
| Stati | stic | Symmetric | Depen | dent | Dependent - |
| Lambda | | .01613 | | 00000 | .02000 |
| Number of Mis | sing Obse | rvations = 59 | | | |

| Crosstabula | | ACT9 y AGE | OPPORTI AGE GRO | JNITY FOR | SMALL BUS | SINESS | |
|-------------|--------------------|---------------|--------------------|---------------|----------------------|-------------|-----------------------|
| | ь. | y AGE | AGE GR | JUP | | | - Page 1 of 4 |
| | Count | | | | | | • |
| | Exp Val Row Pct | 26-35 YR | 36-45 VR | 46-55 YR | OVER 55 | 1 | |
| AGE-> | Col Pct | S | S | S | OVER 33 | Row | |
| » cmo | Residual | 2 | 3 | 4 | 5 | Total | |
| ACT9 | 1 | 1 | 5 | 3 | 10 | 19 | |
| NO SMALL | | 3.0 | 6.2 | 2.7 | 7.1 | 7.9% | |
| BESINESSE | ES | 5.3% 2.6% | 26.3% 6.4% | 15.8% 8.8% | 52.6% 11.2% | | |
| | | -2.0 | -1.2 | .3 | 2.9 | | |
| | 2 | | 1 2 | 8 | 1 5 | 42 | |
| A LITTLE | 2 | 6.7 | 13 13.7 | 6.0 | 15 15.6 | 17.6% | |
| | | 14.3% | 31.0% | 19.0% | 35.7% | | |
| | | 15.8% | 16.7% 7 | 23.5% 2.0 | 16.9% 6 | | |
| | - | | | | | | |
| SOME | 3 | 11 10.5 | 21 21.5 | 9.4 | 26 24.6 | 66 27.6% | |
| SOME | | 16.7% | 31.8% | 12.1% | 39.4% | 27.08 | |
| | | 28.9% | 26.9% | 23.5% | 29.2% | | |
| | - | .5 | 5 | -1.4 | 1.4 | | |
| | 4 | 20 | 39 | 15 | 38 | 112 | |
| A LOT | | 17.8 17.9% | 36.6 34.8% | 15.9 13.4% | 41.7 33.9% | 46.9% | |
| | | 52.6% | 50.0% | 44.1% | 42.7% | | |
| | | 2.2 | 2.4 | 9 | -3.7 | | |
| | Column | 38 | 78 | 34 | 89 | 239 | |
| | Total | 15.9% | 32.6% | 14.2% | 37.2% | 100.0% | |
| | | | | | | | |
| Chi-Square | D.F. | Sign | nificance | Min | n E.F. | Cells v | with E.F.< 5 |
| | | | | | | | ***** |
| 4.78778 | 3 9 | | .8524 | | 2.703 | 2 OF | 16 (12.5%) |
| Sta | atistic | | Symmo | etric | With ACT Depender | | With AGE Dependent |
| Lambda | | | . (| 00361 | .00 | 0000 | .00667 |
| | | | | | | | |

ACT10 SHOPPING By AGE AGE GROUP

--- Page 1 of 4

| AGE-> | Count Exp Val Row Pct Col Pct Residual | S | 36-45 YR S | 46-55 YR S | OVER 55 | Row Total |
|----------|--|--------------------------------------|--------------------------------------|-------------------------------------|--------------------------------------|--------------------|
| NO SHOPP | 1 ING | 1 5.5 2.9% 2.6% -4.5 | 12 11.0 35.3% 15.4% 1.0 | 4.9 11.8% 11.4% 9 | 17 12.6 50.0% 19.1% 4.4 | 34 14.1% |
| A LITTLE | 2 | 11 7.8 22.9% 28.2% 3.2 | 18 15.5 37.5% 23.1% 2.5 | 7 7.0 14.6% 20.0% | 12 17.7 25.0% 13.5% -5.7 | 48 19.9% |
| SOME SHO | 3 PPING | 16 9.1 28.6% 41.0% 6.9 | 19 18.1 33.9% 24.4% | 3 8.1 5.4% 8.6% -5.1 | 18 20.7 32.1% 20.2% -2.7 | 56 23.2% |
| A LOT S | 4 HOPPING | 11 16.7 10.7% 28.2% -5.7 | 29 33.3 28.2% 37.2% -4.3 | 21 15.0 20.4% 60.0% 6.0 | 42 38.0 40.8% 47.2% 4.0 | 103 42.7% |
| | Column Total | 39 16.2% | 78 32.4% | 35 14.5% | 89 36.9% | 7 241 100.0% |

| Chi-Square | D.F. | Significance | Min E.F. | Cells | with E.F.< 5 |
|-------------------------|------------|--------------------|-------------------|-------|-----------------------|
| 23.39570 | 9 | .0054 | 4.938 | 1 OF | 16 (6.3%) |
| Stati | stic | Symmetr | With AGic Depende | | With AGE Dependent |
| Lambda Number of Mis | ssing Obse | .041 rvations = 52 | 38 .0 | 03623 | .04605 |

Crosstabulation: ACT11 RESTAURATS
By AGE AGE GROUP

--- Page 1 of 4

| AGE-> | Count Exp Val Row Pct Col Pct Residual | 26-35 YR S | 36-45 YR S | 46-55 YR S | OVER 55 | Ro w Total |
|-----------|--|--------------------------------------|--------------------------------------|-------------------------------------|--------------------------------------|----------------------|
| NO RESTAU | 1 JRATS | 0 5.5 .0% .0% | 10 11.1 29.4% 12.8% -1.1 | 5.1 11.8% 11.1% -1.1 | 20 12.2 58.8% 23.3% 7.8 | 34 14.2% |
| A LITTLE | 2 | 12 8.0 24.5% 30.8% 4.0 | 19 16.0 38.8% 24.4% 3.0 | 7.4 10.2% 13.9% -2.4 | 13 17.6 26.5% 15.1% -4.6 | 49 20.5% |
| SOME RES | 3 FAURATS | 15 11.1 22.1% 38.5% 3.9 | 23 22.2 33.8% 29.5% .8 | 11 10.2 16.2% 30.6% | 19 24.5 27.9% 22.1% -5.5 | 68 28.5% |
| A LOT RES | 4 STAURATS | 12 14.4 13.6% 30.8% -2.4 | 26 28.7 29.5% 33.3% -2.7 | 16 13.3 18.2% 44.4% 2.7 | 34 31.7 38.6% 39.5% 2.3 | 88 36.8% |
| | Column Total | 39 16.3% | 78 32.6% | 36 15.1% | 86 36.0% | 239 100.0% |

| Chi-Square | • | | Min E.F. | Cells with E.F.< 5 | |
|------------|------|-----------|----------------------|--------------------|--|
| 19.45388 | 9 | .0216 | 5.121 | None | |
| Stati | stic | Symmetric | With ACT Dependen | nt Dependent | |
| Lambda | | .04276 | .01 | .06536 | |

ACT12 By AGE MOTEL AGE GROUP

---- Page 1 of 4

| AGE-> | Count Exp Val Row Pct Col Pct Residual | 26-35 YR S | 36-45 YR S | 46-55 YR S | OVER 55 | Row Total |
|-------------------|--|-------------------------------------|--------------------------------------|-------------------------------------|--------------------------------------|---------------|
| ACT12 NO MOTEL | 1 | 13 13.4 16.5% 33.3% 4 | 24 26.8 30.4% 30.8% -2.8 | 14 11.7 17.7% 41.2% 2.3 | 28 27.1 35.4% 35.4% | 79 34.3% |
| A LITTLE | MOTEL 2 | 16 12.0 22.5% 41.0% 4.0 | 21 24.1 29.6% 26.9% -3.1 | 13 10.5 18.3% 38.2% 2.5 | 21 24.4 29.6% 26.6% -3.4 | 71 30.9% |
| SOME MOTE | 3 | 5 6.6 12.8% 12.8% -1.6 | 18 13.2 46.2% 23.1% 4.8 | 3 5.8 7.7% 8.8% -2.8 | 13 13.4 33.3% 16.5% | 39 17.0% |
| A LOT MOT | 4 TEL | 5 7.0 12.2% 12.8% -2.0 | 15 13.9 36.6% 19.2% 1.1 | 4 6.1 9.8% 11.8% -2.1 | 17 14.1 41.5% 21.5% 2.9 | 41 17.8% |
| | Column Total | 39 17.0% | 78 33.9% | 34 14.8% | 79 34.3% | 230 100.0% |

| Chi-Square | D.F. | Significance | Min E.F. | | with E.F.< 5 |
|------------|------|--------------|----------|------|-----------------------|
| 8.95049 | 9 | .4419 | 5.765 | None | |
| Stati | stic | Symmetric | With AC | - | With AGE Dependent |
| Lambda | | .02649 | .0 | 1987 | .03311 |

ACT13 RESIDENTIAL DEVELOPMENT By AGE AGE GROUP

--- Page 1 of 4

| | | | | | | - ·· J · · - · - |
|------------------------|--|-------------------------------------|--------------------------------------|-----------------------------------|--------------------------------------|-------------------------|
| AGE-> | Count Exp Val Row Pct Col Pct Residual | 26-35 YR S | 36-45 YR S | 46-55 YR S 4 | OVER 55 | Row Total |
| NO RESIDI DEVELOPMI | | 6 6.9 14.6% 15.4% 9 | 12 13.6 29.3% 15.6% -1.6 | 4 5.8 9.8% 12.1% -1.8 | 19 14.7 46.3% 22.9% 4.3 | 41 17.7% |
| A LITTLE | 2 | 22 15.0 24.7% 56.4% 7.0 | 29 29.5 32.6% 37.7% 5 | 12 12.7 13.5% 36.4% 7 | 26 31.8 29.2% 31.3% -5.8 | 89 38.4% |
| SOME | 3 | 6 9.4 10.7% 15.4% -3.4 | 24 18.6 42.9% 31.2% 5.4 | 8 8.0 14.3% 24.2% | 18 20.0 32.1% 21.7% -2.0 | 56 24.1% |
| A LOT | 4 | 5 7.7 10.9% 12.8% -2.7 | 12 15.3 26.1% 15.6% -3.3 | 9 6.5 19.6% 27.3% 2.5 | 20 16.5 43.5% 24.1% 3.5 | 46 19.8% |
| | Column Total | 39 16.8% | 77 33.2% | 33 14.2% | 83 35.8% | 232 100.0% |
| Chi-Square | e D.F. | Sign | nificance | Min | n E.F. | Cells with E.F.< 5 |

| Chi-Square | D.F. | Significance | Min E.F. | Cells with E.F. < 5 |
|------------|------|--------------|----------|-----------------------|
| | | | | |
| 12.95924 | 9 | .1645 | 5.832 | None |

With ACT13 With AGE
Dependent Dependent Symmetric Dependent Statistic .03082 Lambda .00000 .06040

Crosstabulation: ACT14 WATER ACCESS IMPROVEMENT Bv AGE AGE GROUP --- Page 1 of 4 Count Exp Val Row Pct 26-35 YR 36-45 YR 46-55 YR OVER 55 AGE-> Col Pct S S S Row Residual 3 4 5 2 Total ACT14 7 6 40 6 21 NO WATER ACCESS 17.1% 6.7 13.3 5.8 14.2 IMPROVEMENT 15.0% 17.5% 15.0% 52.5% 25.3% 9.0% 15.4% 17.6% -.7 -6.3 . 2 6.8 2 8 20 8 25 61 8.9 A LITTLE 10.2 20.3 21.6 26.1% 13.1% 41.0% 13.1% 32.8% 20.5% 25.6% 23.5% 30.1% -2.2 -.3 -.9 3.4 3 11 21 7 20 59 SOME 9.8 19.7 8.6 20.9 25.2% 35.6% 18.6% 11.9% 33.9% 28.2% 26.9% 20.6% 24.1% -.9 1.2 1.3 -1.6 4 14 30 13 17 74 26.2 A LOT 12.3 24.7 10.8 31.6% 18.9% 40.5% 17.6% 23.0% 35.9% 38.5% 38.2% 20.5% 1.7 5.3 -9.2 2.2 Column 39 78 34 83 234 Total 16.7% 14.5% 35.5% 100.0% 33.3% Chi-Square D.F. Significance Min E.F. Cells with E.F. < 5 ____ _____ _____ 13.09074 9 .1585 5.812 None With ACT14 With AGE Dependent Statistic Symmetric Dependent

.07074

.05000

.09272

Number of Missing Observations = 59

Lambda

ACT15 PARK/RECREATION By AGE GROUP

--- Page 1 of 4

| AGE-> | Count Exp Val Row Pct Col Pct Residual | 26-35 YR S | 36-45 YR S | 46-55 YR S | OVER 55 | Row Total |
|-----------|--|-------------------------------------|--------------------------------------|-------------------------------------|-------------------------------------|---------------|
| NO PARK/I | | 3 5.3 9.4% 7.9% -2.3 | 8 10.8 25.0% 10.3% -2.8 | 6 4.7 18.8% 17.6% 1.3 | 15 11.2 46.9% 18.5% 3.8 | 32 13.9% |
| A LITTLE | 2 | 11 11.8 15.3% 28.9% 8 | 22 24.3 30.6% 28.2% -2.3 | 12 10.6 16.7% 35.3% 1.4 | 27 25.2 37.5% 33.3% 1.8 | 72 31.2% |
| SOME | 3 | 8 11.7 11.3% 21.1% -3.7 | 24 24.0 33.8% 30.8% | 7 10.5 9.9% 20.6% -3.5 | 32 24.9 45.1% 39.5% 7.1 | 71 30.7% |
| A LOT | 4 | 16 9.2 28.6% 42.1% 6.8 | 24 18.9 42.9% 30.8% 5.1 | 9 8.2 16.1% 26.5% | 7 19.6 12.5% 8.6% -12.6 | 56 24.2% |
| | Column Total | 38 16.5% | 78 33.8% | 34 14.7% | 81 35.1% | 231 100.0% |

| Chi-Square | D.F. | Significance | Min E.F. | | with E.F.< 5 |
|------------|------|--------------|----------|------|--------------|
| 22.81465 | 9 | .0066 | 4.710 | 1 OF | 16 (6.3%) |

| | tatistic | Symmetric | With ACT15 Dependent | With AGE Dependent |
|--------|----------|-----------|-------------------------|-----------------------|
| Lambda | | .09385 | .07547 | .11333 |

Crosstabulation: ACT16 SUBSIDIZED HOUSING By AGE AGE GROUP

--- Page 1 of 4

| AGE-> | Count Exp Val Row Pct Col Pct Residual | S | 36-45 YR S | 46-55 YR S | OVER 55 | Row Total |
|---------------------|--|------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------|
| NO SUBSII HOUSES | 1 DIZED HO | 19 19.7 16.0% 50.0% 7 | 48 40.0 40.3% 62.3% 8.0 | 14 16.6 11.8% 43.8% -2.6 | 38 42.6 31.9% 46.3% -4.6 | 119 52.0% |
| A LITTLE | 2 | 12 9.5 21.1% 31.6% 2.5 | 15 19.2 26.3% 19.5% -4.2 | 10 8.0 17.5% 31.3% 2.0 | 20 20.4 35.1% 24.4% 4 | 57 24.9% |
| SOME | 3 | 5.6 17.6% 15.8% | 8 11.4 23.5% 10.4% -3.4 | 5 4.8 14.7% 15.6% | 15 12.2 44.1% 18.3% 2.8 | 34 14.8% |
| A LOT | 4 | 1 3.2 5.3% 2.6% -2.2 | 6 6.4 31.6% 7.8% 4 | 3 2.7 15.8% 9.4% .3 | 9 6.8 47.4% 11.0% 2.2 | 19 8.3% |
| | Column Total | 38 16.6% | 77 33.6% | 32 14.0% | 82 35.8% | 229 100.0% |
| Chi-Squar | e D.F. | Sig | nificance | Miı | n E.F. | Cells with E.F.< 5 |

| Chi-Square | D.F. | Significance | Min E.F. | Cells with E.F.< 5 | |
|------------|----------------|--------------|---------------------------------|--------------------|-----------------------|
| 8.62319 | .62319 9 .4728 | | 2.655 3 OF With ACT16 Dependent | | 16 (18.8%) |
| Statistic | | Symmetric | | | With AGE Dependent |
| Lambda | | .03891 | .0 | 0000 | .06803 |

By AGE

ACT17 SENIOR CITIZEN CENTER
y AGE GROUP

--- Page 1 of 4

| AGE-> | Count Exp Val Row Pct Col Pct Residual | 26-35 YR S | 36-45 YR S | 46-55 YR S | OVER 55 | Row Total |
|----------------|--|-------------------------------------|--------------------------------------|-------------------------------------|--------------------------------------|---------------|
| ACT17 NO SENIO | 1 R CENTER | 7 8.2 14.3% 17.9% -1.2 | 14 16.2 28.6% 18.2% -2.2 | 8 6.9 16.3% 24.2% 1.1 | 20 17.7 40.8% 23.8% 2.3 | 49 21.0% |
| A LITTLE | 2 | 13 12.1 18.1% 33.3% | 30 23.8 41.7% 39.0% 6.2 | 8 10.2 11.1% 24.2% -2.2 | 21 26.0 29.2% 25.0% -5.0 | 72 30.9% |
| SOME | 3 | 17 11.5 24.6% 43.6% 5.5 | 17 22.8 24.6% 22.1% -5.8 | 14 9.8 20.3% 42.4% 4.2 | 21 24.9 30.4% 25.0% -3.9 | 69 29.6% |
| A LOT | 4 | 2 7.2 4.7% 5.1% -5.2 | 16 14.2 37.2% 20.8% 1.8 | 3 6.1 7.0% 9.1% -3.1 | 22 15.5 51.2% 26.2% 6.5 | 43 18.5% |
| | Column Total | 39 16.7% | 77 33.0% | 33 14.2% | 84 36.1% | 233 100.0% |

| Chi-Square | D.F. | Significance | Min E.F. | Cells with E.F.< 5 |
|------------|------|--------------|----------|--------------------|
| 18.80878 | 9 | .0269 | 6.090 | None |

With AGE With ACT17 Statistic Symmetric Dependent Dependent Lambda .06452 .06832 .06040

Crosstabulation: ACT18 YOUTH ACTIVITY CENTER By AGE AGE GROUP

--- Page 1 of 4

| AGE-> | Count Exp Val Row Pct Col Pct Residual | 26-35 YR S | 36-45 YR S | 46-55 YR S | OVER 55 | Row Total |
|----------------|--|--------------------------------------|-------------------------------------|-------------------------------------|--------------------------------------|---------------|
| ACT18 NO YOUTH | 1 CENTERT | 6 6.3 16.2% 15.4% 3 | 5 12.4 13.5% 6.5% -7.4 | 6 5.3 16.2% 18.2% | 20 12.9 54.1% 25.0% 7.1 | 37 16.2% |
| A LITTLE | 2 | 11 9.9 19.0% 28.2% 1.1 | 22 19.5 37.9% 28.6% 2.5 | 9 8.4 15.5% 27.3% | 16 20.3 27.6% 20.0% -4.3 | 58 25.3% |
| SOME | 3 | 12 13.1 15.6% 30.8% -1.1 | 29 25.9 37.7% 37.7% 3.1 | 14 11.1 18.2% 42.4% 2.9 | 22 26.9 28.6% 27.5% -4.9 | 77 33.6% |
| A LOT | 4 | 10 9.7 17.5% 25.6% | 21 19.2 36.8% 27.3% 1.8 | 8.2 7.0% 12.1% -4.2 | 22 19.9 38.6% 27.5% 2.1 | 57 24.9% |
| | Column Total | 39 17.0% | 77 33.6% | 33 14.4% | 80 34.9% | 229 100.0% |

| Chi-Square | D.F. | Significance | Min E.F. | Cells with E.F.< 5 |
|------------|------|--------------|----------|--------------------|
| 14.49892 | 9 | .1057 | 5.332 | None |

With ACT18 With AGE Dependent Dependent Statistic Symmetric Lambda .04319 .00000 .08725

4

Crosstabulation: ACT19 HISTORIC ACTIVITY DEVELOPMENT By AGE GROUP

| By AGE | AGE GROUP | Page 1 of | £ |
|--------|-----------|-----------|---|
| | | | |

| AGE-> | Count Exp Val Row Pct Col Pct Residual | 26-35 YR S | 36-45 YR S | 46-55 YR S | OVER 55 | Row Total |
|------------------------|--|-------------------------------------|--------------------------------------|-------------------------------------|--------------------------------------|---------------|
| NO HISTON ACTIVITIN | | 12 8.3 24.5% 30.8% 3.7 | 10 16.3 20.4% 13.2% -6.3 | 10 7.1 20.4% 30.3% 2.9 | 17 17.3 34.7% 21.0% 3 | 49 21.4% |
| A LITTLE | 2 | 15 12.8 20.0% 38.5% 2.2 | 24 24.9 32.0% 31.6% 9 | 13 10.8 17.3% 39.4% 2.2 | 23 26.5 30.7% 28.4% -3.5 | 75 32.8% |
| SOME | 3 | 7 9.4 12.7% 17.9% -2.4 | 24 18.3 43.6% 31.6% 5.7 | 7.9 7.3% 12.1% -3.9 | 20 19.5 36.4% 24.7% | 55 24.0% |
| A LOT | 4 | 5 8.5 10.0% 12.8% -3.5 | 18 16.6 36.0% 23.7% 1.4 | 7.2 12.0% 18.2% -1.2 | 21 17.7 42.0% 25.9% 3.3 | 50 21.8% |
| | Column Total | 39 17.0% | 76 33.2% | 33 14.4% | 81 35.4% | 229 100.0% |

| Chi-Square | D.F. | Significance | Min E.F. | Cells with E.F. < 5 |
|------------|------|--------------|----------|---------------------|
| 13.33600 | 9 | .1480 | 7.061 | None |

| Statistic | Symmetric | With ACT19 Dependent | With AGE Dependent |
|-----------|-----------|-------------------------|-----------------------|
| Lambda | .01656 | .00000 | .03378 |

ACT20 NATURAL & SCENIC AREA BY AGE AGE GROUP

--- Page 1 of 4

| AGE-> | Count Exp Val Row Pct Col Pct Residual | 26-35 YR S | 36-45 YR S | 46-55 YR S | OVER 55 | Row Total |
|------------------------|--|--------------------------------------|-------------------------------------|--------------------------------------|--------------------------------------|--------------------|
| NO NATURA SCENIC AL | | 3 4.2 12.0% 7.5% -1.2 | 5 8.2 20.0% 6.4% -3.2 | 5 3.5 20.0% 15.2% 1.5 | 12 9.1 48.0% 14.0% 2.9 | 25 10.5% |
| A LITTLE | 2 | 8 5.7 23.5% 20.0% 2.3 | 7 11.2 20.6% 9.0% -4.2 | 4 4.7 11.8% 12.1% 7 | 15 12.3 44.1% 17.4% 2.7 | 34 14.3% |
| SOME | 3 | 13 13.0 16.9% 32.5% | 27 25.3 35.1% 34.6% 1.7 | 11 10.7 14.3% 33.3% | 26 27.9 33.8% 30.2% -1.9 | 77 32.5% |
| A LOT | 4 | 16 17.0 15.8% 40.0% -1.0 | 39 33.2 38.6% 50.0% 5.8 | 13 14.1 12.9% 39.4% -1.1 | 33 36.6 32.7% 38.4% -3.6 | 101 42.6% |
| | Column Total | 40 16.9% | 78 32.9% | 33 13.9% | 86 36.3% | 237 100.0% |
| Chi-Square | e D.F. | Sign | nificance | Min | n E.F. | Cells with E.F.< 5 |

| Chi-Square | D.F. | Significance | Min E.F. | Cells | with E.F. < 5 |
|------------|------|--------------|----------|-------|---------------|
| | | | | | |
| 8.13195 | 9 | .5209 | 3.481 | 3 OF | 16 (18.8%) |

With ACT20 With AGE Dependent Dependent Statistic Symmetric Dependent

Lambda .02439

.00000

.04636

ACT21 HEALTH SERVICE y AGE AGE GROUP

By AGE

| | B. | y AGE | AGE GRO | OUP | | | Page 1 of | 4 |
|------------------------|--|-------------------------------------|--------------------------------------|-------------------------------------|--------------------------------------|---------------|-----------------------|---|
| AGE-> | Count Exp Val Row Pct Col Pct Residual | 26-35 YR S | 36-45 YR S | 46-55 YR S 4 | OVER 55 | Row Total | | |
| ACT21 NO HEALTH VICE | 1 H SER- | 5 4.9 17.2% 12.8% | 11 9.5 37.9% 14.7% 1.5 | 4 4.2 13.8% 12.1% 2 | 9 10.5 31.0% 10.8% -1.5 | 29 12.6% | | |
| A LITTLE | 2 | 13 8.5 26.0% 33.3% 4.5 | 19 16.3 38.0% 25.3% 2.7 | 7 7.2 14.0% 21.2% 2 | 11 18.0 22.0% 13.3% -7.0 | 50 21.7% | | |
| SOME | 3 | 8 11.7 11.6% 20.5% -3.7 | 27 22.5 39.1% 36.0% 4.5 | 9.9 13.0% 27.3% 9 | 25 24.9 36.2% 30.1% | 69 30.0% | | |
| A LOT | 4 | 13 13.9 15.9% 33.3% 9 | 18 26.7 22.0% 24.0% -8.7 | 13 11.8 15.9% 39.4% 1.2 | 38 29.6 46.3% 45.8% 8.4 | 82 35.7% | | |
| | Column Total | 39 17.0% | 75 32.6% | 33 14.3% | 83 36.1% | 230 100.0% | | |
| Chi-Square | D.F. | Sign | nificance | Min | n E.F. | Cells w | with E.F. < 5 | |
| 13.6620 | L 9 | | .1349 | | 4.161 | 2 OF | 16 (12.5% |) |
| Sta | atistic | | Symme | etric | With ACT Depender | | With AGE Dependent | |
| Lambda | | | . (| 07119 | .06 | 6081 | .0816 | 3 |

ACT22 OTHERS By AGE AGE GROUP

--- Page 1 of 4

| AGE-> | Count Exp Val Row Pct Col Pct Residual | 26-35 YR S | 36-45 YR S | 46-55 YR S 4 | OVER 55 | Row Total | |
|------------|--|------------------------|------------------------------------|--------------------------------|----------------------------|--------------|--------------|
| | 1 | 0 | 2 | 0 | 1 | 3 | |
| NO OTHERS | - | .5 .0% .0% 5 | 1.1 66.7% 25.0% .9 | .3 .0% .0% 3 | 1.1 33.3% 12.5% 1 | 13.6% | |
| A LITTLE | 2 | 0.2 | .4 | 0 .1 | 0 .4 | 1 4.5% | |
| A LITTLE | | .2 .0% .0% | 100.0% 12.5% .6 | .08 .08 1 | .0% .0% 4 | 4.38 | |
| COME | 3 | 0 | 0 | 1 | 0 | 1 50 | |
| SOME | | .2 | .4 .0% | .1 100.0% | .4 .0% | 4.5% | |
| | | .0% 2 | .0% 4 | 50.0% .9 | .0% 4 | | |
| A LOT | 4 | 3.1 23.5% 100.0% | 5 6.2 29.4% 62.5% -1.2 | 1 1.5 5.9% 50.0% 5 | 7 6.2 41.2% 87.5% | 17 77.3% | |
| | Column Total | ′ 4 18.2% | 8 36.4% | 2 9.1% | 8 36.4% | 22 100.0% | |
| | | | | 2121 | | 20000 | |
| Chi-Square | D.F. | Sign | nificance | Mir | n E.F. | Cells v | with E.F.< 5 |
| 14.12745 | 5 9 | | .1179 | | .091 | 14 OF | 16 (87.5%) |
| Statist | ic | | Symmetric | Der | endent | Der | endent |
| Lambda | | | .1 | 5789 | .00 | 0000 | .21429 |
| N | | | | | With ACT | 22 | With AGE |
| umber | of Missin | ng Observa | ations = | 271 | | | |

This procedure was completed at 5:55:19

CEDAR COMMUNITY SURVEY

| 1. | What do you feel are the four most important problems facing Cedar? (Please rank the following responses from 1 to 4. For example: 1=mostimportant problem, 4=leastimportant problem). |
|---------------------------|--|
| | not enough affordable housing |
| | availability of job opportunities |
| | lack of parks and recreational facilities |
| | lack of public services |
| | no vitality |
| | too few senior citizen activities |
| | not enough youth activities |
| | quality of education availablelack of shopping opportunities |
| | too few community-wide activities |
| | taxes |
| | traffic |
| | 3 lack of medical services other - please specify: 1900 station 2 repair videration |
| 2. | Do you think that Cedar should have any multiple-family housing (such as apartment buildings or duplexes)? |
| | yes _Xnonot sure |
| 3. | Do you think Cedar should have low cost housing? |
| | yes X_nonot sure |
| 4. | What type of community do you think Cedar is? (check up to three responses) |
| | _ agricultural community |
| $\overline{\mathfrak{I}}$ | residential community retirement community |
| | commercially-based community |
| | light industry community heavy industry community |
| | _ other - please specify: |
| | |
| 5. | What type of community would you like Cedar to be? (check up to three responses) |
| | agricultural community |
| | commercially-based community |
| | community with some light-based industry |
| | community surrounded by heavy industry |
| | |
| | residential community |
| | /_ retirement community I would like Cedar to stay the way it is |
| | other - please specify: |

| none | _ a lot a little |
|--|---|
| unlimited growth | <u>X</u> a moderate amount |
| Please list the three things y | you like most about living in Cedar: |
| 1 14 1 1 180 180 18 18 18 | and Co |
| 1. <u>1. 16. 16. 16. 16. 16. 16. 16. 16. 16. 1</u> | - recal |
| 3 | in the contract of the |
| Please list the three things y | you like least about living in Cedar: |
| 1. 4 Compty 200 c 2. 11. 5 distributed to 3. 212 march 400 c | the poto and he summer front to appear to the sum of the con |
| n what area (Cedar, Travers | se City, etc.) do you most often shop for the following things? |
| <u>ITEM</u> | LOCATION |
| Groceries | T (). |
| Auto Services | <u></u> |
| Entertainment | -7 ' |
| Financial Services | |
| Household Items | |
| Improvement materials | |
| Gifts Medical Services | |
| Which items/services that your control of the contr | · |
| | |
| 1. <u>Augustinas (n. 1</u> . | |
| 1 | |
| 2a | |
| 2a | |
| 2a 3 | o see the following things in Cedar? Please rate how much you |
| 2 3 How much would you like to like to see each by using the | o see the following things in Cedar? Please rate how much you |
| 2 3 How much would you like to like to see each by using the | o see the following things in Cedar? Please rate how much you e following scale: |
| 2. How much would you like to like to see each by using the 1 = notat all 2 = a little | o see the following things in Cedar? Please rate how much you e following scale: 3=somewhat 4=alot RATING |
| 2. How much would you like to like to see each by using the 1 = notat all 2 = a little ACTIVITY More festivals like the Polka Downtown revitalization | o see the following things in Cedar? Please rate how much you e following scale: 3=somewhat 4=alot RATING |
| How much would you like to like to see each by using the second s | o see the following things in Cedar? Please rate how much you e following scale: 3=somewhat 4=alot RATING |
| How much would you like to like to see each by using the selection of the | o see the following things in Cedar? Please rate how much you e following scale: 3=somewhat 4=alot RATING |
| How much would you like to like to see each by using the selection of the | o see the following things in Cedar? Please rate how much you e following scale: 3=somewhat 4=alot RATING |
| How much would you like to like to see each by using the second s | o see the following things in Cedar? Please rate how much you e following scale: 3=somewhat 4=alot RATING Festival craft market |

| | | Heavy industry More opportunities for small business ownership | | | |
|------------|------|---|---------------|----------------------|--|
| | | Commercial development | | | |
| | | Shopping Restaurants Motels More residential development Water access improvements Park improvements/recreation opportunities Subsidized housing Senior citizen center Youth activity center Historic activities/developments Natural and scenic areas More health services | | | |
| | | Motels / | | | |
| | | More residential development | | | |
| | | Water access improvements | | | |
| | | Park improvements/recreation opportunities 2 | | | |
| | | Subsidized housing/_ | | | |
| | | Senior citizen center | | | |
| | | Youth activity center 4 | | | |
| | | Historic activities/developments | | | |
| | | Natural and scenic areas | | | |
| | | More health services | | | |
| .** | | Other - please specify | | | |
| | 12. | Would you be willing to volunteer for the following: | | | |
| | 12. | Would you be willing to voidificer for the following. | YES | NO | |
| | | To be a committee member responsible for the above plans? | 120 | <u>×</u> | |
| rçsi | | Figure 1 | | | |
| | | To be on a work crew for park improvements? | | $\underline{\times}$ | |
| | | | | ^ / | |
| | | To help with fund raising? | | $\downarrow X$ | |
| | | | • | | |
| | 13. | If additional activities or facilities were available would ye | ou be willing | to pay for them? | |
| | | X_yesnonot sure | | | |
| | | | | | |
| | 14. | How long have you lived in the Cedar area?year | re | | |
| | • •• | | | | |
| | | | | | |
| iere asign | 15. | How many months each year do you live in Cedar? 12 m | onths | | |
| 6 5 | | | | | |
| | 16 | De ven even er rent vent heme? (sheek ene) | - | | |
| | 16. | Do you own or rent your home? (check one) | rent | | |
| | | | | | |
| | 17. | In which area do you work? (check one) | | | |
| | | | | | |
| | | Cedar area Solon Township Other: Other: Cedar area Solon Township Solon Township Solon Township Other: Solon Township Solon Township Solon Township Solon Township Solon Township Solon Township | | | |
| TIC ! | | Traverse City Other: K. to | re. (| | |
| | | -1 | | | |
| | | | | | |
| | 18. | How far do you drive to work each day?miles | | | |
| | | | | | |
| | 19. | How many people live in your household? people | | | |
| | 13. | people | | | |
| | | | | | |
| | 20. | In what age group are you? | | | |
| | | | | | |
| | | 18-25 years 26-35 years over 55 | | | |
| | | 36-45 years 46-55 years over 55 | ; | | |

| | What is your sex?/ male?_ | | |
|---|--|-----------------------|---------------|
| | In what occupational field do you wor | rk? (check one) | |
| | Agriculture Construction | Retired Education | |
| | Finance, Insurance, Real Estate Government | Retail Transportation | |
| | Manufacturing Other - please specify: | Tourism | |
| * | . * * * * * * * * * * * * * * * * * * * | ****** | . * * * * * * |
| | tional comments or suggeryou! Please complete, fold, staple or t | tape, and mail. | 16 h |
| | you! Please complete, fold, staple or t | | 1000 |

SOLON TOWNSHIP Cedar, Michigan 49621

