# SOCIO-ECONOMIC APPENDIX

# **INTRODUCTION**

This appendix provides socioeconomic and flood risk management analysis in support of the feasibility study for the Leon Creek Watershed in Bexar County, Texas.

# Purpose

The purpose of the socioeconomic analysis is to describe the socioeconomic characteristics of the study area under both without-project (existing and future conditions) and with-project (alternatives) conditions, and to identify those characteristics that can have an impact on plan formulation, evaluation, and selection of a recommended plan. Socioeconomic characteristics include but are not limited to population, demographics, per capita income, employment, land use, economic activity and development, and public safety and welfare. The socioeconomic analysis is used as part of the flood damage and cost reduction analysis, environmental impact analysis, social justice, and recreation analysis.

The purpose of the flood damage and cost analysis is to quantify expected flood damages and costs that occur under without-project (existing and future) conditions and with-project conditions (alternatives formulated to reduce expected flood damages and costs). The without-project damages and costs are compared to the residual damages and costs expected to occur under with-project conditions (alternatives), the difference being the economic (monetary) benefit attributable to the alternative.

# **Study Area**

The project study area is defined as the Leon Creek Watershed including its tributaries located in northwestern Bexar County, Texas. The watershed extends from the northwestern boundary of the county to the creek's confluence with the Medina River southwest of San Antonio. The watershed's total drainage area consists of approximately 238 square miles. In addition to the mainstem of Leon Creek, the watershed includes several major tributaries including Babcock Creek, Helotes Creek, Huesta Creek, French Creek, Culebra Creek, Chimenea Creek, Los Reyes Creek, Ranch Creek, Huebner Creek, Slick Ranch Creek, Westwood Village Creek, Indian Creek, Government Canyon Creek, Wildcat Canyon Creek, Pecan Creek, Comanche Creek, and their tributaries. The watershed also defines the hydrological study area for this project.

For socioeconomic analysis, the study area is defined as Bexar County, and where data is available, the census block groups contained by the 500-year floodplains of the streams. In addition to

unincorporated parts of the county, this study area includes all or portions of San Antonio, Leon Valley, Grey Forest, and Helotes.

For flood damage analysis, the study area is defined as the 500-year floodplain around Leon Creek and its tributaries. On the next page, Figure A-1 shows the watershed and 500-year floodplain.

# STUDY AREA DEMOGRAPHICS

The socioeconomic characteristics of the study area are important to understand in the process of alternative formulation and making choices among the alternatives. This section provides a narrative of the socioeconomic makeup of the study area and surrounding county.

# Population

According to the Bureau of the Census, the population of Bexar County in 2010 was 1,392,931, which represented growth of 23 percent from 2000. In the study area, the 2010 population was 340,133, an increase of 43 percent from 2000. In 2000, the study area's population accounted for approximately 20 percent of total population for Bexar County. Table A-1 compares population characteristics of the study area and Bexar County.

	Bexar County			Study Area				
	20	00	2010		2000		2010	
Population	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total	1,392,931		1,714,773		238,448		340,133	
Male	677,541	48.6	840,840	49.0	117,379	49.2	167,959	49.4
Female	715,390	51.4	873,933	51.0	121,069	50.8	172,174	50.6
White	959,122	68.9	1,250,252	72.9	164,477	69.0	252,324	74.2
Black	100,025	7.2	128,892	7.5	14,397	6.0	19,903	5.9
Asian, Hawaiian, Pacific Islander	23,889	1.7	44,089	2.6	5,866	2.5	12,107	3.6
Other	247,979	17.8	217,389	12.7	42,100	17.7	40,270	11.8
American Indian	11,193	0.8	14,475	0.8	1,726	.7	2,451	0.7
Two or More Races	50,723	3.6	59,676	3.5	9,883	4.1	12,455	3.7
Hispanic Origin	757,033	54.3	1,006,958	58.7	122,503	51.4	194,188	57.1

Table A-1. C	County and Study	Area Population	by Sex and	<b>Race or Hispanic</b>	Origin
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In terms of race and ethnicity, the study area's 2010 composition was similar to the overall county population. In both geographies, the largest race component was the White population, with 72.9 percent of the county's population and 74.2 percent of the study. The second largest component was Some Other Race, with 12.7 percent of the county's population and 11.8 percent of the study area population. About 59 percent of the county's population identified themselves as of Hispanic Origin, and in the study area, 57 percent.



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Figure A-1. Leon Creek Watershed

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Although projections are not available for the study area, we can get an idea of the potential growth by examining the state and county population projections. As urbanization continues to occur outward from San Antonio, much of the growth will be in areas within the Leon Creek Watershed.

Figure A-2 shows the projected percent population growth for Texas and Bexar County for 2015 through 2050, as calculated from year 2010 population figures. Over this 40-year period, the state's population is expected grow by 64 percent, while the county's growth over the same period is projected to be about 57 percent.



Figure A-2. Population Growth from 2015 to 2050 Source: U.S. Department of Commerce, Bureau of the Census

# Housing

Table A-2 provides housing characteristics from the 2010 Census for the county and study area.

Table A-2.	County and	<b>Study Area</b>	Housing	Statistics
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Housing Characteristic	Bexar County	Study Area
Total Units	662,872	119,723
Occupied Units	608,931	113,171
Vacant Units	53,941	6,552
Owner Occupied	368,638	75,843
Renter Occupied	240,293	37,328
Owner Occupied (Percent of Total Occupied)	60.5%	67.0%
Renter Occupied (Percent of Total Occupied)	39.5%	33.0%
Vacancy Rate	8.1%	5.4%

Source: U.S. Department of Commerce, Bureau of the Census

- In Bexar County, there were 662,872 housing units. In the study area, there were 119,723 housing units, 18 percent of the county's total.
- In the county, 8.1 percent of the units were vacant compared to 5.4 percent in the study area.
- Of the occupied units, 60.5 percent were owner-occupied in the county, while 67.0 percent were such in the study area.

### Education

Figure A-3 shows the education attainment in the population ages 25 years and older, based on the 2000 Census for the county and study area. Current (2010 Census) values were not available for the study area, therefore 2000 data was used.





In percentage terms, the study area showed a higher level of education attainment than the county overall. Among the county's population, 24 percent of the population's highest attainment was a high school diploma or GED; 23 percent of the population had less than a high school diploma or GED; and 53 percent had some education beyond the high school level, with 29 percent having some level of college degree. Comparatively, in the study area, only 14 percent had less than a high school degree or GED; 22 percent had only a high school degree or GED; and 64 percent had education beyond high school with 37 percent receiving some level of college degree.

# Employment

Although more current data is not available at the study area level, Table A-3 provides 2012 labor force characteristics for Texas, Bexar County, and San Antonio.

Labor Force Characteristic	Texas	Bexar County	San Antonio
Total	12,597,465	815,285	628,882
Employed	11,742,600	731,612	588,290
Unemployed	854,865	53,673	40,592
Unemployment Rate	6.8%	6.6%	6.5%

Table A-3.	2012 Labor 1	Force

Source: Texas Workforce Commission

In 2012, the county labor force was 815,285. The labor force in San Antonio was 628,882, which accounts for 77.1 percent of the total county labor force. Unemployment rates were similar in the county and city, at 6.6 and 6.5 percent, respectively. These rates were slightly lower than the state's unemployment rate of 6.8 percent.

Table A-4 presents civilian employment by North American Industry Classification System (NAICS) sector for the county and study area from the 2005-2009 American Community Survey.

	Bexar County Stu		Study	Area
Sector	Number	Percent	Number	Percent
Total	700,217	100.0	140,265	100.0
Agricultural, Forestry, Fishing, and Hunting	2,172	0.3	335	0.2
Mining	2,087	0.3	362	0.3
Construction	58,120	8.3	9,572	6.8
Manufacturing	42,702	6.1	7,703	5.5
Wholesale Trade	23,064	3.3	3,741	2.7
Retail Trade	83,274	11.9	16,067	11.5
Transportation and Warehousing	27,004	3.9	4,162	3.0
Utilities	5,869	0.8	1,010	0.7
Information	18,070	2.6	3,948	2.8
Finance and Insurance	51,620	7.4	14,876	10.6
Real Estate, Rental and Leasing	16,197	2.3	2,398	1.7
Professional, Scientific Services	40,115	5.7	8,204	5.8
Management of Companies and Enterprises	703	0.1	150	0.1
Administrative, Support, Waste Management, and Remediation Services	33,700	4.8	5,829	4.2
Educational Services	65,710	9.4	14,293	10.2
Health Care and Social Assistance	87,878	12.6	19,052	13.6
Arts, Entertainment, and Recreation	10,274	1.5	2,425	1.7
Accommodation and Food Services	59,311	8.5	11,182	8
Other Services (except Public Administration)	35,820	5.1	6,236	4.4
Public Administration	36,527	5.2	8,722	6.2

Table A-4. 2005-2009 ACS Civilian Employment by NAICS Sector

#### Source: U.S. Department of Commerce, Bureau of the Census

Comparison of the percent of total employment for each sector shows that the study area's employment composition was almost identical to the county overall. The largest sectors for employment are health care and social assistance, retail trade, and educational services and finance and insurance. This indicates that the area's economy was service-sector driven.

Table A-55 provides establishment data from the 2012 ESRI Community Analyst for Bexar County and the study area. Consistent with the employment data, the number of establishments was highest in the service-producing sectors for both the county and study area. The largest sector was retail services followed by health care and social assistance.

	Bexar County		Study Area	
Sector	Number	Percent	Number	Percent
Total Establishments	87,347	100.0	13,851	100.0
Agricultural, Forestry, Fishing	808	0.9	116	0.8
Mining	229	0.3	10	0.1
Utilities	64	0.1	10	0.1
Construction	7,294	8.4	1,274	9.2
Manufacturing	2,663	3.0	413	3.0
Wholesale Trade	3,851	4.4	599	4.3
Retail Trade	10,446	12.0	1,722	12.4
Transportation and Warehousing	2,076	2.4	346	2.5
Information	1,617	1.9	274	2.0
Finance and Insurance	3,800	4.4	485	3.5
Real Estate	3,832	4.4	603	4.4
Professional, Scientific Services	11,467	13.1	1,705	12.3
Management of Companies and Enterprises	246	0.3	42	0.3
Administrative, Support, Waste Management, and Remediation Services	15,769	18.1	2,852	20.6
Educational Services	1,492	1.7	259	1.9
Health Care and Social Assistance	6,366	7.3	827	6.0
Arts, Entertainment, and Recreation	1,553	1.8	265	1.9
Accommodation and Food Services	4,410	5.0	623	4.5
Other Services (except Public Administration)	8,704	10.0	1,335	9.6
Public Administration	660	0.8	101	0.7

Table A-5. 2012 Establishments by NAICS Sector

Source: ESRI Community Analyst

### Income

Per capita income for Bexar County in 2012 was \$23,024. The study area had a slightly higher per capita income at \$23,636.

Table A-6 compares the study area's median household income to that of the county. The study area shows a higher median household income of \$53,413 relative to the county's median household income of \$44,718.

Bexar County	Study Area
608,931	113,171
44,718	53,413
	Bexar County 608,931 44,718

 Table A-6.
 2012 Household Income

Source: U.S. Department of Commerce, Bureau of the Census

Table A-37 displays the poverty characteristics of the Bexar County population, based on 2005-2009 American Household Survey data. In the study area, 12.6 percent of the population was below the poverty level, which is lower than in the county, where 16.0 percent of the population was below the poverty level over the 2005-2009 period..

Population Characteristic	Bexar County	Study Area
Total Households	540,332	98,730
Total Above Poverty Level	453,675	86,300
Total Below Poverty Level	86,657	12,430
Percent Above Poverty Level	84.0%	87.4%
Percent Below Poverty Level	16.0%	12.6%

 Table A-3. Poverty Status

Source: U.S. Department of Commerce, Bureau of the Census

# **Environmental Justice**

In accordance with Executive Order 12898, "Federal Actions to Address Environmental Justice in Minority Populations and Low Income Populations," data was compiled to help assess the potential impacts to minority and low-income populations within the study area. Environmental justice is the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation and enforcement of environmental laws, regulations and policies. To meet this goal, the population's racial and ethnic makeup and incomes will be looked up for the project areas and compared to the county level data to see if there is a significantly larger minority or low income areas that may need additional attention. If such areas are found, outreach will be offered through public meetings to ensure these populations are well informed of any proposed project.

On the following pages, Tables A-11 and A-12 examine the study area population and income, respectively, at the most detailed levels possible.

		Race / Ethnicity (percent)					
Census	Total				American	Asian and	
Block Group	Population	White	Hispanic	Black	Indian	Pacific Islander	Other
151900.2	1,227	13.0	86.3	0.0	0.7	0.0	0.0
152000.1	715	14.0	79.3	2.2	0.0	3.1	1.4
152100.2	1,972	15.8	81.4	0.0	0.9	0.0	1.9
160900.7	1,565	2.9	93.4	1.2	0.0	2.5	0.0
161000.1	1,432	8.3	91.7	0.0	0.0	0.0	0.0
161000.3	527	11.2	88.8	0.0	0.0	0.0	0.0
161100.2	1,137	1.7	98.3	0.0	0.0	0.0	0.0
161100.3	1,698	0.5	99.1	0.0	0.0	0.5	0.0
161100.5	1,737	3.7	95.7	0.0	0.0	0.0	0.6
161100.6	849	0.0	94.1	0.0	0.0	5.9	0.0
161200.1	984	6.6	89.3	0.9	1.2	0.0	1.9
161200.2	1,008	30.3	69.7	0.0	0.0	0.0	0.0
161301.1	184	29.9	70.1	0.0	0.0	0.0	0.0
161301.3	3,497	4.9	90.4	4.4	0.0	0.0	0.3
161301.4	2,414	4.2	89.9	3.5	0.0	0.0	2.4
161301.5	2,451	5.4	89.0	0.7	1.3	1.5	2.1
161302.1	4,458	9.2	84.7	2.8	0.0	0.9	2.5
161401.1	7,511	59.0	14.1	18.3	0.6	4.2	3.8
161402.1	1,939	57.0	17.8	19.0	0.1	2.0	4.1
161501.3	1,070	33.3	47.4	14.2	0.0	5.1	0.0
161501.4	1,235	6.5	85.2	7.1	0.0	0.4	0.8
161502.1	1,097	14.9	83.1	1.2	0.0	0.0	0.7
161502.2	2,403	12.7	79.9	7.5	0.0	0.0	0.0
161502.5	1,154	27.9	65.1	7.0	0.0	0.0	0.0
161600.1	1,349	26.3	63.6	7.4	0.0	0.0	2.7
161600.3	0	0	0	0	0	0	0
171600.1	1,235	0.6	84.9	14.4	0.0	0.0	0.0
171600.2	1,840	4.3	93.3	1.3	0.0	1.1	0.0
171600.3	1,002	1.5	98.5	0.0	0.0	0.0	0.0
171600.4	1,974	4.2	90.4	3.5	0.0	1.9	0.0
171700.1	1,978	8.0	84.4	7.2	0.0	0.4	0.0
171700.2	1,306	21.6	73.7	0.9	0.0	3.8	0.0
171700.3	1,017	14.2	77.7	4.0	0.0	0.0	4.1
171700.4	1,033	24.4	60.7	10.8	0.0	0.0	4.1
171700.6	909	18.6	56.0	14.6	0.0	9.8	1.0
171700.7	0	0	0	0	0	0	0
171801.3	1,421	21.0	69.5	6.3	0.0	0.0	3.2
171802.3	1,474	10.5	83.7	3.4	0.0	1.4	0.9
171902.1	2,861	33.9	45.7	13.1	0.0	2.2	5.0
171906.1	4,292	40.2	42.7	11.6	0.3	3.0	2.3
171911.1	2,577	35.9	47.1	6.8	0.0	8.5	1.6
171911.4	6,950	26.4	52.7	15.0	0.3	2.1	3.4

Table A-4. Distribution of Population by Race/Ethnicity per Census Block Group

		Race / Ethnicity (percent)					
Census	Total				American	Asian and	
Block Group	Population	White	Hispanic	Black	Indian	Pacific Islander	Other
171912.1	3,993	25.2	57.4	9.8	0.1	4.9	2.6
172001.1	8,788	54.0	34.4	6.3	0.4	3.4	1.5
181401.3	2,518	47.5	38.6	5.9	0.0	4.8	3.2
181401.4	938	61.9	28.5	8.7	0.0	0.0	0.9
181503.1	4,552	51.9	37.9	4.7	0.0	3.3	2.2
181505.1	1,102	44.4	52.2	0.0	0.0	1.9	1.5
181506.1	687	54.3	35.4	6.1	0.0	2.6	1.6
181506.2	1,305	59.8	32.6	2.1	0.0	4.3	1.1
181602.1	816	30.0	62.3	5.0	0.0	2.7	0.0
181701.1	1,722	52.9	37.9	4.4	0.0	2.9	1.9
181701.2	100	51.0	44.0	0.0	0.0	5.0	0.0
181703.1	2,001	67.6	24.2	2.6	0.0	5.5	0.0
181703.2	1,322	55.4	38.8	5.3	0.0	0.5	0.0
181704.1	809	52.4	45.9	1.7	0.0	0.0	0.0
181704.2	1,601	49.0	42.6	2.4	0.0	2.8	3.1
181704.3	1,862	32.2	54.4	3.2	0.0	4.4	5.8
181704.4	963	12.4	82.1	0.0	0.0	0.7	4.8
181705.1	1,288	41.8	41.5	11.0	0.0	5.1	0.6
181705.2	350	67.4	32.6	0.0	0.0	0.0	0.0
181705.3	555	28.1	58.0	9.7	0.0	4.1	0.0
181706.1	1,832	30.3	56.9	7.9	0.0	1.4	3.5
181706.2	2,037	29.0	59.9	8.2	0.6	2.3	0.0
181706.3	2,242	28.2	50.3	11.5	0.0	5.8	4.2
181711.1	4,737	43.9	41.1	8.3	0.2	5.3	1.2
181712.1	1,926	48.2	43.8	3.3	0.0	0.3	4.4
181712.2	1,637	52.0	35.6	6.2	0.0	4.3	1.9
181713.1	1,748	47.8	41.9	10.1	0.0	0.3	0.0
181713.2	1,452	44.0	41.3	4.6	0.0	5.4	4.8
181713.3	2,183	55.2	36.4	2.9	0.5	2.8	2.2
181713.4	1,692	28.7	56.9	12.6	0.0	0.4	1.5
181714.1	6,105	41.2	45.7	8.7	0.1	2.4	1.8
181714.2	1,520	58.0	34.4	6.1	0.0	0.5	1.0
181714.3	3,664	39.2	50.7	5.5	0.0	4.6	0.0
181715.1	5,287	34.2	56.3	4.6	0.8	1.4	2.8
181715.2	1,420	26.9	59.0	9.8	0.0	4.3	0.0
181716.1	7.301	32.0	60.2	4.1	0.0	1.1	2.6
181717.1	2,890	45.1	39.6	11.6	0.7	2.8	0.3
181717.3	3.394	42.9	41.7	10.8	0.0	2.3	2.4
181717.4	1,012	52.2	28.4	6.6	2.3	1.2	9.4
181719.1	5,367	49.1	40.1	6.8	0.0	2.5	1.5
181801.1	1,677	64.2	21.6	1.9	0.0	7.5	4.8
181803.1	1,754	48.0	38.2	4.7	1.1	6.6	1.4
181803.2	3.680	51.2	43.0	2.9	1.7	0.4	0.8
181803.3	1,134	57.0	20.4	0.0	0.0	20.6	2.0
181806.1	1,686	33.2	50.7	7.4	0.0	5.3	3.4

				Race / E	thnicity (percen	t)	
Census Block Group	Total Population	White	Hispanic	Black	American Indian	Asian and Pacific Islander	Other
181806.2	469	61.8	10.7	17.1	0.0	10.4	0.0
181806.3	2,522	53.3	40.5	2.3	0.0	3.0	0.9
181807.1	6,820	55.1	33.7	3.4	1.1	4.2	2.6
181808.1	970	38.9	44.3	6.1	0.7	0.0	10.0
181809.1	1,962	45.8	47.1	4.7	0.0	2.4	0.0
181809.2	1,292	48.1	39.7	7.8	0.0	0.0	4.4
181809.3	1,185	58.7	35.9	2.4	0.0	3.0	0.0
181809.4	1,166	30.1	56.3	3.6	0.0	2.3	7.7
181810.1	2,434	51.1	35.3	3.2	0.9	8.4	1.2
181810.3	953	33.4	50.9	12.9	0.0	2.8	0.0
181810.4	1,748	53.1	37.3	4.0	0.3	5.2	0.0
181811.1	3,480	61.2	33.0	0.3	0.0	3.3	2.2
181812.1	1,639	67.2	26.7	1.8	0.0	3.3	1.0
181812.2	9,922	49.6	37.8	5.0	0.3	4.3	2.9
181900.1	1,139	72.2	20.7	3.6	0.0	3.5	0.0
181900.2	1,164	62.7	29.8	3.3	0.0	4.2	0.0
181900.3	2,556	57.7	28.8	4.7	0.5	4.7	3.7
182000.1	1,900	76.4	20.2	0.2	0.6	1.2	1.5
182000.2	1,968	64.9	26.6	1.1	0.1	4.7	2.6
182101.1	4,196	89.8	7.7	1.8	0.0	0.0	0.6
182102.1	3,313	83.2	15.1	0.0	1.0	0.0	0.8
182103.1	1,751	76.1	23.2	0.0	0.0	0.7	0.0
182104.1	3,180	72.8	25.3	0.4	0.0	0.6	1.0
191803.1	2,170	67.2	28.8	0.0	0.0	1.6	2.3
191803.2	96	100.0	0.0	0.0	0.0	0.0	0.0

Source: U.S. Department of Commerce, Bureau of the Census

Of the 112 census block groups that intersect the study area, 110 had reported populations.

- Seventy-one of the 110 census block groups had populations that are 50 percent or more minority with regard to race and Hispanic origin. That represents 65 percent of the census block groups with reported population.
- For the study area as a whole, 59.2 percent of the population is minority. Of the 110 census block groups, 53 had total minority populations greater than 59.2 percent.
- In Bexar County, 64.4 percent of the population is minority. Of the 110 census block groups in the study area, 46 had total minority populations greater than 64.4 percent.

To identify areas within the study area where income levels could warrant further actions with regard to environmental justice, the population below poverty levels from the 2000 Census for census block groups in the 500-year floodplain were compared to the population of Bexar County.

Table A-5 provides a summary of populations below and above the poverty level for each of the 112 census block groups that intersect the 500-year floodplain, as well as for the city of San Antonio, Bexar County, State of Texas, and United States.

	Total Population from Which	Income Below	w Poverty	Income Above	e Poverty
Geographic Area	Poverty is Determined	Population	Percent	Population	Percent
U.S.	273,882,232	33,899,812	12.4	239,982,420	87.6
Texas	20,287,300	3,117,609	15.4	17,169,691	84.6
Bexar County	1,359,271	215,736	15.9	1,143,535	84.1
San Antonio	1,122,736	193,731	17.3	929,005	82.7
480291519002	1,219	437	35.8	782	64.2
480291520001	535	227	42.4	308	57.6
480291521002	1,961	218	11.1	1,743	88.9
480291609007	1,542	495	32.1	1,047	67.9
480291610001	1,432	584	40.8	848	59.2
480291610003	527	95	18.0	432	82.0
480291611002	1,137	287	25.2	850	74.8
480291611003	1,698	371	21.8	1,327	78.2
480291611005	1,737	401	23.1	1,336	76.9
480291611006	849	140	16.5	709	83.5
480291612001	984	43	4.4	941	95.6
480291612002	1,008	357	35.4	651	64.6
480291613011	184	71	38.6	113	61.4
480291613013	3,473	1,482	42.7	1,991	57.3
480291613014	2,414	798	33.1	1,616	66.9
480291613015	2,444	753	30.8	1,691	69.2
480291613021	4,450	1,175	26.4	3,275	73.6
480291614011	994	76	7.6	918	92.4
480291614021	1,408	84	6.0	1,324	94.0
480291615013	1,036	155	15.0	881	85.0
480291615014	1,235	417	33.8	818	66.2
480291615021	1,097	346	31.5	751	68.5
480291615022	2,401	873	36.4	1,528	63.6
480291615025	1,148	65	5.7	1,083	94.3
480291616001	1,327	223	16.8	1,104	83.2
480291616003	0	0	0.0	0	0.0
480291716001	1,235	431	34.9	804	65.1
480291716002	1,825	504	27.6	1,321	72.4
480291716003	981	309	31.5	672	68.5
480291716004	1,955	702	35.9	1,253	64.1
480291717001	1,978	611	30.9	1,367	69.1
480291717002	1,306	294	22.5	1,012	77.5
480291717003	1,013	149	14.7	864	85.3
480291717004	1,033	141	13.6	892	86.4
480291717006	892	234	26.2	658	73.8
480291717007	0	0	0.0	0	0.0
480291718013	1,421	431	30.3	990	69.7

 Table A-5. Populations Below and Above Poverty Level by Census Block Group

 Bold = Census Block Group with below-poverty-level ratios higher than Bexar County's 15.9 percent

	Total Population from Which	Income Belo	w Poverty	Income Abov	e Poverty
Geographic Area	Poverty is Determined	Population	Percent	Population	Percent
480291718023	1,474	448	30.4	1,026	69.6
480291719021	2,851	272	9.5	2,579	90.5
480291719061	4,274	72	1.7	4,202	98.3
480291719111	2,568	136	5.3	2,432	94.7
480291719114	6,944	384	5.5	6,560	94.5
480291719121	3,968	151	3.8	3,817	96.2
480291720011	8,783	476	5.4	8,307	94.6
480291814013	2,400	382	15.9	2,018	84.1
480291814014	795	119	15.0	676	85.0
480291815031	4,443	552	12.4	3,891	87.6
480291815051	1,102	58	5.3	1,044	94.7
480291815061	687	82	11.9	605	88.1
480291815062	1,305	157	12.0	1,148	88.0
480291816021	816	204	25.0	612	75.0
480291817011	1,656	20	1.2	1,636	98.8
480291817012	100	0	0.0	100	100.0
480291817031	2,001	159	7.9	1,842	92.1
480291817032	1,322	120	9.1	1,202	90.9
480291817041	809	26	3.2	783	96.8
480291817042	1.592	90	5.7	1.502	94.3
480291817043	1,862	306	16.4	1,556	83.6
480291817044	963	131	13.6	832	86.4
480291817051	1,288	52	4.0	1,236	96.0
480291817052	291	0	0.0	291	100.0
480291817053	555	40	7.2	515	92.8
480291817061	1,829	216	11.8	1,613	88.2
480291817062	2,037	263	12.9	1,774	87.1
480291817063	2,242	41	1.8	2,201	98.2
480291817111	4,737	41	0.9	4,696	99.1
480291817121	1.918	0	0.0	1.918	100.0
480291817122	1,523	85	5.6	1,438	94.4
480291817131	1.748	0	0.0	1,748	100.0
480291817132	1,452	39	2.7	1,413	97.3
480291817133	2.158	66	3.1	2.092	96.9
480291817134	1,685	611	36.3	1,074	63.7
480291817141	6.095	113	1.9	5.982	98.1
480291817142	1,520	17	1.1	1,503	98.9
480291817143	3.642	201	5.5	3.441	94.5
480291817151	5.280	406	7.7	4.874	92.3
480291817152	1.420	104	7.3	1.316	92.7
480291817161	7.266	748	10.3	6.518	89.7
480291817171	2.873	94	3.3	2,779	96.7
480291817173	3,394	85	2.5	3,309	97.5
480291817174	1.012	0	0.0	1.012	100.0
480291817191	5.367	78	1.5	5.289	98.5
480291818011	1.677	26	1.6	1.651	98.4
480291818031	1.754	_0 74	4.2	1,680	95.8
480291818032	3,680	452	12.3	3,228	87.7

	Total Population from Which	Income Belo	w Poverty	Income Abov	e Poverty
Geographic Area	Poverty is Determined	Population	Percent	Population	Percent
480291818033	1,134	101	8.9	1,033	91.1
480291818061	1,223	894	73.1	329	26.9
480291818062	469	57	12.2	412	87.8
480291818063	2,522	377	14.9	2,145	85.1
480291818071	6,790	418	6.2	6,372	93.8
480291818081	970	210	21.6	760	78.4
480291818091	1,962	161	8.2	1,801	91.8
480291818092	1,281	175	13.7	1,106	86.3
480291818093	1,185	74	6.2	1,111	93.8
480291818094	1,166	46	3.9	1,120	96.1
480291818101	2,434	38	1.6	2,396	98.4
480291818103	953	18	1.9	935	98.1
480291818104	1,748	192	11.0	1,556	89.0
480291818111	3,466	272	7.8	3,194	92.2
480291818121	1,639	62	3.8	1,577	96.2
480291818122	9,849	438	4.4	9,411	95.6
480291819001	1,122	12	1.1	1,110	98.9
480291819002	1,153	84	7.3	1,069	92.7
480291819003	2,556	661	25.9	1,895	74.1
480291820001	1,900	29	1.5	1,871	98.5
480291820002	1,968	51	2.6	1,917	97.4
480291821011	4,196	39	0.9	4,157	99.1
480291821021	3,313	127	3.8	3,186	96.2
480291821031	1,751	68	3.9	1,683	96.1
480291821041	3,178	57	1.8	3,121	98.2
480291918031	2,170	48	2.2	2,122	97.8
480291918032	96	0	0.0	96	100.0

Source: U.S. Department of Commerce, Bureau of the Census

On the next page, Figure A-3 shows the census block groups with ratios greater than 15.9 percent of population below the poverty level.

- In the U.S. overall, 12.4 percent of the 2000 population recorded was below the poverty level.
- In Texas and Bexar County, the ratios were 15.4 and 15.9 percent, respectively.
- Within the city of San Antonio, 17.3 percent of the population was below the poverty level.

Given that the study area comprises areas both inside and outside the city limits of San Antonio, the value for Bexar County was chosen for comparison to identify which block groups might have income sensitive areas. Of the 112 census block groups, 35 had ratios of population below the poverty level that are greater than the 15.9 percent for Bexar County. This represents 31 percent of the census block groups, but only 7.1 percent of the total population in all of the study area, or 16,764 persons. (These block groups are bold in Table A-12, page A-12.) One block group, 1818.061, had more than half of its population below the poverty level, with 73.1 percent.

After comparing population and income data from the census blocks within the project area, there were no areas where minority populations would be effected in any greater way than the overall populations. However one census block group, 1818,061 was significantly higher with regards to below poverty level incomes, and as such, may require additional actions through public meetings to ensure this sub-population is aware of any impacts of a project should a project take place in that immediate area.



Figure A-3. Areas of Concern for Environmental Justice (EJ)

# WITHOUT-PROJECT FLOOD DAMAGES AND COSTS

# Overview

Key to alternative formulation is an understanding of the monetary damages caused by flooding and the number and makeup of damaged structures. This section provides the analysis of the number of structures in the floodplain, presents damages to these structures by frequency event under existing conditions, expected annual damages by damage reach, and a preliminary comparison of with- and without-project equivalent annual damages for initial alternatives.

# Methodology

The theoretical computation of flood damages is relatively simple. It is based on the depth of flooding for various flood events (exceedance probabilities), and a relationship between the depth of flooding and the estimated damages based on a percentage of the structure and content value or value of privately owned vehicles (POV). The nomenclature used in this appendix to describe the relative risk reflects the actual probability, rather than the average recurrence interval, of flood events. For example, the commonly used term "100-year frequency flood," meaning that flood which stands a one-percent chance of being equaled or exceeded in any given one-year period, will hereafter be known as the "1-percent annual exceedance probability (AEP) flood." Damages to the various structures, accumulated by frequency of events, produce a frequency-damage function. Using this frequency-damage data, an integration process calculates estimates of expected annual damages. This involves aggregating the multiplication of the mean damage between each pair of flood events by the difference in exceedance probabilities. This is then repeated for the range of flood events in each damage category.

### Hydrologic Engineering Center - Flood Damage Assessment Program

The Hydrologic Engineering Center - Flood Damage Assessment (HEC-FDA) software program is used to compute flood damages under without- and with-project conditions. The program integrates hydrologic, hydraulic, and floodplain characteristics through application of a Monte Carlo simulation method, and computes single event damages and expected annual damages (EAD), while accounting for uncertainty in the values of structures and contents. Damage susceptibility factors used by the program to estimate flood damages include: number and type of structures, structure and content values, elevation where the structure begins to sustain measurable damages, and flood depth-to-percent damage relationship.

### **Inventory of Floodplain Structures**

An inventory of properties lying within the limits of the 0.2% AEP (500-year) floodplain was conducted to determine the number and type of structures, values of structures and contents, and ground and finished floor elevations (elevation where water enters the structure). Structures were

initially identified and digitized in GIS using digital orthoquads as base maps. A field survey was then conducted to determine condition and quality of the structures, number of floors, construction materials (roofing and exterior walls) and to identify the first floor elevation. Square footage was acquired from the appraisal district databases. In addition, the survey identified the applicable relationship of flood depth to percent damage for each structure type. Last, the number of POVs susceptible to flood was estimated. The following paragraphs describe each inventory item in detail.

Depreciated Structure Value/Replacement Cost. Structure values were obtained from the Bexar County Appraisal District to use as a base value. To accurately reflect replacement cost less depreciation to the existing structures in compliance with ER-1105-2-101, values for a sample of nine commercial structures were calculated using Marshall and Swift cost estimating software, based on the information collected during a field survey. This sample represents 10 percent of residential and commercial structures in the study area. Characteristics were collected in the field included exterior wall construction, roofing materials, condition and quality. These values along with square footage take from the appraisal information were entered into the Marshall & Swift software along with zip codes to determine the depreciated replace value. A ratio between the Marshall Swift valued sample structures and their appraisal values was then calculated to adjust all structures in the database. Residential structures including multi-family were also adjusted, based on a 10-percent sample of one- and two-story structures. Replacement cost is the cost of physically replacing (reconstructing) the structure. Depreciation accounts for deterioration that occurred prior to flooding and variations in remaining useful life of the structure. Premanufacture homes were classified as mobile residence because of similar construction and finished floor elevations. In the presentation of data that follows, this would make mobile residence values seem higher than the atypical mobile residence.

Structure values for single- and multi-family residential were adjusted upward by 28.6 percent; commercial properties were adjusted upward by 11.2 percent. This adjustment was also applied to mobile residences. Values per square footage for public structures were based on the applicable estimates produced by Marshall and Swift. Uncertainty distributions associated with estimating the depth to percent damage functions, structure values, content ratios, and first flood stage are used to develop the total aggregated stage-damage uncertainty function by damage categories for each damage reach.

- **Content Value**. Content values for residential structures were not specifically collected. Residential content values are embedded in the depth to percent damage relationship (see "Depth to Percent Damage Relationships"). For non-residential structures, personal business property obtained from the county appraisal district database was used, when available. These values represent values of equipment and inventory. Where personal business property was not available, estimates based on structure value and occupancy type are incorporated into the non-residential depth damage functions used by the Fort Worth District.
- **Ground and First Floor Elevations**. Topographic maps compiled from aerial photography served as base maps to identify flood prone properties and estimate ground elevations. First floor elevations were visually inspected for each structure. For each Monte Carlo simulation, the *first floor stage with uncertainty* is computed from the first floor stage, uncertainty distribution, and

uncertainty parameters. The uncertainty parameters are the same units as for the first floor stage. The uncertainty in the first floor stage is modeled using the normal distribution with a standard deviation of 0.5 foot.

- **Depth to Percent Damage Relationships**. Flood depth to percent damage relationships relate the • depth of flooding relative to the structure first floor to the dollar amount of flood damages as a percent of the estimated structure value. For residential structure types, these relationships were compiled by the USACE Institute of Water Resources (IWR), based on data collected from flooding events in various parts of the United States between 1996 and 2001. Damage relationships for commercial and public structures also reflect the results of analyses of historical data collected from major flood events across the United States, and were supplemented based on the findings of subsequent economic field surveys of floodplain properties in the Fort Worth District, considering such factors as the design of the structure and nature of the structure contents. As described in EM 1110-2-1619—Risk-Based Analysis for Flood Damage Reduction Studies, there are risks and uncertanties associated to the parameters including valuation, elevation and depth-damage percentages. Uncertainties can rise form analytical errors in assigning these paramters or from the uncertainty of exact values when, for instance, assigning content valuation. To address uncertainties, standard devations are used in the Monte Carlo simulations, where higher values of standard devation are used where the uncertanties of the parameters are greater. The uncertainty associated with residential structures and contents is modeled using a normal distribution with a standard deviation of 5 percent. Commercial and public structures are similarly modeled with a standard deviation of 10 percent. These values are the default values used in HEC-FDA and are used in the Forth Worth District flood risk management studies unless a greater uncertainty of the parameter values is determined to exist and a larger standard deviation warranted.
- Privately Owned Vehicles. Damages for automobiles were estimated based on the average number of vehicles per residence characteristic of the study area and the probability of their being present at the time of a flood. An analysis was made of registered motor vehicles per occupied housing unit for counties within Metropolitan Statistical Areas (MSA) in Texas, using data from the U.S. Census and the Texas State Department of Highways and Public Transportation. The number of registered vehicles per occupied housing unit in the MSA clusters around a mean value of 2.48. Given that not all registered motor vehicles are associated with private residences and some housing units are unoccupied, an average of 2.0 vehicles per residence is assumed for this analysis. It is anticipated that 1.5 of these would be present during non-work hours (128 hours per week) and 0.5 present during work hours (40 hours per week). Therefore, the expected number of vehicles present at any given time that a flood might occur is derived as follows:

((128/168) \* 1.5) + ((40/168) \* 0.5)

#### or 1.26 vehicles per residence

Values for vehicles associated with single-family homes as well as multi-family and mobile residences were based on the national average price of new and used vehicles as reported by the U.S. Bureau of Transportation Statistics (BTS). Prices for new vehicles are calculated by subtracting CNW Marketing Research vehicle leasing data from Bureau of Economic Analysis

data that combines sales and leases. Used car sales data is derived from sales from franchised dealers, independent dealers, and casual sales. The average new and used sales price also includes leased vehicles. The most recent price reported by BTS is \$12,774. Under the assumption that a family's purchase of a vehicle is a function of income, this average price can be adjusted down to the Census block level based on Census Bureau data for median family income. From the 2000 U.S. Census, the median household income is \$41,994 nationally. Median household income for the census blocks that intersect the study area ranges from \$19,069 to \$109,424. This translates into valuation for vehicles located at residential structures within the study area of \$7,800 to \$44,759. The value represents the valuation of 1.26 vehicles at each structure. Thefore, the value of an individual vehicle would range from \$6,190 to \$35,523.

# Hydrology and Hydraulic Characteristics

### Flood Profiles and Probability of Flood Events

A range of without-project water surface profiles were developed. They include the 50, 20, 10, 4, 2, 1, 0.4, and 0.2% AEP flood events (or the 2-, 5-, 10-, 25-, 50-, 100-, 250-, and 500-year floods, respectively). The profiles were used to delineate the floodplain (and damage) limits and to determine the relationship of damageable properties to both elevation and frequency of flood occurrence. As mentioned earlier, the computation of flood damages is based on the depth of flooding for various flood events and a relationship between the depth of flooding and the estimated damages based on a percentage of the structure and contents value or vehicle value.

### **Flood Profile Stationing**

This study adopts stations along the stream, denoted as feet above the mouth of the stream. Stationing is attached to structures by assigning the structure to the closest cross-section.

### **Damage Reaches**

The PDT divided the study area into 35 damage reaches, based on the locations of confluences of Leon Creek with its tributaries and of major road crossings. The mainstem of Leon Creek was divided into seven economic damage reaches; Culebra Creek was divided into two reaches; and the remaining 26 tributaries were each defined as a single reach.

For Leon Creek, the reaches are defined as follows:

- Reach 1 Confluence of Leon Creek with Medina River to downstream of State Highway 16
- Reach 2 Downstream of State Highway 16 to downstream of the Jet Engine Test Cell Facility located at Kelly USA (formerly Kelly Air Force Base)
- Reach 3 Downstream of the Test Cell Facility to just upstream of SW Military Drive (During preliminary alternative formulation, this reach was divided to segregate structures protected by a levee alternative. Reach 3L indicates structures behind the levee, reach 3R represents structures not protected by the levee.)

- Reach 4 Upstream of SW Military Drive to just upstream of confluence with Huebner Creek
- Reach 5 Upstream of confluence with Huebner Creek to upstream of Babcock Road (During preliminary alternative formulation, this reach was divided so segregate structures protected by a levee alternative. Reach 5L indicates structures behind the levee, reach 5R represents structures not protected by the levee.)
- Reach 6 Upstream of Babcock Road to upstream of I-10
- Reach 7 Upstream of I-10 to end of study

For Culebra Creek, the reaches were defined as:

- Reach 1 Confluence of Culebra Creek with Leon Creek to downstream of Loop 1604
- Reach 2 Downstream of Loop 1604 to end of study

On page A-22, Figure A-4 provides a geographic representation of the economic reaches.

### Value of Floodplain Properties

On page A-23, Table A-6 provides the number, valuation, and structure type for each of the single event categories for each reach in the study area. Valuations for each occupancy category include structure and contents. The table shows that the 0.2% AEP floodplain contains 4,630 structures valued at \$1,157,588,000. The structures are composed of 3,757 (81.1%) single-family structures, 56 (1.2%) multi-family residential structures, 193 (4.2%) mobile homes, 513 (11%) commercial structures, and 111 (2.4%) public structures.

For single family residences, a typical structure was of frame construction with brick veneer or hardboard siding and built on slab on grade foundations with no basements. Commercial properties were evenly distributed among concrete block construction and metal frame buildings with metal siding, and typically slab on grade foundations.

Total valuation of single-family residential structures is estimated at \$812,722,000 (70.2%); for multifamily residential, the valuation is \$72,029,000 (6.2%); for mobile homes, the valuation was \$4,797,000 (0.4%); for commercial structures, \$248,559,000 (21.5%); and for public structures, valuation is \$19,481,000 (1.7%).

In addition to structures in the 0.2% AEP, there are an estimated 4,133 privately owned automobiles with a total valuation of \$81,768,000. See Table A-8 on page A-42.



Figure A-4. Leon Creek Economic Reaches

	50%	6 AEP	20	% AEP	10	% AEP	4%	AEP	2%	AEP	19	% AEP	0.4	I% AEP	0.2	% AEP
Reach / Structure Type	No.	Value	No.	Value	No.	Value	No.	Value	No.	Value	No.	Value	No.	Value	No.	Value
Babcock Trib																
Single-Family	0	\$ 0	0	\$ 0	2	\$ 620	4	\$ 959	7	\$ 1,724	8	\$ 1,978	11	\$ 2,810	11	\$2,180
Multi-Family	2	307	7	1,075	7	1,075	7	1,075	7	1,075	7	1,075	7	1,075	7	1,075
Mobile Home	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Commercial	0	0	0	0	0	0	0	0	2	6	6	91	7	101	8	103
Public	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	602
Total	2	307	7	1,075	9	1695	11	2,035	16	2,805	21	3,986	25	3,986	27	4,591
Chimenea Creek																
Single-Family	0	0	0	0	0	0	0	0	0	0	0	0	1	436	1	436
Multi-Family	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mobile Home	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Commercial	0	0	0	0	0	0	0	0	1	2	1	2	1	2	3	15
Public	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	1	2	1	2	2	438	4	451
Culebra Creek 1																
Single-Family	0	0	0	0	6	1,371	68	15,539	199	48,551	360	88,724	697	166,154	972	227,907
Multi-Family	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mobile Home	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Commercial	0	0	0	0	1	57	8	617	10	977	19	1,678	52	12,826	65	18,233
Public	0	0	0	0	0	0	0	0	0	0	0	0	1	207	2	252
Total	0	0	0	0	7	1,428	76	16,156	209	49,528	379	90,401	750	179,187	1,039	246,393
Culebra Creek 2																
Single-Family	0	0	0	0	0	0	0	0	0	0	0	0	3	646	27	6,593
Multi-Family	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mobile Home	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	517
Commercial	0	0	0	0	0	0	3	938	5	1,480	11	2,162	11	2,162	12	4,933
Public	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	3	938	5	1,480	11	1,480	14	2,808	44	12,043

 Table A-6. Number and Value of Floodplain Properties (January 2008 Prices - \$000)

	50%	% AEP	209	% AEP	10	% AEP	4%	AEP	2%	AEP	1%	6 AEP	0.4	% AEP	0.2	% AEP
Reach / Structure Type	No.	Value	No.	Value												
Culebra Creek Trib A																
Single-Family	0	0	0	0	4	861	11	3,160	19	5,041	32	8,054	57	14,292	74	18,901
Multi-Family	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mobile Home	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Commercial	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Public	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	4	861	11	3,160	19	5,041	32	8,054	57	14,292	74	18,901
Culebra Creek Trib C																
Single-Family	0	0	0	0	1	262	1	262	2	558	4	1.130	6	1,815	8	2,782
Multi-Family	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mobile Home	0	0	0	0	1	15	1	15	1	15	1	15	1	15	1	15
Commercial	0	0	2	57	3	169	3	169	5	170	7	199	10	775	12	781
Public	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	2	57	5	446	5	446	8	743	12	1,345	17	2,605	21	3,578
Culebra Creek Trib E																
Single-Family	0	0	0	0	0	0	1	520	1	520	2	1,011	2	1,011	5	2,712
Multi-Family	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mobile Home	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Commercial	0	0	0	0	0	0	0	0	0	0	1	3	1	3	2	445
Public	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	1	520	1	520	3	1,014	3	1,014	7	3,158
French Creek																
Single-Family	0	0	1	632	3	1,692	6	2,556	8	3,397	15	6,183	39	14,121	78	25,774
Multi-Family	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mobile Home	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Commercial	0	0	1	137	1	137	3	720	3	720	4	759	8	10,936	10	11,232
Public	0	0	0	0	0	0	0	0	0	0	0	0	1	849	3	2,496
Total	0	0	2	768	4	1,829	9	3,277	11	4,118	19	6,942	48	25,906	91	39,502

	50%	6 AEP	20%	6 AEP	109	% AEP	4%	AEP	2%	AEP	1%	5 AEP	0.4	% AEP	0.2	% AEP
Reach / Structure Type	No.	Value	No.	Value	No.	Value	No.	Value								
French Creek Trib A																
Single-Family	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Multi-Family	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mobile Home	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Commercial	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Public	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Helotes Creek																
Single-Family	0	0	0	0	5	2,020	11	3,792	30	7,207	106	20,726	162	31,475	233	44,257
Multi-Family	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mobile Home	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Commercial	0	0	0	0	17	1,148	29	2,131	39	2,973	42	3,292	44	3,802	53	4,625
Public	0	0	0	0	0	0	0	0	0	0	4	63	4	63	19	3,682
Total	0	0	0	0	22	3,168	40	5,924	69	10,180	152	24,082	210	35,340	305	52,564
Helotes Creek Trib A																
Single-Family	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	124
Multi-Family	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mobile Home	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Commercial	0	0	5	576	10	1,186	15	2,153	16	2,158	17	2,200	18	2,216	18	2,216
Public	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	5	576	10	1,186	15	2,153	16	2,158	17	2,200	18	2,216	19	2,340
Helotes Creek Trib B																
Single-Family	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	388
Multi-Family	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mobile Home	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Commercial	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Public	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	388

A-25

	50%	6 AEP	20%	6 AEP	10	% AEP	4%	AEP	2%	AEP	1%	AEP	0.4	% AEP	0.2	% AEP
Reach / Structure Type	No.	Value	No.	Value	No.	Value	No.	Value	No.	Value	No.	Value	No.	Value	No.	Value
Huebner Creek																
Single-Family	0	0	2	29	10	1,461	50	9,681	100	18,917	170	33,728	290	60,328	360	75,748
Multi-Family	0	0	0	0	0	0	0	0	0	0	0	0	2	1,223	10	10,626
Mobile Home	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Commercial	0	0	1	23	2	73	3	220	3	220	5	454	6	464	7	478
Public	1	88	2	100	5	162	10	237	13	854	15	2,428	15	2,428	16	2,480
Total	1	88	5	151	63	10,138	63	10,138	116	19,991	343	36,610	313	64,443	393	89,333
Huebner Creek Trib A																
Single-Family	1	112	3	604	7	1,910	10	2,898	11	3,087	12	3,235	13	3,332	19	5,402
Multi-Family	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mobile Home	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Commercial	0	0	0	0	1	59	1	59	1	59	2	904	6	4,284	7	5,204
Public	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	1	112	3	604	8	1,,969	11	2,957	12	3,146	14	4,139	19	7,615	22	9,018
Huesta Creek																
Single-Family	0	0	1	147	1	147	1	147	1	147	1	1,47	8	2,573	19	5,402
Multi-Family	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mobile Home	0	0	0	0	1	11	6	131	6	131	9	167	28	344	25	447
Commercial	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Public	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	1	147	2	157	7	277	7	277	10	313	26	2,917	44	5,849
Indian Creek																
Single-Family	0	0	1	16	2	32	5	327	14	1,517	46	5,770	102	13,239	133	17,188
Multi-Family	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mobile Home	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Commercial	2	69	12	135	15	222	18	283	18	283	19	298	23	401	24	457
Public	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	2	69	13	151	27	254	23	610	23	1,800	65	6,069	125	13,641	157	17,644

	50%	6 AEP	20	% AEP	10	% AEP	4%	AEP	2%	AEP	19	6 AEP	0.4	% AEP	0.2	% AEP
Reach / Structure Type	No.	Value	No.	Value	No.	Value	No.	Value	No.	Value	No.	Value	No.	Value	No.	Value
Leon Creek 1																
Single-Family	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Multi-Family	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mobile Home	0	0	0	0	0	0	0	0	0	0	0	0	1	85	1	85
Commercial	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Public	0	0	0	0	0	0	0	0	0	0	0	0	3	1,401	9	3,292
Total	0	0	0	0	0	0	0	0	0	0	0	0	4	1,486	10	3,377
Leon Creek 2																
Single-Family	0	0	4	450	21	2,114	32	3.103	33	3,125	33	3,125	34	3.269	36	3,560
Multi-Family	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mobile Home	0	0	10	109	78	887	116	2,717	117	2,732	117	2,732	117	2,732	118	2,740
Commercial	0	0	5	57	33	1,274	41	1,341	43	1,457	48	1,869	58	2,.734	61	3,052
Public	0	0	0	0	0	0	0	0	3	14	3	14	3	14	3	14
Total	0	0	19	616	132	4,275	189	7,163	196	7,328	201	7,739	212	8,749	218	9,365
Leon Creek 3L																
Single-Family	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Multi-Family	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mobile Home	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Commercial	0	0	4	12,087	5	35,403	5	35,403	5	35,403	5	35,403	5	35,403	6	35,567
Public	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	4	12,087	5	35,403	5	35,403	5	35,403	5	35,403	5	35,403	6	35,567
Leon Creek 3R																
Single-Family	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Multi-Family	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mobile Home	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Commercial	0	0	0	0	0	0	0	0	0	0	0	0	1	20	1	20
Public	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	1	20	1	20

	50%	6 AEP	20%	6 AEP	109	% AEP	4%	AEP	2%	AEP	1%	AEP	0.4	% AEP	0.2	% AEP
Reach / Structure Type	No.	Value	No.	Value	No.	Value	No.	Value	No.	Value	No.	Value	No.	Value	No.	Value
Leon Creek 4																
Single-Family	0	0	1	1,513	2	1,652	4	1,704	8	2.370	22	5,006	44	7,989	66	10,814
Multi-Family	0	0	0	0	0	0	2	4774	3	7,160	4	9,547	5	11,934	16	22,822
Mobile Home	0	0	0	0	0	0	0	0	0	0	3	21	6	41	6	41
Commercial	0	0	1	30	4	223	16	1,464	23	8,824	29	27,800	36	35,541	43	43,968
Public	1	31	6	717	9	880	19	2,145	21	2,595	21	2,595	21	2,595	23	3,501
Total	1	31	8	2,260	15	2,755	41	10,086	55	20,951	79	44,970	112	58,101	154	81,147
Leon Creek 5L																
Single-Family	0	0	0	0	0	0	0	0	6	1,032	78	12,277	216	34,691	307	49,751
Multi-Family	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mobile Home	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Commercial	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Public	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	6	1,032	78	12,277	216	34,691	307	49,751
Leon Creek 5R																
Single-Family	0	0	0	0	0	0	1	278	13	2,438	66	12,349	241	51,927	727	157,107
Multi-Family	0	0	0	0	0	0	0	0	6	12,927	11	22,322	17	35,589	17	35,589
Mobile Home	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Commercial	0	0	0	0	3	371	13	7,477	15	8,638	18	8,940	24	10,685	35	33622
Public	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	1
Total	0	0	0	0	3	371	14	7,756	34	25,004	95	43,610	282	98,201	782	226,318
Leon Creek 6																
Single-Family	0	0	0	0	0	0	6	1,028	22	6,027	39	11,305	62	18,608	88	27,549
Multi-Family	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mobile Home	0	0	0	0	0	0	0	0	5	165	13	400	25	630	36	832
Commercial	0	0	3	27	9	257	48	31,745	62	34,174	75	43,845	85	55,006	97	57,641
Public	0	0	0	0	4	280	13	1,865	16	2,496	20	2,620	26	2,922	28	2,991
Total	0	0	3	27	13	536	83	34,638	105	42,862	147	58,169	198	77,166	249	89,014

	50%	6 AEP	20%	% AEP	109	% AEP	4%	AEP	2%	AEP	1%	6 AEP	0.4	% AEP	0.2	% AEP
Reach / Structure Type	No.	Value	No.	Value	No.	Value	No.	Value	No.	Value	No.	Value	No.	Value	No.	Value
Leon Creek 7																
Single-Family	0	0	0	0	15	4,889	69	25,052	118	43,189	154	58,047	188	71,541	210	78,444
Multi-Family	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mobile Home	0	0	0	0	0	0	0	0	1	119	1	119	1	119	1	119
Commercial	0	0	0	0	4	353	7	626	7	626	11	1,561	13	1,914	15	2,940
Public	0	0	0	0	1	10	2	63	2	63	2	63	2	63	2	63
Total	0	0	0	0	20	5,252	78	25,741	128	43,997	168	59,791	204	73,637	228	81,565
Leon Trib B																
Single-Family	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Multi-Family	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mobile Home	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Commercial	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Public	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Leon Trib F																
Single-Family	0	0	0	0	0	0	16	2,223	26	3,246	59	6,082	81	7,330	100	8775
Multi-Family	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mobile Home	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Commercial	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Public	0	0	0	0	0	0	1	69	1	69	1	69	1	69	1	69
Total	0	0	0	0	0	0	17	2,293	27	3,315	60	6,151	82	7400	101	8,844
Leon Trib H																
Single-Family	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Multi-Family	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mobile Home	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Commercial	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Public	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

	50%	% AEP	20%	% AEP	10	% AEP	4%	AEP	2%	AEP	1%	6 AEP	0.4	% AEP	0.2	% AEP
Reach / Structure Type	No.	Value														
Leon Trib J																
Single-Family	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Multi-Family	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mobile Home	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Commercial	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Public	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Leon Trib K																
Single-Family	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Multi-Family	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mobile Home	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Commercial	1	7	3	16	6	33	9	2,904	9	2,904	9	2,904	9	2,904	9	2,904
Public	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	1	7	3	16	6	33	9	2,904	9	2,904	9	2,904	9	2,904	9	2,904
Leon Trib L																
Single-Family	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Multi-Family	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mobile Home	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Commercial	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Public	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Leon Trib M																
Single-Family	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Multi-Family	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mobile Home	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Commercial	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Public	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

	50% AEP		20% AEP		10% AEP		4% AEP		2% AEP		1% AEP		0.4% AEP		0.2% AEP	
Reach / Structure Type	No.	Value	No.	Value	No.	Value	No.	Value	No.	Value	No.	Value	No.	Value	No.	Value
Los Reyes Creek																
Single-Family	0	0	0	0	0	0	1	102	3	286	5	730	12	4,337	16	6,094
Multi-Family	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mobile Home	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Commercial	0	0	2	319	2	319	3	327	4	420	6	426	10	796	13	1,692
Public	0	0	0	0	0	0	0	0	0	0	0	0	1	38	1	38
Total	0	0	2	319	2	319	4	429	7	706	11	1,156	23	5,171	30	7,825
Ranch Creek																
Single-Family	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Multi-Family	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mobile Home	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Commercial	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Public	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Slick Ranch																
Single-Family	0	0	44	5,903	104	14,132	140	19,031	155	21,183	170	23,252	209	28,641	255	35,021
Multi-Family	0	0	0	0	1	319	4	1,278	5	1,597	6	1,917	6	1,917	6	1,917
Mobile Home	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Commercial	0	0	0	0	0	0	0	0	0	0	5	15,327	5	15,327	8	16,441
Public	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	44	5,903	105	14,452	144	20,309	160	22,780	181	40,496	220	45,885	269	53,378
Slick Ranch Trib B																
Single-Family	0	0	1	10	2	62	3	113	3	113	3	113	3	113	3	113
Multi-Family	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mobile Home	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Commercial	0	0	0	0	0	0	1	1,670	1	1,670	1	1,670	1	1,670	1	1,670
Public	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	1	10	2	62	4	1,784	4	1,784	4	1,784	4	1,784	4	1,784

	50% AEP		20% AEP		10% AEP		4% AEP		2% AEP		1% AEP		0.4% AEP		0.2% AEP	
Reach / Structure Type	No.	Value	No.	Value	No.	Value	No.	Value	No.	Value	No.	Value	No.	Value	No.	Value
Westwood Village																
Single-Family	0	0	0	0	0	0	1	53	4	131	5	233	7	430	10	659
Multi-Family	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mobile Home	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Commercial	0	0	0	0	0	0	0	0	0	0	2	38	3	320	3	320
Public	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	1	53	4	131	7	271	10	750	13	979
Total Watershed																
Single-Family	1	112	58	9,303	185	33,225	441	92,531	783	173,806	1,390	303,204	2,487	540,673	3,757	812,722
Multi-Family	2	307	7	1,075	8	1,395	13	7,127	21	23,760	28	34,861	37	51,738	56	72,029
Mobile Home	0	0	10	109	80	913	123	2,863	130	3,162	144	3,453	169	3,967	193	4,797
Commercial	3	76	43	13,508	116	41,912	226	90,250	272	103,164	343	151,829	437	200,292	513	248,559
Public	2	119	8	817	19	1,331	43	4,380	56	6,092	66	7,852	78	10,650	111	19,481
Grand Total	8	614	126	24,813	408	78,775	846	197,151	1,262	309,984	1,971	501,199	3,208	807,320	4,630	1,157,588

- Babcock Tributary contains 27 total structures with a valuation of \$4,591,000. These structures comprise 11 (41%) single-family residential structures, seven (26%) multi-family residential structures, eight (30%) commercial structures, and one (4%) public structure. Single-family structures are valued at \$2,180,000 (61%), multi-family structures are valued at \$1,075,000 (23%), commercial structures are valued at \$103,000 (2%), and public structures are valued at \$602,000 (13%).
- In the Chimenea Creek, there are a total of four structures: one single-family residence valued at \$436,000 and three commercial structures valued at \$15,000.
- For reach 1 of Culebra Creek, there were 1,039 structures with a total valuation of \$246,393,000. The mix of structures is 972 (94%) single-family residences valued at \$227,907,000 (93%); 65 (6%) commercial structures valued at \$18,233,000 (7%); and two (0.2%) public structures valued at \$252,000 (0.1%).
- In reach 2 of Culebra Creek, there are 44 structures valued at \$12,043,000. The mix of structures is 27 (61%) single-family residences valued at \$6,593,000 (55%); 5 (11%) mobile homes valued at \$517,000 (4%); and 12 (27%) commercial structures valued at \$4,933,000 (41%).
- Culebra Creek Trib A contains 74 structures valued at \$18,901,000. All of the structures are single-family residential.
- Culebra Creek Trib C contains 21 structures valued at \$3,578,000: eight (38%) are single-family residential valued at \$2,782,000 (78%); one (5%) mobile home valued at \$15,000 (0.4%); and 12 (57%) commercial structures valued at \$781,000 (22%).
- Culebra Creek Trib E contains seven structures valued at \$3,158,000. Five (71%) of the structures are single-family residential valued at \$2,712,000 (86%). Two (29%) of the structures are commercial valued at \$445,000 (14%).
- French Creek contains 91 structures valued at \$39,502,000. The mix of structures is: 78 (86%) single-family residential valued at \$25,774,000 (65%); 10 (11%) commercial structures valued at \$11,232,000 (28%); and three (3%) public structures valued at \$2,496,000 (6%).
- Helotes Creek contains 305 structures valued at \$52,564,000. The structure mix is 233 (76%) single-family residences valued at \$44,257,000 (84%); 53 (17%) commercial structures valued at \$4,625,000 (9%); and 19 (6%) public structures valued at \$3,682,000 (7%).
- Helotes Creek Trib A contains 19 structures valued at \$2,340,000. The mix of structures is one (5%) single-family residential valued at \$124,000 (5%), and 18 (95%) commercial structures valued at \$2,216,000 (95%).
- Helotes Creek Trib B contains two single-family structures valued at \$388,000.
- Huebner Creek contains 393 structures valued at \$89,333,000. The mix of structures is: 360 (92%) single-family residences valued at \$75,748,000 (85%); 10 (3%) multi-family residential structures valued at \$10,626,000 (12%); seven (2%) commercial structures valued at \$478,000 (0.5%); and 16 (4%) public structures valued at \$2,480,000 (3%).

- Huebner Creek Trib A contains 22 structures valued at \$9,018,000. Fifteen (68%) of the structures are single-family residential valued at \$3,814,000 (42%); seven (32%) are commercial structures valued at \$5,204,000 (58%).
- Huesta Creek contains 44 structures valued at \$5,849,000. Nineteen (43%) of the structures are single-family residential valued at \$5,402,000 (92%), and 25 (57%) of the structures are mobile homes valued at \$447,000 (8%).
- Indian Creek contains 157 structures valued at \$17,644,000. The mix of structures is: 133 (85%) single-family residential valued at \$17,188,000 (97%); and 24 (15%) commercial structures valued at \$457,000 (3%).
- Leon Creek 1 contains 10 structures valued at \$3,377,000. One (10%) of the structures is a mobile home valued at \$85,000 (3%), and nine (90%) are public structures valued at \$3,292,000 (97%).
- Leon Creek 2 contains 218 structures valued at \$9,365,000. The mix of structures is: 36 (17%) single-family residential valued at \$3,560,000 (38%); 119 (54%) mobile homes valued at \$2,740,000 (29%); 61 (28%) commercial structures valued at \$3,052,000 (33%); three (1%) public structures valued at \$14,000 (0.1%).
- Leon Creek 3 Left contains six commercial structures valued at \$35,567,000.
- Leon Creek 3 Right contains one public structure valued at \$20,000.
- Leon Creek 4 contains 154 structures valued at \$81,147,000. The mix of structures is: 66 (43%) single-family residential valued at \$10,814,000 (13%); 16 (10%) multi-family residential structures valued at \$22,822,000 (28); six (4%) mobile homes valued at \$41,000 (0.1%); 43 (28% commercial structures valued at \$43,968,000 (54%); 23 (15%) public structures valued at \$3,501,000 (4%).
- Leon Creek 5 Left contains 307 single family residential structures valued at \$49,751,000.
- Leon Creek 5 Right contains 782 structures valued at \$226,318,000. The mix of structure is: 727 (93%) single-family residential valued at \$157,107,000 (69%); 17 (2%) multi-family structures valued at \$35,589,000 (16%); and 35 (5%) commercial structures valued at \$33,589,000 (15%).
- Leon Creek 6 contains 249 structures valued at \$89,014,000. The mix of structures is: 88 (35%) single-family residences valued at \$27,549,000 (31%); 36 (15%) mobile homes valued at \$832,000 (1%); 97 (39%) commercial structures valued at \$57,641,000 (63%); 28 (11%) public structures valued at \$2,991,000 (3%).
- Leon Creek 7 contains 228 structures valued at \$81,565,000. The mix of structures is: 210 (92%) single-family residences valued at \$78,444,000 (96%); one (0.4%) mobile home valued at \$119,000 (0.1%); 15 (7%) commercial structures valued at \$2,940,000 (4%); two (0.9%) public structures valued at \$63,000 (0.1%).
- Leon Trib F contains 101 structures valued at \$8,844,000. The mix of structures is: 100 (99%) single-family residences valued at \$8,775,000 (99%) and one (1%) public structure valued at \$69,000 (1%).

- Los Reyes Creek contains 30 structures valued at \$7,825,000. The mix of structures is: 16 (53%) single-family residences valued at \$6,094,000 (78%); 13 (43%) commercial structures valued at \$1,692,000 (11%); and one (3%) public structure valued at \$38,000 (.5%).
- Slick Ranch Creek contains 269 structures valued at \$53,378,000. The mix of structures: is 255 (95%) single-family residences valued at \$35,021,000 (66%); six (2%) multi-family structures valued at \$1,917,000 (4%); and eight (3%) commercial structures valued at \$16,441,000 (31%).
- Slick Ranch Trib B contains four structures valued at \$1,784,000. The mix of structures is three (75%) single-family residences valued at \$113,000 (6%); and one (25%) commercial structure valued at \$1,670,000 (94%).
- Westwood Village contains 13 structures valued at \$979,000. The mix of structures is 10 (77%) single-family residences valued at \$659,000 (67%), and three (23%) commercial structures valued at \$320,000 (33%).

Table A-7 shows the median value of structures and contents by structure category for structures in the database.

	Median Value of Structure and
Structure Category	Contents
Single-Family Residential	\$ 209
Multi-Family Residential	1,094
Mobile Residences	14
Commercial Structures	73
Public Structures	60

 Table A-7. Median Value of Structures and Contents (January 2008 Prices - \$000)

On the next page, Table A-8 provides the number and valuation for privately owned vehicles per single event category.

50% AEP		6 AEP	20% AEP		10% AEP		4% AEP		2% AEP		1%	AEP	0.4% AEP		0.2% AEP	
Reach	No.	Value	No.	Value	No.	Value	No.	Value	No.	Value	No.	Value	No.	Value	No.	Value
Babcock Trib	2	\$139	7	\$ 523	9	\$ 574	11	\$ 609	15	\$ 666	17	\$ 688	18	\$ 698	19	\$ 709
Chimenea Creek	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	27
Culebra Creek 1	0	0	0	0	8	162	76	1,558	216	4,424	375	7,675	707	14,193	1,010	20,094
Culebra Creek 2	0	0	0	0	0	0	0	0	1	26	6	156	18	469	46	1,197
Culebra Creek Trib A	0	0	0	0	4	95	11	261	19	451	32	762	57	1,361	74	1,767
Culebra Creek Trib C	0	0	0	0	2	52	2	52	3	84	5	142	8	226	11	309
Culebra Creek Trib E	0	0	0	0	0	0	1	32	1	32	2	64	2	64	5	159
French Creek	0	0	1	31	3	88	6	166	6	166	15	404	40	973	78	1,896
French Creek Trib A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Helotes Creek	0	0	0	0	4	116	13	377	32	781	107	2,168	164	3,302	237	4,715
Helotes Creek Trib A	0	0	0	0	0	0	0	0	0	0	0	0	1	26	1	26
Helotes Creek Trib B	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	62
Huebner Creek	0	0	3	47	24	381	69	1,003	121	1,843	187	3,008	303	5,228	374	7,149
Huebner Creek Trib A	1	17	4	66	8	132	11	182	12	198	12	198	12	198	14	231
Huesta Creek	0	0	8	201	16	403	24	604	26	654	34	855	49	1,250	64	1,634
Indian Creek	0	0	1	10	2	21	6	68	17	206	49	615	111	1,372	143	1,751
Leon Creek 1	0	0	0	0	0	0	0	0	0	0	1	13	1	13	2	26
Leon Creek 2	0	0	74	585	141	1,119	150	1,215	150	1,215	150	1,215	153	1,241	155	1,267
Leon Creek 3L	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Leon Creek 3R	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Leon Creek 4	0	0	2	20	2	20	7	136	15	278	32	513	55	785	90	1,526
Leon Creek 5L	0	0	0	0	0	0	0	0	6	112	78	1,453	216	4,024	307	5,719
Leon Creek 5R	0	0	0	0	0	0	1	25	19	1,119	78	2,480	259	6,633	746	16,475
Leon Creek 6	0	0	0	0	0	0	21	901	48	1,597	76	2,480	115	3,298	145	3,821
Leon Creek 7	0	0	0	0	16	489	83	2,368	135	3,673	167	4,522	194	5,263	215	5,858
Leon Trib B	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	12
Leon Trib F	0	0	0	0	14	138	31	305	60	590	82	807	100	984	102	1,004
Leon Trib H	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Leon Trib J	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Leon Trib K	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Leon Trib L	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Leon Trib M	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Los Reves Creek	0	0	0	0	0	0	1	32	3	95	5	159	12	382	16	509
Ranch Creek	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Slick Ranch	0	0	44	601	105	1,437	144	2,011	160	2,239	176	2,479	215	3,012	261	3,654
Slick Ranch Trib B	0	0	1	20	2	41	3	61	3	61	3	61	3	61	3	61
Westwood Village	0	0	0	0	0	0	1	10	5	49	7	69	7	69	11	108
Total	3	\$155	145	\$2,105	360	\$5,237	672	\$11,975	1,075	\$20,617	1,696	\$32,776	2,838	\$54,389	4,133	\$81,768

 Table A-8.
 Number and Value of Floodplain Privately Owned Vehicles (January 2008 Prices - \$000)

A-36
#### **Single Event Damages**

Damages in the floodplain begin to accrue with the 50% AEP event involving eight structures and damages estimated at \$63,000.

- With the 10% AEP, a total of 408 structures receive damages estimated at \$11,510,000. Singlefamily residential properties make up 45 percent of the structures and 33 percent of the damages. Commercial structures account for 28 percent of the structures and 59 percent of the damages.
- With a 4% AEP event, 846 structures are projected to receive damages totaling \$31,895,000. Of these structures, 52 percent are single-family residential and 26 percent, commercial. Single-family residential properties make up 34 percent of the total damages, while commercial structures account for 58 percent of the total.
- The 1% AEP event is projected to generate \$97,178,000 in damages to 1,971 structures. Seventyone percent of the structures are single-family residential, which accounts for 37 percent the damages. Commercial structures account for 17 percent of the total number of structures and 54 percent of the total damages.
- In the 0.2% AEP event, 4,629 structures are projected to experience damages totaling \$245,447,000. Eighty-one percent of the structures are single-family residential and 11 percent are commercial. Single-family residential structures account for 51 percent of the total damages, while commercial structures represent 41 percent of total damages.

#### Single Event Damages by Stream and Reach

This section provides summaries of the single event damages projected for each stream / reach, as detailed in Table A-9 on page A-42.

- Babcock Tributary. Damages begin in the 50% AEP along Babcock Tributary with \$37,000 of damages to two multi-family residential structures. With a 4% AEP event, damages increase to \$393,000 to 11 structures; seven multi-family, and four single-family. A 1% AEP event is estimated to generate \$586,000 in damage to eight single-family structures, seven multi-family structures, and six commercial structures. The 0.2% AEP event is projected to cause \$792,000 of damage to 27 structures: 11 single-family residential, seven multi-family residential, eight commercial, and one public structure.
- Chimenea Creek. Damages begin in the 2% AEP event, with less than \$1,000 of damage to one commercial structure. In the 0.2% AEP event, total damages are expected to be \$35,000, involving one single-family residential structure and three commercial structures.
- Culebra Creek 1. Damages begin to accrue with the 10% AEP event totaling \$100,000, involving six single-family residential structures and one commercial structure. Damages increase significantly in the 4% AEP event, jumping to \$1,612,000, involving 68 single-family residential structures and eight commercial structures. The single-family residential structures account for 89 percent of the total damages. With a 1% AEP event, a total of 379 structures are projected to be

affected with damages of \$10,261,000. Ninety-five percent of the structures are single-family residential and five percent are commercial. Single-family residential structures account for 96 percent of the damages, and commercial structures, four percent. With the 0.2% AEP event, 1,039 structures are expected to receive \$40,598,000 of damage. Ninety-four percent of the structures are single-family residential, which accounts for 91 percent of the total damages.

- Culebra Creek 2. Damages begin with the 4% AEP event, involving three commercial structures generating \$142,000 of damage. With the 1% AEP event, 11 commercial structures are projected to receive \$455,000 of damage. A 0.2% AEP event would generate \$1,307,000 of damage to 44 structures: 27 single-family residential properties accounting for 24 percent of the damages, five mobile homes accounting for six percent of the damages, and 12 commercial structures accounting for 70 percent of the damages.
- Culebra Creek Tributary A. Damages start with the 10% AEP event, with four single-family residential structures experiencing \$56,000 of damage. With a 4% AEP event, \$216,000 of damage is projected to occur, affecting 11 single-family residential structures. A 1% AEP event would generate \$649,000 of damage to 32 single-family residential structures. In the 0.2% AEP event, 57 single-family residential structures and two public structures are projected to receive \$1,120,000 of damage.
- Culebra Creek Tributary C. Damages begin with the 20% AEP event, two commercial structures and projected damages of \$8,000. In the 10% AEP event, damages increase to \$35,000 affecting one single-family residential structure, one mobile home, and three commercial structures. With a 4% AEP event, the same structures are projected to receive \$79,000 of damage. In the 1% AEP event, 12 structures would receive projected damages of \$162,000. This includes four single-family residential structures, one mobile home, and seven commercial structures. In a 0.2% AEP event, 21 structures are projected to experience \$404,000 of damage. The mix of structures is eight single-family residential, one mobile home, and 12 commercial structures.
- Culebra Creek Tributary E. Damages begin to accrue with the 4% AEP event and would generate \$41,000 of damage to one single-family residential structure. A 1% AEP event would create damages of \$70,000 to two single-family residential structures and one commercial structure. A 0.2% AEP event would cause \$130,000 of damage to five single-family residential structures and two commercial structures.
- French Creek. A 20% AEP event would affect one single-family residential structure and one commercial structure, causing an estimated \$45,000 of damage. A 10% AEP event would cause \$98,000 of damage to three single-family residential structures and one commercial structure. The 4% AEP event would cause \$247,000 of damage to six single-family residential structures and three commercial structures. The 1% AEP event would generate \$630,000 of damage to 15 single-family residential structures and four commercial structures. The 0.2% AEP event would cause \$3,153,000 of damage to 78 single-family residential structures, 10 commercial structures, and three public structures.
- Helotes Creek. Damages start with the 20% AEP event with \$7,000 of damage involving four commercial structures. Damages increase significantly with the 10% AEP event, to \$301,000.

Structures involved include five single-family residential structures and 17 commercial structures. The 4% AEP event is expected to damage 11 single-family residential structures and 29 commercial structures in the amount of \$989,000. The 1% AEP event would generate \$3,489,000 of damage to 106 single-family residential structures, 42 commercial structures, and four public structures. The 0.2% AEP event would cause \$7,676,000 of damage to 305 structures: 233 single-family residential, 53 commercial, and 19 public.

- Helotes Creek Tributary A. Damages start in the 20% AEP event, with five commercial structures incurring \$19,000 of damage. A 10% AEP event is projected to impact 10 commercial structures with \$101,000 of damage. The 4% AEP event would cause \$149,000 of damage to 15 structures. A 1% AEP event would generate \$229,000 of damage to 17 commercial structures. The 0.2% AEP event would generate damages of \$326,000, to 19 commercial structures.
- Helotes Creek Tributary B. Damages start with the 0.2% AEP event with \$10,000 of damage to two single-family residential structures.
- Huebner Creek. Damages begin with the 50% AEP event, involving one public structure with damages of \$15,000. In the 10% AEP event, damages would involve 10 single-family residential structures, two commercial structures, and five public structures with \$228,000 of damage. The 4% AEP would generate \$838,000 of damage to 63 single-family residences, three commercial structures, and ten public structures. The 0.2% AEP event would cause \$11,823,000 of damage to 360 single-family residences, 20 multi-family residences, seven commercial structures, and 16 public structures.
- Huebner Creek Tributary A. Damages begin with the 50% AEP event, with one single-family residence receiving \$3,000 of damage. The 10% AEP event generates \$120,000 of damage to seven single-family residences and one commercial structure. The 4% AEP event generates damages of \$201,000 to 10 single-family structures and one commercial structure. The 1% AEP event is projected to create damages of \$594,000 to 12 single-family residential structures and two commercial structures. With a 0.2% AEP event, damages would be \$1,374,000, involving 15 single-family residential structures and seven commercial structures.
- Huesta Creek. Damages first begin to accrue with the 20% AEP event, with \$11,000 of damage to one single-family residential structure. A 10% AEP event would realize \$29,000 of damage to one single-family residential structure and 11 mobile homes. The 4% AEP event would cause \$43,000 of damage to one single-family structure and six mobile homes. The 1% event would damage one single-family residence and nine mobile homes, causing \$98,000 of damage. The .2% AEP event would cause \$653,000 of damage to 19 single-family residences and 25 mobile homes.
- Indian Creek. Along Indian Creek, damages first begin with the 50% AEP event, with projected damages of \$5,000 to two commercial structures. In the 10% AEP event, damages totaling \$44,000 impact two single-family residential structures and 15 commercial structures. With a 4% AEP event, damages triple to \$135,000, involving five single-family residences and 18 commercial structures. In the 1% AEP event, 46 single-family residential structures and 19 commercial structures receive \$497,000 of damage. The 0.2% AEP event would generate \$1,839,000 in damages, involving 133 single-family residences and 24 commercial structures.

- Leon Creek 1. Damages start with the .04% AEP event, with \$87,000 of damage to one mobile home and three public structures. The 0.2% AEP event would create \$198,000 of damage to one mobile home and nine public structures.
- Leon Creek 2. Damages begin with the 20% AEP event, impacting four single-family structures, 10 mobile homes, and five commercial structures, with damages estimated at \$93,000. The 4% AEP event is projected to cause \$1,631,000 in damages to 32 single-family residences, 116 mobile homes, and 41 commercial structures. The 0.2% AEP event would generate \$4,743,000 in damages to 36 single-family residences, 118 mobile homes, 61 commercial structures, and three public structures.
- Leon Creek 3 Left. Damages begin with the 20% AEP event, causing \$924,000 of damage to four commercial structures. The 4% AEP event would generate \$10,689,000 of damage to five commercial structures. The 0.2% AEP event is projected to generate \$25,262,000 of damage to six commercial structures.
- Leon Creek 3 Right. Damages begin with the .04% AEP event, causing \$5,000 of damage to one public structure. In the .02% AEP, damages increase to \$7,000 to the same structure.
- Leon Creek 4. Damages start with the 50% AEP event, with an estimated \$3,000 damage to one public structure. The 4% AEP event would cause \$2,516,000 of damage to four single-family residences, two multi-family residential structures, 16 commercial structures, and 19 public structures. A 0.2% AEP event is expected to cause \$35,530,000 of damage to 66 single-family residences, 16 multi-family residential structures, six mobile homes, 43 commercial structures, and 23 public structures.
- Leon Creek 5 Left. Damages start with the 2% AEP event, with an estimated \$95,000 damage to six single-family residences. The 1% AEP event would generate \$1,368,000 of damage to 78 single-family residences. The 0.2% AEP event is projected to generate \$10,361,000 of damage to 307 single-family residences.
- Leon Creek 5 Right. Damages start with the 10% AEP event with \$63,000 of damages to three commercial structures. In the 4% AEP event, one single-family residence and 13 commercial structures would receive \$1,733,000 of damage. The 1% AEP event would generate \$7,728,000 in damages to 66 single-family residences, 11 multi-family residential structures, and 18 commercial structures. The .02% AEP event would generate \$35,207,000 of damage to 727 single-family residences, 17 multi-family residential structures, and three public structures.
- Leon Creek 6. Damages start with the 20% AEP event, involving three commercial structures and creating \$2,000 of damage. The 4% AEP event is projected to cause \$4,023,000 of damage to six single-family residences, 48 commercial structures, and 11 public structures. The 0.2% AEP event involves 88 single-family residences, 36 mobile homes, 97 commercial structures, and 28 public structures, with \$35,277,000 of damage.
- Leon Creek 7. Damages begin in the 10% AEP event, causing \$508,000 of damage to 15 singlefamily residences, four commercial structures, and one public structure. The 4% AEP event would generate \$2,805,000 of damage to 69 single-family residences, seven commercial structures, and

two public structures. The 0.2% AEP event would cause damage to 210 single-family residences, one mobile home, 15 commercial structures, and two public structures, estimated at a total of \$13,128,000.

- Leon Tributary F. Damages start with a 4% AEP event, expected to cause \$187,000 of damage to 16 single-family residences and one public structure. The 0.2% AEP event is projected to involve 100 single-family residences and one public structure, with \$1,629,000 in damages.
- Leon Tributary K. Damages first occur with the 50% AEP event, with less than \$1,000 damage to one commercial structure. The 10% AEP event is expected to generate \$146,000 in damages to six commercial structures. The 4% AEP event involves nine commercial structures with \$419,000 of damage. The 0.2% AEP event involves nine commercial structures with projected damages of \$566,000.
- Los Reyes Creek. Damages begin in the 20% AEP event, with \$19,000 of damage to two commercial structures. The 4% AEP event would generate \$65,000 of damage to one single-family residence and three commercial structures. The 0.2% AEP event would involve 16 single-family residences and 13 commercial structures, causing \$987,000 in damages.
- Slick Ranch Creek. Damages start with the 20% AEP event, with \$484,000 of damage to 44 single-family residences. The 4% AEP event would cause \$2,529,000 of damage to 140 single-family residences and four multi-family residential structures. The 0.2% AEP event is projected to generate \$10,200,000 damage to 255 single-family residences, six multi-family residential structures, and eight commercial structures.
- Slick Ranch Tributary B. Damages begin with the 20% AEP event, with estimated damages of \$2,000 to one single-family residence. The 4% AEP event involves three single-family residential structures and one commercial, with damages projected at \$209,000. The 0.2% AEP event is projected to cause \$445,000 of damage to three single-family residential structures and one commercial structure.
- Westwood Village Creek. Damages begin with the 4% AEP event, with \$4,000 of damage to one single-family structure. The 0.2% AEP event would create \$156,000 damage to 10 single-family residences and three commercial structures.

French Creek Trib A, Leon Creek Tribs B, H, J, M, and Ranch Creek do not generate any significant damages through the 0.2% AEP event.

On page A-51, Table A-10 provides detailed single-event damages to privately owned vehicles by reach.

	50%	6 AEP	20	% AEP	10	% AEP	4%	AEP	2%	AEP	19	6 AEP	0.4	% AEP	0.2	% AEP
Reach / Structure Type	No.	Dmg.	No.	Dmg.	No.	Dmg.	No.	Dmg.								
Babcock Trib																
Single-Family	0	\$ 0	0	\$ 0	2	\$ 18	4	\$83	7	\$ 151	8	\$ 213	11	\$ 296	11	\$ 355
Multi-Family	2	37	7	199	7	265	7	310	7	340	7	364	7	390	7	409
Mobile Home	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Commercial	0	0	0	0	0	0	0	0	2	<1	6	10	7	14	8	16
Public	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	13
Total	2	37	7	199	9	283	11	383	16	491	21	586	25	700	27	792
Chimenea Creek																
Single-Family	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	34
Multi-Family	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mobile Home	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Commercial	0	0	0	0	0	0	0	0	1	<1	1	<1	1	<1	3	1
Public	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	1	<1	1	<1	1	<1	4	35
Culebra Creek 1																
Single-Family	0	0	0	0	6	99	68	1,483	199	4,413	360	9,884	697	23,894	972	36,883
Multi-Family	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mobile Home	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Commercial	0	0	0	0	1	1	8	129	10	260	19	377	52	2,010	65	3,676
Public	0	0	0	0	0	0	0	0	0	0	0	0	1	34	2	39
Total	0	0	0	0	7	100	76	1,612	209	4,673	379	10,261	750	25,937	1,039	40,598
Culebra Creek 2																
Single-Family	0	0	0	0	0	0	0	0	0	0	0	0	3	106	27	313
Multi-Family	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mobile Home	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	75
Commercial	0	0	0	0	0	0	3	142	5	202	11	455	11	691	12	919
Public	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	3	142	5	202	11	455	14	797	44	1,307

 Table A-9. Structures and Contents Single Event Damages by AEP and Reach (January 2008 Prices - \$000)

	50%	% AEP	20%	6 AEP	109	% AEP	4%	AEP	2%	AEP	1%	6 AEP	0.4	% AEP	0.2	% AEP
Reach / Structure Type	No.	Dmg.	No.	Dmg.	No.	Dmg.	No.	Dmg.	No.	Dmg.	No.	Dmg.	No.	Dmg.	No.	Dmg.
Culebra Creek Trib A																
Single-Family	0	0	0	0	4	58	11	216	19	405	32	649	57	1,120	74	1,627
Multi-Family	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mobile Home	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Commercial	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Public	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	4	58	11	216	19	405	32	649	57	1,120	74	1,627
Culebra Creek Trib C																
Single-Family	0	0	0	0	1	12	1	44	2	73	4	111	6	187	8	274
Multi-Family	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mobile Home	0	0	0	0	1	1	1	2	1	2	1	2	1	3	1	4
Commercial	0	0	2	8	3	23	3	33	5	40	7	48	10	94	12	125
Public	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	2	8	5	35	5	79	8	115	12	162	17	284	21	403
Culebra Creek Trib E																
Single-Family	0	0	0	0	0	0	1	41	1	54	2	70	2	96	5	126
Multi-Family	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mobile Home	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Commercial	0	0	0	0	0	0	0	0	0	0	1	<1	1	<1	2	4
Public	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	1	41	1	54	3	70	10	96	7	130
French Creek																
Single-Family	0	0	1	41	3	86	6	181	8	301	15	489	39	1,171	78	2,164
Multi-Family	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mobile Home	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Commercial	0	0	1	4	1	12	3	67	3	90	4	141	8	374	10	858
Public	0	0	0	0	0	0	0	0	0	0	0	0	1	36	3	131
Total	0	0	2	45	4	98	9	247	11	392	19	630	48	1,581	91	3,153

	50%	% AEP	209	% AEP	109	% AEP	4%	AEP	2%	AEP	1%	AEP	0.4	% AEP	0.2	% AEP
Reach / Structure Type	No.	Dmg.	No.	Dmg.	No.	Dmg.	No.	Dmg.	No.	Dmg.	No.	Dmg.	No.	Dmg.	No.	Dmg.
French Creek Trib A																
Single-Family	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Multi-Family	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mobile Home	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Commercial	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Public	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Helotes Creek																
Single-Family	0	0	0	0	5	225	11	714	30	1,184	106	2,797	162	4,171	233	6,115
Multi-Family	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mobile Home	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Commercial	0	0	4	7	17	76	29	275	39	521	42	691	44	884	53	1,171
Public	0	0	0	0	0	0	0	0	0	0	4	1	4	2	19	391
Total	0	0	4	7	22	301	40	989	69	1,705	152	3,489	310	5,057	305	7,676
Helotes Creek Trib A																
Single-Family	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	36
Multi-Family	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mobile Home	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Commercial	0	0	5	19	10	101	15	149	16	176	17	229	18	266	18	290
Public	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	5	19	10	101	15	149	16	176	17	229	18	266	19	326
Helotes Creek Trib B																
Single-Family	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	10
Multi-Family	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mobile Home	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Commercial	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Public	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	10

	50%	6 AEP	20%	% AEP	109	% AEP	4%	AEP	2%	AEP	1%	5 AEP	0.4	% AEP	0.2	% AEP
Reach / Structure Type	No.	Dmg.	No.	Dmg.	No.	Dmg.	No.	Dmg.	No.	Dmg.	No.	Dmg.	No.	Dmg.	No.	Dmg.
Huebner Creek																
Single-Family	0	0	2	17	10	183	50	766	100	1,733	170	3,151	290	6,322	360	9,675
Multi-Family	0	0	0	0	0	0	0	0	0	0	0	0	2	233	10	1,535
Mobile Home	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Commercial	0	0	1	4	2	12	3	28	3	38	5	59	6	88	7	110
Public	1	15	2	24	5	34	10	44	13	74	15	184	15	361	16	503
Total	1	15	5	46	17	228	63	838	116	1,846	190	3,393	313	7,004	393	11,823
Huebner Creek Trib A																
Single-Family	1	3	3	54	7	116	10	190	11	266	12	344	13	439	15	517
Multi-Family	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mobile Home	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Commercial	0	0	0	0	1	5	1	11	1	13	2	250	6	707	7	857
Public	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	1	3	3	54	8	120	11	201	12	279	14	594	19	1,146	22	1,374
Huesta Creek																
Single-Family	0	0	1	11	1	23	1	30	1	36	1	71	8	260	19	563
Multi-Family	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mobile Home	0	0	0	0	1	6	6	13	6	19	9	26	18	53	25	90
Commercial	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Public	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	1	11	2	29	7	43	7	55	10	98	26	313	44	653
Indian Creek																
Single-Family	0	0	1	1	2	11	5	73	14	196	46	431	102	1,058	133	1,760
Multi-Family	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mobile Home	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Commercial	2	5	12	26	15	33	18	62	18	64	19	66	23	74	24	80
Public	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	2	5	13	27	27	44	23	135	32	260	65	497	125	1,132	157	1,839

	50%	% AEP	20%	6 AEP	109	% AEP	4%	6 AEP	2%	6 AEP	19	6 AEP	0.4	% AEP	0.2	% AEP
Reach / Structure Type	No.	Dmg.	No.	Dmg.	No.	Dmg.	No.	Dmg.	No.	Dmg.	No.	Dmg.	No.	Dmg.	No.	Dmg.
Leon Creek 1																
Single-Family	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Multi-Family	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mobile Home	0	0	0	0	0	0	0	0	0	0	0	0	1	39	1	79
Commercial	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Public	0	0	0	0	0	0	0	0	0	0	0	0	3	48	9	119
Total	0	0	0	0	0	0	0	0	0	0	0	0	4	87	10	198
Leon Creek 2																
Single-Family	0	0	4	65	21	384	32	777	33	985	33	1.135	34	1,319	36	1,527
Multi-Family	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mobile Home	0	0	10	19	78	213	116	499	117	760	117	1,035	117	1,482	118	2,056
Commercial	0	0	5	9	33	271	41	355	43	410	48	532	58	905	61	1,156
Public	0	0	0	0	0	0	0	0	3	1	1	3	3	3	3	5
Total	0	0	19	93	132	868	189	1,631	196	2,156	201	2,703	212	3,709	218	4,743
Leon Creek 3L																
Single-Family	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Multi-Family	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mobile Home	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Commercial	0	0	4	924	5	5,922	5	10,689	5	13,253	5	15,827	6	20,421	6	25,262
Public	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	4	924	5	5,922	5	10,689	5	13,253	5	15,827	6	20,421	6	25,262
Leon Creek 3R																
Single-Family	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Multi-Family	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mobile Home	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Commercial	0	0	0	0	0	0	0	0	0	0	0	0	1	5	1	7
Public	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	1	5	1	7

	50%	6 AEP	20%	6 AEP	109	% AEP	4%	AEP	2%	5 AEP	1%	6 AEP	0.4	% AEP	0.2	% AEP
Reach / Structure Type	No.	Dmg.	No.	Dmg.	No.	Dmg.	No.	Dmg.								
Leon Creek 4																
Single-Family	0	0	1	164	2	645	4	885	8	1,019	22	1,386	44	2,294	66	3,469
Multi-Family	0	0	0	0	0	0	2	671	3	1,316	4	2,139	5	3,453	16	5,908
Mobile Home	0	0	0	0	0	0	0	0	3	<1	3	3	6	8	6	17
Commercial	0	0	1	2	4	18	16	309	29	1,526	29	7,863	36	20,707	43	24,561
Public	1	3	6	100	9	284	19	652	21	879	21	1,059	21	1,301	23	1,575
Total	1	3	8	266	15	947	41	2,516	55	4,740	79	12,450	112	27,764	154	35,530
Leon Creek 5L																
Single-Family	0	0	0	0	0	0	0	0	6	95	78	1,368	216	5,381	307	10,362
Multi-Family	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mobile Home	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Commercial	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Public	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	6	95	78	1,368	216	5,381	307	10,362
Leon Creek 5R																
Single-Family	0	0	0	0	0	0	1	19	13	312	66	1,625	241	8,641	727	22,679
Multi-Family	0	0	0	0	0	0	0	0	6	1,750	11	3,281	17	5,554	17	7,306
Mobile Home	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Commercial	0	0	0	0	3	63	13	1,713	15	2,323	18	2,821	24	3,651	35	5,222
Public	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	<1
Total	0	0	0	0	3	63	14	1,733	34	4,385	95	7.728	282	17,846	782	35,207
Leon Creek 6																
Single-Family	0	0	0	0	0	0	6	137	22	542	39	1,213	62	2,690	88	4,746
Multi-Family	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mobile Home	0	0	0	0	0	0	0	0	5	24	13	51	25	92	36	152
Commercial	0	0	3	2	9	34	48	3,576	62	11,671	75	19,405	85	25,480	97	29,542
Public	0	0	0	0	4	25	11	310	16	458	20	558	26	689	28	787
Total	0	0	3	2	13	59	65	4.032	105	12,695	147	21,227	198	28,951	249	35,277

	50%	% AEP	20%	% AEP	10	% AEP	4%	AEP	2%	AEP	1%	5 AEP	0.4	% AEP	0.2	% AEP
Reach / Structure Type	No.	Dmg.	No.	Dmg.												
Leon Creek 7																
Single-Family	0	0	0	0	15	480	69	2,631	118	4,415	154	6,605	188	9,881	210	12,588
Multi-Family	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mobile Home	0	0	0	0	0	0	0	0	1	12	1	15	1	18	1	23
Commercial	0	0	0	0	4	28	7	164	7	203	11	271	13	368	15	503
Public	0	0	0	0	1	<1	2	10	2	11	2	12	2	13	2	14
Total	0	0	0	0	20	508	78	2,805	128	4,641	168	6,903	204	10,281	228	13,128
Leon Trib B																
Single-Family	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Multi-Family	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mobile Home	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Commercial	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Public	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Leon Trib F																
Single-Family	0	0	0	0	0	0	16	184	26	418	59	752	81	1,232	100	1,616
Multi-Family	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mobile Home	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Commercial	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Public	0	0	0	0	0	0	1	3	1	9	1	11	1	12	1	13
Total	0	0	0	0	0	0	17	187	27	427	60	763	82	1,244	101	1,629
Leon Trib H																
Single-Family	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Multi-Family	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mobile Home	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Commercial	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Public	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

	50%	6 AEP	20%	% AEP	109	% AEP	4%	AEP	2%	AEP	1%	5 AEP	0.4	% AEP	0.2	% AEP
Reach / Structure Type	No.	Dmg.	No.	Dmg.	No.	Dmg.	No.	Dmg.	No.	Dmg.	No.	Dmg.	No.	Dmg.	No.	Dmg.
Leon Trib J																
Single-Family	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Multi-Family	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mobile Home	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Commercial	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Public	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Leon Trib K																
Single-Family	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Multi-Family	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mobile Home	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Commercial	1	<1	3	1	6	146	9	419	9	460	9	493	9	533	9	566
Public	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	1	.<1	3	1	6	146	9	419	9	460	9	493	9	533	9	566
Leon Trib L																
Single-Family	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Multi-Family	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mobile Home	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Commercial	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Public	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Leon Trib M																
Single-Family	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Multi-Family	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mobile Home	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Commercial	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Public	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

	50%	% AEP	20%	6 AEP	10	% AEP	4%	AEP	2%	AEP	1%	6 AEP	0.4	% AEP	0.2	% AEP
Reach / Structure Type	No.	Dmg.														
Los Reyes Creek																
Single-Family	0	0	0	0	0	0	1	11	3	30	5	72	12	331	16	751
Multi-Family	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mobile Home	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Commercial	0	0	2	19	2	41	3	54	4	61	6	80	10	140	13	236
Public	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	2	19	2	41	4	65	7	91	11	152	22	470	29	987
Ranch Creek																
Single-Family	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Multi-Family	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mobile Home	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Commercial	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Public	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Slick Ranch																
Single-Family	0	0	44	484	104	1,462	140	2,353	155	3,034	155	3,772	209	4,925	255	5,866
Multi-Family	0	0	0	0	1	91	4	176	5	223	6	267	6	333	6	392
Mobile Home	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Commercial	0	0	0	0	0	0	0	0	0	0	5	2,063	5	2,192	8	3,942
Public	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	44	484	105	1,553	144	2,529	160	3,257	181	6,102	220	7,450	269	10,200
Slick Ranch Trib B																
Single-Family	0	0	1	2	2	4	3	7	3	9	3	12	3	15	3	17
Multi-Family	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mobile Home	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Commercial	0	0	0	0	0	0	1	202	1	258	1	309	1	397	1	428
Public	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	1	2	2	4	3	209	4	268	4	321	4	412	4	445

	50%	6 AEP	209	% AEP	10	% AEP	4%	6 AEP	2%	AEP	19	6 AEP	0.4	% AEP	0.2	% AEP
Reach / Structure Type	No.	Dmg.	No.	Dmg.	No.	Dmg.	No.	Dmg.	No.	Dmg.	No.	Dmg.	No.	Dmg.	No.	Dmg.
Westwood Village																
Single-Family	0	0	0	0	0	0	1	4	4	11	5	28	7	58	10	92
Multi-Family	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mobile Home	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Commercial	0	0	0	0	0	0	0	0	0	0	2	<1	3	50	3	64
Public	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	1	4	4	11	7	29	10	108	13	156
Total Watershed																
Single-Family	1	3	58	840	185	3,805	441	10,829	783	19,682	1,390	36,178	2,487	75,888	3,757	124,215
Multi-Family	2	37	7	199	8	356	13	1,157	21	3,629	28	6,050	37	9,963	56	15,550
Mobile Home	0	0	10	19	80	220	123	514	130	818	144	1,132	169	1,697	193	2,496
Commercial	3	5	43	1,025	116	6,786	226	18,377	272	31,569	343	51,991	437	80,049	513	99,957
Public	2	18	8	125	19	343	43	1,017	56	1,432	66	1,827	77	2,499	110	3,447
Grand Total	8	63	126	2,208	408	11,510	846	31,895	1,262	57,131	1,971	97,178	3,207	170,096	4,629	245,447

Table A-10. Privatel	v Owned Vehicles Single Even	t Damages by AEP and Reach	(January 2008 Prices - \$000)
			(00000000000000000000000000000000000000

	50%	% AEP	20	% AEP	10	% AEP	4	% AEP	2%	% AEP	19	6 AEP	0.4	% AEP	0.2	% AEP
Reach	No.	Value	No.	Value	No.	Value	No.	Value	No.	Value	No.	Value	No.	Value	No.	Value
Babcock Trib	2	\$64	7	\$ 402	9	\$ 502	11	\$ 563	15	\$ 600	17	\$ 625	18	\$ 645	19	\$ 654
Chimenea Creek	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	11
Culebra Creek R1	0	0	0	0	8	76	76	924	216	2,541	375	5,140	707	10,544	1,010	15,091
Culebra Creek R2	0	0	0	0	0	0	0	0	1	6	6	59	18	233	46	575
Culebra Creek Trib A	0	0	0	0	4	40	11	115	19	208	32	334	57	577	74	812
Culebra Creek Trib C	0	0	0	0	2	11	2	27	3	44	5	68	8	109	11	155
Culebra Creek Trib E	0	0	0	0	0	0	1	8	1	13	2	19	2	35	5	56
French Creek	0	0	1	14	3	28	6	68	8	106	15	173	40	427	78	846
French Creek Trib A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Helotes Creek	0	0	0	0	4	68	13	230	32	427	107	1,126	164	1,770	237	2,679
Helotes Creek Trib A	0	0	0	0	0	0	0	0	0	0	0	0	1	5	1	8
Helotes Creek Trib B	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	13
Huebner Creek	0	0	3	17	24	124	69	400	121	815	187	1,404	303	2,699	374	4,176
Huebner Creek Trib A	1	4	4	24	8	52	11	82	12	105	12	124	12	149	14	171

	50%	6 AEP	20	% AEP	10	% AEP	4	% AEP	2%	AEP	1%	AEP	0.49	% AEP	0.2	% AEP
Reach	No.	Value	No.	Value	No.	Value	No.	Value	No.	Value	No.	Value	No.	Value	No.	Value
Huesta Creek	0	0	8	83	16	229	24	368	26	451	34	570	49	906	64	1,225
Indian Creek	0	0	1	3	2	10	6	35	17	74	49	206	111	524	143	818
Leon Creek 1	0	0	0	0	0	0	0	0	0	0	1	8	1	13	2	23
Leon Creek 2	0	0	74	340	141	955	150	1,151	150	1,189	150	1,204	153	1,224	155	1,251
Leon Creek 3L	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Leon Creek 3R	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Leon Creek 4	0	0	2	7	2	20	7	88	15	189	32	379	55	654	90	1,214
Leon Creek 5L	0	0	0	0	0	0	0	0	6	32	78	713	216	2,617	307	4,454
Leon Creek 5R	0	0	0	0	0	0	1	27	19	483	78	1,385	259	4,345	746	10,655
Leon Creek 6	0	0	0	0	0	0	21	515	48	1,012	76	1,581	115	2,509	145	3,301
Leon Creek 7	0	0	0	0	16	279	83	1,387	135	2,266	167	3,103	194	4,156	215	4,870
Leon Trib B	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	4
Leon Trib F	0	0	0	0	14	53	31	156	60	329	82	519	100	748	102	869
Leon Trib H	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Leon Trib J	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Leon Trib K	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Leon Trib L	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Leon Trib M	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Los Reyes Creek	0	0	0	0	0	0	1	12	3	36	5	75	12	204	16	358
Ranch Creek	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Slick Ranch	0	0	44	213	213	686	144	1,111	160	1,394	176	1,690	215	2,119	261	2,472
Slick Ranch Trib B	0	0	0	0	4	12	3	22	3	27	3	32	3	38	3	43
Westwood Village	0	0	0	0	0	0	1	3	5	20	7	35	7	55	11	78
Total	3	\$68	145	\$1,108	360	\$3,143	672	\$7,292	1,075	\$12,368	1,696	\$20,571	2,820	\$37,306	4,133	\$56,880

### **EXPECTED ANNUAL DAMAGES**

Table A-11 shows the expected annual damages (EAD) for each reach in the study. The overall EAD for the watershed is estimated at \$12,325,000. Single-family residential structures account for 37 percent of total EAD, commercial structures account for 37 percent, privately owned vehicles account for 19 percent, public structures account for two percent, multi-family residential structures account for four percent, and mobile homes, about one percent.

The damage reach with the greaterst impact on EAD is Culebra Creek 1, accounting for 18 percent of the total EAD. Reach 3L of Leon Creek is responsible for 15 percent of the overall EAD. Leon Creek reaches 4, 5R, 6 each make up nine percent of EAD. Reach 7 of Leon Creek accounts for eight percent of total EAD. Slick Ranch accounts for seven percent of EAD. Helotes Creek, Huebner Creek, and Leon Creek 2 each account for four percent. The remaining reaches account for less than four percent each toward total EAD.

This analysis focuses on the existing conditions in the Leon Creek Watershed. Given the large area and number of streams and reaches involved, definitions of reaches and damage centers are expected to change as alternatives are explored. Because of small expected annual damages, some reaches or portions of reaches, could be removed from consideration. Additionally, reaches could be combined, based on cross-reach impacts of alternatives that are developed.

Using present-value calculations to equate cost and benefit stream, a Federal interest rate of 4-5/8 percent, a period of analysis of 50 years, and total expected annual damages of \$12,325,000, along with the assumption of eliminating all of the EAD, a potential sum of project sizes of \$266,486,000 would yield a benefit-to-cost ratio of 1. The final column in Table A-11 indicates similar calculations using the same assumptions for potentially supportable projects for each reach.

Reach	Commercial	Multi-Family Residential	Mobile Homes	Public	Privately Owned Vehicles	Single- Family Residential	Total EAD	Maximum Supportable Project Size
Babcock Trib	\$ 4	\$ 90	\$ 0	\$4	\$ 158	\$ 21	\$ 277	\$ 5,989
Chimenea Creek	< 1	0	0	0	0	1	2	43
Culebra Creek 1	153	0	0	2	606	1,418	2,178	47,092
Culebra Creek 2	50	0	3	0	19	12	83	1,795
Culebra Trib A	0	0	0	0	27	60	87	1,881
Culebra Trib C	10	0	< 1	0	6	13	29	627
Culebra Trib E	3	0	0	0	3	12	17	368
French Creek	114	1	0	9	37	109	269	5,816
French Trib A	0	0	0	0	0	< 1	<1	
Helotes Creek	73	0	0	11	113	293	491	10,616
Helotes Trib A	42	0	0	0	< 1	2	44	941
Helotes Trib B	0	0	0	0	< 1	< 1	1	22

Table A-11.	Expected Annual Damages and Potentially Supportable Projects by Reach
	(January 2008 Prices - \$000)

Deach	Commoroial	Multi-Family	Mobile	Dublic	Privately Owned	Single- Family	Total	Maximum Supportable
Reach	Commercial	Residentia	Homes	Public	venicies	Residential	EAD	Project Size
Huebner Creek	9	19	< 1	29	124	301	482	10,422
Huebner Trib A	52	0	0	0	17	46	114	2,465
Huesta Creek	0	7	4	0	83	25	118	2,551
Indian Creek	15	0	0	< 1	20	49	84	1,816
Leon Creek 1	0	0	1	3	<1	0	4	86
Leon Creek 2	68	0	89	< 1	178	109	444	9,622
Leon Creek 3L	1,733	0	0	0	0	0	1,733	37,470
Leon Creek 3R	< 1	0	0	0	0	0	< 1	
Leon Creek 4	642	158	< 1	112	31	179	1,122	24,259
Leon Creek 5L	0	0	0	0	90	209	300	6,486
Leon Creek 5R	290	229	0	0	203	415	1,136	24,562
Leon Creek 6	878	0	3	37	75	68	1,060	22,919
Leon Creek 7	35	0	2	2	288	687	1,013	21,903
Leon Trib B	0	0	0	0	< 1	< 1	< 1	
Leon Trib F	0	0	0	1	38	59	98	2,119
Leon Trib H	0	0	0	0	0	< 1	< 1	
Leon Trib J	0	0	0	0	0	< 1	< 1	
Leon Trib K	162	0	0	0	0	0	162	3,503
Leon Trib L	0	0	0	0	0	0	0	
Leon Trib M	0	0	0	0	0	0	0	
Los Reyes Creek	14	0	0	< 1	5	9	28	605
Ranch Creek	0	0	0	0	0	0	0	
Slick Ranch	126	32	0	0	203	492	853	18,443
Slick Ranch Trib B	79	< 1	0	0	5	2	86	1,859
WW Village	3	0	0	0	3	3	8	173
Total	\$4,553	\$535	\$102	\$209	\$2,332	\$4,593	\$12,325	\$266,486

# Future Without-Project Expected Annual Damages and Average Annual Equivalents

For this study, future conditions represent 2035, 25 years beyond the 2010 base for existing conditions. Hydraulic and hydrological estimates for the future without-project conditions were entered into HEC-FDA to calculate expected annual damages for the future condition. The structure database was held constant for computation of future expected annual damages. As described in Appendix G.1 "Hydrologic and Hydraulic Analyses," future conditions generally show increased flows and damages, but some reaches experienced a decrease in flows. On the next page, Table A-12 shows the EAD values for future without-project conditions by economic reach, along with existing conditions EADs for comparison.

To determine any potential benefits from alternatives, these two EAD values were used to create average annual equivalents (AAE) or equivalent annual damages, because full benefits from any alternative would not begin until 2035. Using a Federal interest rate of 4-5/8 percent and time horizon

of 50 years, average annual equivalents (AAE) were computed within HEC-FDA for each reach. The without-project AAE damages are also included in Table A-12.

	Existing	Future	Without
Reach	Project EAD	Project EAD	Project AAE
Babcock Trib	\$ 277	\$ 430	\$ 359
Chimenea Creek	2	1	2
Culebra Creek 1	2,178	1,722	1,933
Culebra Creek 2	83	80	81
Culebra Trib A	87	98	93
Culebra Trib C	29	38	34
Culebra Trib E	17	18	17
French Creek	269	240	254
French Trib A	< 1	< 1	< 1
Helotes Creek	491	500	496
Helotes Trib A	44	45	45
Helotes Trib B	1	<1	1
Huebner Creek	482	421	449
Huebner Trib A	114	120	117
Huesta Creek	118	121	120
Indian Creek	84	86	85
Leon Creek 1	4	4	4
Leon Creek 2	444	564	508
Leon Creek 3L	1,733	2,179	1,972
Leon Creek 3R	< 1	< 1	< 1
Leon Creek 4	1,122	1,199	1,163
Leon Creek 5L	300	300	300
Leon Creek 5R	1,136	1136	1,136
Leon Creek 6	1,060	1,450	1,270
Leon Creek 7	1,013	1,094	1,057
Leon Trib B	< 1	< 1	< 1
Leon Trib F	98	150	126
Leon Trib H	< 1	< 1	< 1
Leon Trib J	< 1	< 1	< 1
Leon Trib K	162	182	172
Leon Trib L	0	0	0
Leon Trib M	0	0	0

#### Table A-12. Existing and Future Without-Project Expected Annual Damages and Without-Project Average Annual Equivalents (January 2008 Prices - \$000)

Reach	Existing Without- Project EAD	Future Without - Project EAD	Without- Project AAE
Los Reyes Creek	28	39	33
Ranch Creek	0	0	0
Slick Ranch	853	1,124	998
Slick Ranch Trib B	86	99	93
WW Village	8	8	8
Total	\$12,325	\$13,449	\$12,927

## PRELIMINARY STRUCTURAL ALTERNATIVES

This section describes how the team began to narrow the focus of the study as a result of the flood damage and cost analysis. Upon reviewing the damages in the overall watershed, 12 areas of interest (AOI), based on structural *damage centers*, were identified for further study. Then preliminary structural alternatives were developed to address the problems in the areas of interest.

Damages (economic) reaches were identified based on H&H considerations, such as significant highway crossings or significant confluences with other streams, along Leon Creek and Cuebra Creek. Other streams were treated as single reaches.

Because of the size of the watershed, a method was needed to identify what areas to focus on. Damage centers based on structure damages were coded using ArcView, and maps prepared. Areas of concentrated damage were identified as areas of interest (AOIs). In some cases, and AOI spans an economic reach because of he confluence of to multiple streams or damages existed on either side of a reach break. AOIs were simply used at a method of focusing in or areas for further study. Damages and benefits are all based on economic reach classifications not AOIs.

#### **Areas of Interest**

The damage centers were indicated by clusters of structures that had some significant damage in the same event. An area in the watershed of high or concentrated damage—which can include more than one damage center or areas beyond a particular damage center—determines the location of an AOI. On the next page, Table A-13 describes the geographic location and boundaries of each AOI.

Area of Interest	Stream	Original Reach	AOI Location and Bounds
AOI-1	Leon Creek	LC R2	On Leon Creek between Quintana Road and New Laredo Highway
AOI-2	Leon Creek	LC R3	On Leon Creek, just south of its crossing of SW Military Dr
AOI-3	Leon Creek Trib F	LC Trib F	On tributary F of Leon Creek, bounded on the east by S. Callaghan Road, on the south by Old US Highway 90 W, on the west by Gena Road, and on the north by the northern boundary of the tributary's 500-year flood delineation
AOI-4	Slick Ranch Creek	Slick Ranch	On Slick Ranch Creek, upstream of its confluence with Leon Creek. Bounded on the north by State Highway 151, Pinn Road to the east, Marbach Road to the south, and the stream's 500-year floodplain delineation to the west
AOI-5	Culebra Creek Leon Creek	Culebra LC R5	On Culebra Creek, from its confluence with Leon Creek in Reach 5, and continuing along Culebra Creek, upstream to its confluence with Helotes Creek
AOI-6	Huebner Creek	Huebner	Along Huebner Creek, bounded on the north at its crossing with Bandera Road, and on the south near Brierbrook, on the east and west by the 500-year floodplain delineation of the stream
AOI-7	Leon Creek	LC R5	Along Leon Creek, from Barryhill Road to the north, Grissom Road to the south, and the stream's 500-year floodplain delineation on the east and west
AOI-8	Huebner Creek	Huebner	Along Huebner Creek, bounded on the north by Parkland Oaks Drive, to the south by Bandera Road, and on the east and west by the 500-year floodplain delineation of the stream
AOI-9	Huebner Creek	Huebner	Along Huebner Creek from just above Babcock Road on the north, to the crossing at Whitby Road to the south, and on the east and west by the 500-year floodplain delineation
AOI-10	Leon Creek	LC 6	Along Leon Creek, beginning at Mission Cemetery on the north, along the stream parallel to I-10 W, to just south of Old Camp Bullis Road.
AOI-11	Leon Creek Leon Creek Leon Creek Trib L	LC 6 LC 7	Along tributary L of Leon Creek, just southeast of the intersection of Broad Oak Trail and Boerne Stage Road to the northwest, following the stream to its confluence with Leon Creek at I-10 W
AOI-12	Helotes Creek	Helotes	On Helotes Creek, roughly bounded on the north by Pond Road, to the east by Ink Wells and Pine Branch, the south by Village Basin, and to the west by W Loop 1605 N

#### Table A-13. Identified Areas of Interest

On page A-58, Figure A-5 shows the location of the 12 areas of interest within the watershed.



Figure A-5. Leon Creek Areas of Interest

To address the areas of interest, 18 preliminary structural alternatives were developed, along with water surface profiles. In addition to existing conditions, future conditions were developed for each alternative, and average annual equivalent damages were computed using HEC-FDA with an interest rate of 4-5/8 percent and an analysis horizon of 50 years. For descriptions of the alternatives with area maps, see the main report. For information on the water surface profiles, see Appendix G.1 "Hydrologic and Hydraulic Analysis."

*Benefits* are the dollar amount of flood damages reduced by a given alternative. The reduction in flood damages is measured by the difference in average annual equivalents of the without- and with-project conditions. Table A-14 provides a summary of each alternative, its without- and with-project AAE, and the resulting annual benefit.

Alternative	Name	Target Area of Interest	Without- Project AAE (\$)	With-Project AAE (\$)	Total Annual Benefits (\$)
1	Leon Creek Overbank Mod	AOI-1	12,927,160	12,725,580	201,580
2	Leon Creek 100-Year Levee	AOI-2	12,927,160	10,961,730	1,965,430
3	Leon Creek 500-Year Levee	AOI-2	12,927,160	10,910,270	2,016,890
4	Leon Creek Bypass Channel	AOI-2	12,927,160	11,702,820	1,224,340
5	Slick Ranch Creek Channel Mod	AOI-4			
6	Leon Trib F 500-Year Levee	AOI-3	12,927,160	12,801,320	125,840
7	Huebner Trib A Pond	AOI-8, 6	12,927,160	12,430,330	496,830
8	Huebner Channel Mod	AOI-9	12,927,160	12,911,760	15,400
9	LC-15: Huebner Creek RSWF at Prue Road	AOI-9	12,927,160	12,659,740	267,420
10	Helotes Channel Mod	AOI-12	12,927,160	12,819,350	107,810
11	DC-12 Helotes Creek RSWF	AOI-12, 5, 2, 1	12,927,160	11,162,360	1,764,800
12	Helotes Quarry Pond	AOI-12, 5, 2, 1	12,927,160	10,847,550	2,079,610
13	Government Canyon RSWF	AOI-5	12,927,160	11,216,460	1,710,700
14	Government Canyon RSWF	AOI-5	12,927,160	10,803,370	2,123,790
15	Leon 100-Year Levee	AOI-7	12,927,160	12,483,890	443,270
16	Leon 500-Year Levee	AOI-7	12,927,160	12,507,720	419,440
17	Quarry at the Rim	AOI-7 and above	12,927,160	12,157,530	769,630
18	AOI-11 Ponds	AOI-11	12,927,160	11,817,490	1,109,670

 Table A-14. Preliminary Average Annual Equivalent Damages Summary

## ANALYSIS OF STRUCTURAL MEASURES FLOOD RISK MANAGEMENT BENEFITS, COSTS, AND NET BENEFITS

During the plan formulation of the structural alternatives, the values of structures and contents were updated to reflect October 2010 prices. Costs for the analysis used during preliminary plan formulation were provided by Halff & Associates, who were responsible for modeling the alternatives. Additionally, average annual equivalents and annualized costs were calculated using a Federal discount rate of 4.125%. An updated summary of the average annual equivalents (AAE) for the without project scenario is presented in Table A-22.

Reach	Average Annual Equivalents
Babcock Trib	382.11
Chimenea Creek	1.57
Culebra Creek Reach 1	1,977.59
Culebra Creek Reach 2	85.68
Culebra Creek Trib A	97.94
Culebra Creek Trib C	36.12
Culebra Creek Trib E	18.18
French Creek	266.43
Frech Creek Trip A	0.01
Helotes Creek	521.52
Helotes Creek Trib A	46.93
Helotes Creek Trib B	0.52
Huebner Creek	471.36
Huebner Creek Trib A	123.45
Huesta Creek	126.47
Indian Creek	89.50
Leon Creek Reach 1	4.14
Leon Creek Reach 2	528.93
Leon Creek Reach 3 Right	0.22
Leon Creek Reach 3 Left	1,937.56
Leon Creek Reach 4	1,165.58
Leon Creek Reach 5 Right	1,034.32
Leon Creek Reach 5 Left	310.79
Leon Creek Reach 6	1,388.08

## Table A-22. Without Project Average Annual EquivalentsOctober 2010 Prices, \$1,000

Leon Creek Reach 7	1,131.71
Leon Creek Trib B	0.32
Leon Creek Trib F	133.75
Leon Creek Trib H	0.21
Leon Creek Trib J	0.09
Leon Creek Trib K	181.87
Leon Creek Trib M	0.00
Los Reyes Creek	35.44
Ranch Creek	0.00
Slick Ranch	1,388.67
Slick Ranch Trib B	98.29
Westwood Village Creek	8.10
Total AAE	\$13,593.45

#### Alternative 1

Alternative 1 targeted damages in AOI-1, located in reach 2 of Leon Creek with additional impacts to reaches 3L and 3R of Leon Creek. This alternative consisted of removing the high point on one side of the creek to allow overbank storage sufficient enough to contain the 5-year AEP event. The with-project AAE is \$13,444,070, resulting in annual benefits of \$149,500. Annual costs for the this alternative are estimated at \$987,000, yielding net annual benefits of -\$837,550 and a benefit-to-cost ratio of 0.15. With negative net benefits, this alternative was not carried forward.

Table A-23. Summary of Net Annual Benefits for AOI-1

Alternative	AAE	Annual Benefits	Annual Costs	Net Annual Benefits	B-C Ratio
1	\$13,444,070	\$149,500	\$987,000	-\$837,550	0.15

#### Alternative 2, 3, and 4

Alternatives 2 - 4 targeted damages in AOI-2, the test cell facility, located in reach 3 of Leon Creek with additional impacts to reach 4 of Leon Creek. These alternatives consisted of various levees on the left bank of Leon Creek and bypass channels constructed on the right hand bank of Leon Creek.

Alternative 2 is a levee designed to contain the 100-year AEP event. The initial with-project AAE is \$12,543,800, resulting in annual benefits of \$1,049,000. Annual costs for the this alternative are estimated at \$593,700, yielding net annual benefits of \$456,200 and a benefit-to-cost ratio of 1.77. However, the alternative resulted induced annual damages of \$250 upstream related higher water surface elevations. These reported AAE does not include these induced damages. Alternative 2B is a refinement of Alternative 2 to reduce the induced damages and incorporate interior drainage features in the project costs. Alternative 2B has an AAE of \$12,072,670 yielding annual benefits of \$883,480 and a

benefit-to-cost ratio of 2.39. With the refinements, \$100 of annual induced damages remained. Alternative 2B with Hydraulic Mitigation was a further refinement on Alternative 2B to include upstream channel modifications to address the remaining induced damages. This refined alternative has an AAE of \$11,843,950, yielding annual benefits of \$1,749,500. Annual costs were estimated at \$828,700 yielding net annual benefits of \$920,800 and a benefit-to-cost ratio of 2.11. Additionally, induced damages upstream were eliminated. This final refinement of Alternative 2 is carried forward.

Alternative 3 consisted of a levee designed to contain the 500-year AEP event on the left bank. The alternative had an AAE of \$11,659,930, yielding an annual benefit of \$1,933,800. Annual costs are estimated to be \$789,300, yielding net annual benefits of \$1,144,500 and a benefit-to-cost ratio of 2.45. The alternative resulted in \$280 of annual induced damages upstream, not included in the AAE.

Alternative 4 considered a by-pass channel constructed on the right bank of Leon Creek in reach 3. A preliminary100 ft channel was modeled and giving an AAE of \$12,466,140, yielding annual benefits of \$1,127,310. Annual costs were estimated at \$239,600, yielding annual net benefit of \$887,710 and a benefit-to-cost ratio of 4.10. This alternative was carried forward for refinement in modeling and cost estimates, and additional widths were considered. Alternative 4A considered a 25 foot channel, Alternative 4B considered an 40 foot channel, and Alternative 4C considered a refined 100 foot channel from Alternative 4. A summary of the refined alternatives is shown in Table A-23.

Alternative	AAE	Annual Benefits	Annual Costs	Net Annual Benefits	B-C Ratio
2	\$12,543,800	\$1,049,000	\$593,700	\$456,200	1.77
2B	\$12,072,670	\$1,520,880	\$637,400	\$883,480	2.39
2B w/ Mit.	\$11,843,950	\$1,749,500	\$828,700	\$920,800	2.11
3	\$11,659,930	\$1,933,800	\$789,300	\$1,144,500	2.45
4	\$12,466,140	\$1,127,310	\$239,600	\$887,710	4.70
4A	\$13,137,720	\$455,730	\$152,800	\$302,930	2.98
4B	\$13,047,810	\$545,640	\$165,800	\$379,840	3.29
4C	\$12,892,321	\$701,140	\$220,300	\$480,840	3.18
2B + 4C	\$11,842,220	\$1,751,490	\$813,300	\$938,190	2.15
2B w/ Mit. +					
4C	\$11,508,610	\$1,750,260	\$1,001,600	\$748,660	1.75
3 w/ Mit. + 4C	\$11,320,770	\$1,938,090	\$1,154,300	\$783,790	1.68

Table A-24. Summary of Net Annual Benefits for AOI-2

While all three variations had positive net annual benefits, none of the three refinements exceeded the net annual benefits of the levee alternatives.

Prior to modeling Alternative 2B with hydraulic mitigation, a combination of the 100 year levee (Alternative 2B) and the 100 foot bypass channel (Alternative 4C) was considered. The combination had an AAE of \$11,842,220, yielding annual benefits of \$1,751,490. The annual cost of the combination is estimated at \$812,100, yielding net annual benefits of \$938,190 and a benefit-to-cost ratio of 2.15. While having higher net benefits, the alternative did not reduce the induced damages as intended.

Two additional combinations of alternatives were also analyzed for AO2. The first combination included the 100 year levee with mitigation and the 100' bypass channel. The annual benefits for this combination is \$1,750,250 and annual costs are \$1,001,600, yielding net annual benefits of \$748,660 and a benefit-to-cost ratio of 1.75. The second combination included the alternative 3, the 500 year levee to include hydraulic mitigation and the 100' bypass channel. For this combination, annual benefits are \$1,938,090 and annual costs are \$1,154,300. This yielded net annual benefits of \$738,790 and a benefit-to-cost ratio of 1.68.

Alternative 2B (100 year levee with hydraulic mitigation), the combination of alternative 2B and 4C, and the combination of alternative 3 (with hydraulic mitigation) and 4c were carried forward for further consideration with cost refinements.

#### Alternative 5

Alternative 5 consisted of channel improvements along Slick Ranch Creek to address damages in AOI-4. The AAE for this alternative is \$13,392,860, yielding annual benefits of \$200,590. During the plan formulation screen process, it was learned that the City of San Antonio and constructed alternatives in the reach after the existing conditions were prepared, and the sponsor felt that damages through the 100-year AEP had been addressed and made the decision to not proceed with additional investigation along this reach.

Alternative	AAE	Annual Benefits	Annual Costs	Net Annual Benefits	B-C Ratio
5	\$13,392,860	\$200,590	-	-	-

Table A-25. Summary of Net Annual Benefits for AOI-4

#### Alternative 6

Alternative 6 was developed to address damages in AOI-3, located on Leon Creek Trib F. The preliminary alternative consisted of a levee to contain the 500-year AEP event. The AAE for the alternative is \$13,474,430, yielding annual benefits of \$119,020. Annual costs for the alternative was estimated at \$73,700, yielding a net annual benefit of \$45,320 and a benefit-to-cost ratio of 1.61. The local sponsor chose not to proceed with investigation of this alternative.

Table A-26. Summary of Net Annual Benefits for AOI-3

Alternative	AAE	Annual Benefits	Annual Costs	Net Annual Benefits	B-C Ratio
6	\$13,474,430	\$119,020	\$73,700	\$45,320	1.61

#### Alternative 7

Alternative 7 was developed to address damages in AOI 8 and AOI 6, both located on Heubner Creek. The alternative consisted of detention pond at the confluence of Huebner Trib A and Huebner Trib B. The AAE for the alternative is \$13,319,190, yielding annual benefits of \$284,040. The annual cost for

the alternative is estimated at \$1,028,400, yielding net annual benefits of -\$744,360. Additionally, the alternative generated \$9,780 in annual induced damages. Because of the negative net benefits, the alternative was not carried forward for further analysis or consideration.

Alternative	AAE	Annual Benefits	Annual Costs	Net Annual Benefits	B-C Ratio
7	\$13,319,190	\$284,040	\$1,028,400	-\$744,360	0.28

Table A-27. Summary of Net Annual Benefits for AOI-6 and 8

#### Alternative 8 and 9

Alternatives 8 and 9 were developed to address damages in AOI 9, located on Huebner Creek. Alternative 8 consisted of a channel modification to widen and deepen Huebner Creek. The AAE for Alternative 8 is \$13,577,210, yielding annual benefits of \$16,240. The annual cost is estimated to be \$78,700, yielding net annual benefits of -\$62,460 and a benefit-to-cost ratio of 0.21. With negative net annual benefits, the alternative was not carried forward.

Alternative 9 consists of a detention pond on Heubner Creek located just upstream of Prue Road. The facility is currently in design phase, with construction by the Bexar County Flood Control District to begin in the late 2012 to 2013 time frame. The alternative is being considered to determine if it might be included the recommended plan resulting from this study. The AAE for this alternative is \$13,565,200, yielding annual benefits of \$35,230. The annual cost of this alternative is estimated at \$279,300, yielding net annual benefits of -\$244,070 and a benefit-to-cost ratio of 0.13. Given the negative net annual benefits, the alternative was not carried forward.

Table A-28.	Summarv	of Net	Annual	<b>Benefits</b>	for	AOI-9
1 4010 11 20.	Summary	ULIQU	Innuai	Denemus	101	101 /

Alternative	AAE	Annual Benefits	Annual Costs	Net Annual Benefits	B-C Ratio
8	\$13,577,210	\$16,240	\$78,700	-\$62,460	0.21
9	\$13,565,200	\$35,230	\$279,300	-\$244,070	0.13

#### Alternative 10

Alternative 10 was developed to address damages in AOI 12, located on Helotes Creek. The alternative consists of tree and brush clearing from the channel and overbank area. The AAE for the alternative is \$13,486,660, yielding annual benefits of \$106,790. Annual costs for this alternative is estimated at \$431,200, yielding annual net benefits of -\$324,410 and a benefit-to-cost ratio of 0.25. Given negative net benefits, the alternative was not carried forward.

Table A-29. Summary	y of Net Annual	<b>Benefits for</b>	<b>AOI-12</b>
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Alternative	AAE	Annual Benefits	Annual Costs	Net Annual Benefits	B-C Ratio
10	\$13,486,660	\$106,790	\$431,200	-\$324,410	0.25

#### Alternatives 11 and 12

Alternatives 11 and 12 were developed to address damages in AOIs 12, 5, 2 and 1. AOI 12 located on Helotes Creek, AOI 5 located on Culebra Creek Reach 1 and Leon Creek Reach 5, AOI 2 is located on Leon Creek Reach 3, and AOI 1 I located on Leon Creek Reach 2.

Alternative 11 consists of a detention pond with a 28.5 foot high dam located on Helotes Creek south of FM 1560. The AAE for the alternative is \$12,091,260, yielding annual benefits of \$1,540,530. Annual costs are estimated at \$678,000, yielding net annual benefits of \$862,530 and a benefit-to-cost ratio of 2.27.

Alternative 12, also a detention pond, utilizes a near-by quarry. Located downstream of FM1560 on Helotes Creek and upstream of Alternative 11, this pond would have a lateral weir to redirect flow and take advantage of approximately 5,000 acre-feet of storage within the quarry. The AAE for the alternative is \$11,566,850, yielding annual benefits of \$2,026,600. Annual costs are estimated at \$498,000, yielding net annual benefits of \$1,528,600 and a benefit-to-cost ratio of 4.07. Alternative 12 provides significantly greater net annual benefits over Alternative 11, and therefore will be carried forward.

Alternative	AAE	Annual Benefits	Annual Costs	Net Annual Benefits	B-C Ratio
11	\$12,091,260	\$1,540,530	\$678,000	\$862,530	2.27
12	\$11,566,850	\$2,026,600	\$498,000	\$1,528,600	4.07

 Table A-30. Summary of Net Annual Benefits for AOI-12, 5, 2 and 1

#### Alternatives 13 and 14

Alternatives 13 and 14 were developed to address damages in AOI 5, located on Culebra Reach 1, Culebra Reach 2 and Leon Creek Reach 5. Additional benefits downstream of Leon Creek Reach 5 are also expected. Both alternatives consider detention areas in Government Canyon on Culebra Creek.

Alternative 13 consists of a pond created by a 60-foot high 350-foot wide dam to be located on Culebra Creek approximately 1.5 miles upstream of the Government Canyon park entrance. The pond will provide approximately 5,600 acre-feet of storage. The AAE for Alternative 13 is \$12,138,410, yielding annual benefits of \$1,455,040. Annual costs are estimated at \$1,630,500, yielding net annual benefits of -\$175,460 and a benefit-to-cost ratio of 0.89.

Alternative 14 is a Leon Creek Master Plan Detention Site analyzed with USAEP hydrology at the request of the non-Federal sponsor. It consisted of a 51-foot high dam to be located upstream of Alternative 13 with maximum storage of approximately 6,900 acre-feet. The AAE for this alternative is \$11,671,520, yielding annual benefits of \$1,921,930. Annual costs are estimated at \$858,000, yielding net annual benefits of \$1,063,930, and a benefit-to-cost ratio of 2.24.

Because of the environmental and cultural significance of the Government Canyon area, a smaller version of Alternative 14 was considered, and is identified as Alternative 14B. The AAE for the alternative is \$13,051,610, yielding annual benefits of \$541,840. Annual costs are estimated at \$984,300, yielding net annual benefits of -\$442,460, and a benefit-to-cost ratio of 0.55.

Alternative 14 is the only Government Canyon alternative to provide positive annual benefits. However, the preliminary costs did not include environmental or cultural mitigation costs. It was determined by the PDT that these costs would be significant enough as to diminish any positive net annual benefits, and therefore the alternative was not carried forward.

Alternative	AAE	Annual Benefits	Annual Costs	Net Annual Benefits	B-C Ratio
13	\$12,138,410	\$1,455,040	\$1,630,500	-\$175,460	0.89
14	\$11,671,520	\$1,921,930	\$858,000	\$1,063,930	2.24
14B	\$13,051,610	\$541,840	\$984,300	-\$442,460	0.55

Table A-31. Summary of Net Annual Benefits for AOI-12, 5, 2 and 1

#### Alternatives 15, 16, 20 and 21

Alternatives 15, 16, 20 and 21 were developed to address damages in AOI-7, located in reach 5 of Leon Creek. Alternatives 15 and 16 considered levees, while alternatives 20 and 21 considered channel modifications in the same area.

Alternative 15 consists of a levee designed to contain the 100-year AEP event, with the levee on the left bank of the creek. The alternative has AAE of \$13,291,180 yielding annual benefits of \$310,790. Annual costs are estimated at \$1,204,500, yielding net annual benefits of -\$893,710 and a benefit-to-cost ratio of 0.26. Initially this alternative indicated positive net annual benefits, but costs to handle interior drainage issues had been not been included. Once those costs were included, net benefits became negative.

Alternative 16 consists of a levee designed to contain the 500-year AEP event, again, with the levee on the left bank of Leon Creek. The AAE for the alternative is \$13,322,910, yielding annual benefits of \$304,360. The annual costs are estimated at \$414,500, yielding net annual benefits of -\$110,140.

Alternative 20 consists of a 300 foot channel modification on Leon Creek in Reach 5. The AAE for the alternative is \$13,273,280, yielding annual benefits of \$320,170. Annual costs are estimated at \$920,400, yielding net annual benefits of -\$600,230 and a benefit-to-cost ratio of 0.35.

Alternative 21 consists of a 200 foot channel modification on Leon Creek in Reach 5. The AAE for the alternative is \$13,283,160, yielding annual benefits of \$310,290. Annual costs are estimated at \$352,800, yielding net benefits of -\$42,510 and a benefit-to-cost ratio of 0.88.

With the benefit-to-cost ratio near unity, the PDT decided to look at a 100 foot channel modification using rough estimates. Preliminary results showed a favorable benefit-to-cost ratio of 1.37, and the PDT chose to consider a refinement of the 100 foot channel modification, along with a 85 foot channel modification and a 150 foot channel modification.

The results of these variation of Alternative 21 are shown in Table A-24.

Alternative	AAE	Annual Benefits	Annual Costs	Net Annual Benefits	B-C Ratio
15	\$13,291,180	\$310,790	\$1,204,500	-\$893,710	0.26
16	\$13,322,910	\$304,360	\$414,500	-\$110,140	0.73
17	\$13,199,770	\$401,080	\$1,342,600	-\$941,520	0.30
20	\$13,273,280	\$320,170	\$920,400	-\$600,230	0.35
21	\$13,283,160	\$310,290	\$352,800	-\$42,510	0.88
21C 150 ft.	\$13,277,880	\$315,570	\$352,500	-\$36,930	0.90
21D 100 ft.	\$13,301,910	291,540	262,000	29,540	1.11
21E 85 ft.	\$13,319,680	273,770	238,100	35,670	1.15

Table A-32. Summary of Net Annual Benefits for AOI-7

Both of the levee alternatives resulted in negative net annual benefits, and were not carried forward. Of the channel modification alternatives, the 85 foot channel modification, Alternative 21E, resulted in the greatest net annual benefits, and will be carried forward.

#### Alternative 17

Alternative 17 was developed to address damages in AOI 7, located in Leon Creek Reach 5, but benefits were anticipated to downstream reaches of Leon Creek as well. The alternative consists of diverting flows from Leon Creek into a quarry. The location is part of the Leon Creek Master Plan and is located north of Loop 1604 and east of IH-10. The AAE for this alternative are \$13,199,770, yielding annual benefits of \$401,080. Annual costs are estimated at \$1,342,600, yielding net annual benefits of \$-941,520 and a benefit-to-cost ratio of .30. Conversations with the quarry owner revealed the quarry was expected to be in operation for approximately 20 years and there was no interest to sale the property. Costs were therefore significant for this alternative, including buying out the potential revenues from the quarry, resulting in negative net benefits.

#### Alternative 18

Alternative 18 was developed to address damages in AOI 11, located on Leon Creek Reaches 6 and 7. The alternative consists of consisted of two ponds located upstream of AOI-11. Leon Trib M Pond is an inline pond located approximately 4,000 feet upstream of the northernmost crossing of Boerne Stage Road. It has a 42-foot high 300-foot wide dam providing storage of approximately 350 acrefeet. Leon XS 285313 Pond is an inline pond approximately 1.3 miles upstream of the crossing of Leon Creek and Huntress Lane. It has a 38-foot high 350-foot wide dam providing storage of approximately 450 acrefeet. The AAE for the alternative is \$12,538,300, yielding annual benefits of

\$1,055,150. Annual costs are estimated at \$1,054,100, yielding net annual benefits of \$1,050 and a benefit-to-cost ratio of 1.00. With minimal annual benefits, and believing the area to have historical significance leading to a politically charged environment, the local sponsor chose to not move forward with this alternative.

Alternative	AAE	Annual Benefits	Annual Costs	Net Annual Benefits	B-C Ratio
18	\$13,291,180	\$1,055,150	\$1,054,100	\$1,050	1.00

Table A-33. Summary of Net Annual Benefits for AOI-11

#### Alternative 22

Alternative 22 was developed to address damages in AOIs 6, 8 and 9. The alternative is a combination of Alternative 7 (detention on Huebner Trib A) and Alternative 9 (detention on Heubner Creek at Prue Road). The AAE for the alternative is \$13,293,700, yielding annual benefits of \$311,700. Annual costs for the alternative are estimated at \$1,270,100, yielding net annual benefits of -\$958,400 and a benefit to cost ratio. Given negative net benefits, the alternative was not carried forward.

Table A-34. Summary of Net Annual Benefits for AOI-6, 8 and 9

Alternative	AAE	Annual Benefits	Annual Costs	Net Annual Benefits	B-C Ratio
22	\$13,293,700	\$311,700	\$1,270,100	-\$958,400	0.25

#### Alternative 23

Alternative 23 was developed to address damages in the lower end of AOI 5, at the confluence of Culebra Creek Reach 1 and Leon Creek. The alternative consists of channel modifications to Leon Creek at the confluence. The initial AAE for the alternative is \$13,420,060, yielding annual benefits of \$173,390. Annual costs for the alternative are estimated at \$211,400, yielding net annual benefits of -\$32,640 and a benefit-to-cost ratio of 0.85.

A second configuration of this alternative was created to investigate if the net benefits could be shifted in the positive direction. Alternative 23C resulted in an AAE of \$13,417,390, yielding annual benefits of \$176,060. Annual costs were estimated at \$228,100, yielding net annual benefits of -\$52,040 and a benefit-to-cost ratio of 0.77.

Alternative	AAE	Annual Benefits	Annual Costs	Net Annual Benefits	B-C Ratio
23	\$13,420,060	\$178,760	\$211,400	-\$32,640	0.85
23B	\$13,417,390	\$176,060	\$228,100	-\$52,040	0.77

Table A-35. Summary	of Net Annual	Benefits for	AOI-5
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#### ANALYSIS OF NON-STRUCTURAL PERMENANT FLOODPLAIN EVACUTION ALTERNATIVES

Given the size of the study area, a choice was made to identify potential non-structural alternatives by identifying concentrated areas where structures were being inundated by 2-. 5-, 10- and 25-year AEP events. Each structure was given an attribute that indicated the first AEP event where the water surface elevation exceeded the finished floor elevation. Using ArcGIS, structures were color coded by these event assignments and significant clusters of structures that were in the four AEP events were identified. This produced 17 clusters, or non-structural areas of interest. The reach location and composition of each of the NS AOIs is presented in Table A-36.

Non- Structural			
Area of		Composition	
Interest	Stream Reach	Each event is inclusive of the more frequent event)	
NS AOI 1	Leon Creek Reach 7	17 single family residential structures in the 10 year event	
		69 single family residential structures in the 25 year event	
		1 mobile home in the 25 year event	
NS AOI 2	Leon Creek	4 commercial structures in the 10 year event	
	Reaches 6 and 7	1 public structure in the 10 year event	
		21 commercial structures in the 25 year event	
		6 public structures in the 25 year event	
		2 single family residential structures in the 25 year event	
NS AOI 3	Leon Creek Reach 6	4 single family residential structures in the 25 year event	
		17 commercial structures in the 25 year event	
NS AOI 4	Babcock Trib	7 multi-family structures in the 5 year event	
		7 multi-family structures in the 10 year event	
		2 single family residential structures in the 10 year event	
		7 multi-family structures in the 25 year event	
		4 single family residences in the 25year event	
NS AOI 5	Leon Creek Reach	13 commercial structures in the 25 year event	
	5R	1 single family residential structures in the 25 year event	
NS AOI 6	Culebra Trib A	4 single family residential structures in the 10 year event	
<u> </u>		9 single family residential structures in the 25 year event	
NS AOI 7	Culebra Creek	5 commercial structures in the 25 year event	
	Reach 1	1 single family residential structure in the 25 year event	
NS AOI 8	Culebra Creek	33 single family residential structures in the 25 year event	
	Reach 1	Only pla family and idential atmost one in the 40 years area.	
NS AOI 9	Culebra Creek	6 single family residential structures in the 10 year event	
	Reach 1	26 single family residential structures in the 25 year event	
NS AOI 10	Huebner Creek	11 single family residential structures in the 25 year event	
	Libraha an Ora ala	1 public structure in the 25 year event	
NS AOI 11	Huebner Creek	16 single family residential structures in the 25 year event	
		1 commercial structure in the 25 year event	
NS AOI 12	NO AOI 12 was actual	y identified. Number was inadvertently skipped when areas were being	
	selected and named.	00 single family assidential structures in the OF years event	
INS AUL 13	Leon Creek Trib F	20 single ramily residential structures in the 25 year event	
	Leen Onesh Dessh O	1 public structure in the 25 year event	
NS AUI 14	Leon Greek Reach 2	10 single ramily residential structures in the 10 year event	
		14 commercial structures in the 10 year event	
		81 mobile nomes in the 10 year event	
	<u> </u>	12 single family residential structures in the 25 year event	

#### Table A-36 Structures By AEP Event in Non-Structural Areas of Interest

		19 commercial structures in the 25 year event
		85 mobile homes in the 25 year event
NS AOI 15	Leon Creek Reach 2	5 single family residential structures in the 10 year event
		6 commercial structures in the 10 year event
		13 single family structures in the 25 year event
		6 commercial structures in the 25 year event
		27 mobile homes in the 25 year event
NS AOI 16	Indian Creek	6 commercial structures in the 5 year event
		9 commercial structures in the 25 year event
NS AOI 17	Indian Creek	13 agricultural barns in the 10 year event
		1 single family residential structure in the 10 year event

To initially screen the non-structural alternatives for each event for each area of interest, acquisition costs of each structure were based on the value of improvements and land from the county appraisal district database. These values are lower than the actual market value of the properties, so any alternatives that would not generate positive net benefits with these values, they would not generate positive net benefits from real estate reconnaissance. Demolition and debris removal costs for each alternative were based on a square foot price taken from costs estimates prepared for other studies in the district.

To determine annual benefits, a separate HEC-FDA run was made for each AEP Event for each nonstructural AOI. The resulting equivalent damages for each run would represent the reduction in annual equivalent damages for the alternative, and would therefore be equivalent to the benefits derived from their permanent removal.



Non-Structural Area of Interest	AEP Event	Annual Benefits	Annual Costs	Annual Net Benefits	Benefit-to-Cost Ratio
NS AOI 1	10	\$265,790	\$278,410	-\$12,620	.95
	25	1,070,659	637, 580	-433,079	.60
NS AOI 2	10	26,060	27,595	-1,899	.93
	25	919,270	969,036	-49,766	.95
NS AOI 3	25	59,780	162,101	-102,321	.37
NS AOI 4	5	322,420	71,468	250,952	4.51
	10	348,160	98,832	249,328	3.52
	25	358,580	125,252	23,328	2.86
NS AOI 5	25	258,690	286,421	-27,731	.90
NS AOI 6	10	22,770	38,650	-15,880	.59
	25	36,990	106,034	-69,044	.35
NS AOI 7	25	17,510	49,647	-32,137	.35
NS AOI 8	25	171,400	325,183	-153,783	.53
NS AOI 9	10	50,640	64,038	-13,398	.79
	25	156,970	273,679	-116,709	.57
NS AOI 10	25	40,340	131,148	-90,808	.31
NS AOI 11	25	48,800	150,291	-101,491	.32
NS AOI 13	25	73,020	267,730	-194,710	.27
NS AOI 14	10	275,490	369,235	-93,475	.75
	25	293,620	411,416	-117,796	.71
NS AOI 15	10	30,440	25,170	4,730	1.18
	25	141,710	127,609	14,101	1.11
NS AOI 16	5	910	62,821	-61,911	.01
	25	1,520	100,847	-99,327	.02
NS AOI 17	10	47,430	26,640	20,790	1.78

#### Table A-37. Annual Net Benefits for Preliminary Screen of Non-Structural Alternatives

Knowing that cost estimates used for preliminary analysis were understated, those alternatives with negative net benefits would not realize an increase in net benefits.

NS-AOI 4 (5-, 10-, and 25-year AEP alternatives),NS AOI 5 (25-year), NS AOI 9 (10-year), NS AOI 14 (10-, and 25-year), and NS AOI 15(10-, and 25-year) alternatives were carried forward for because of positive net benefits or the possible potential for adding recreation or ecosystem restoration. NS AOI 17 had positive net benefits, but with further investigation, the structures were on a single isolated
parcel with a single land owner and not near any of the other non-structural alternatives. NS AOI 17 was not carried forward.

For those alternatives carried forward, real estate costs were developed at a reconnaissance level and quantities developed by civil engineering for demolition and debris removal were used by cost engineering to develop first costs. Table A.37 presents the net benefit calculated for these alternatives using refined costs.

Alternative	First Cost	Annual Cost	Annual Benefit	Net Benefits	Benefit-to-Cost Ratio
NS AOI 4 5 Yr	\$1,174,157	\$58,053	\$71,468	\$13,415	1.23
NS AOI 4 10 Yr	2.048,758	101,296	98,832	-2,464	.98
NS AOI 4 25 Yr	2,801,744	138,525	358,580	220,055	2.59
NS AOI 5 15 Yr	9,455,887	467,524	258,690	-208,834	.55
NS AOI 9 10 Yr	1,851,643	91.550	50,460	-41,090	.55
NS AOI 14 10 Yr	8,569,969	423,722	275,490	-148,232	.65
NS AOI 14 25 Yr	9,387,157	464,125	293,620	-170,505	.63
NS AOI 15 10 Yr	1,455,581	71,968	30,440	-41,528	.42
NS AOI 15 25 Yr	3,663,906	181,153	141,710	-39,443	.78

#### Table A-38. Evaluation of Non-Structural Alternatives Using Refined Costs

Only alternatives in NS AOI 4 had positive net annual benefits. Of these alternatives, the 25 year AEP alternative had the greatest net annual net benefits and was carried forward for consideration of inclusion in the tentatively selected plan.

The 25-year alternatives in NS AOI 14 and 15 however, also became potential candidates for inclusion in the tentatively selected plan. The two alternatives are adjacent to each other and provide a considerably large tract of land. Late in plan evaluation, the sponsor expressed interest in these areas for recreation purposes because the tracts are adjacent to an existing trail system and would allow extension of the trails to additional neighborhoods and could include additional recreation features.

Potential recreation alternatives were developed for the combination of these two non-structural alternatives and include 3.8 miles of multi-use trails, 18 picnic tables, 2 playground areas, 2 multi-use playfield areas, and 2 parking lots.

Preliminary analysis of the non-structural plan in NS AOI 14 and 15 combined with recreation alternatives showed only marginal increased in net benefits and do not suggest a benefit-to-cost ratio of 1.0 or higher is likely.

## STRUCTURAL PLANS CARRIED FORWARD

Three structural plans had positive net benefits and were carried forward for consideration for the recommended plan: Alternative 2B with Hydraulic Mitigation, alternative 2B with Hydraulic Mitigation combined with alternative 4C(100'bypass channel), alternative 3 with hydraulic mitigation (500-year levee) combined with 4C (100' bypass channel) alternative 12, and alternative 21E. Costs used in the preliminary screening were based on cost estimates provided by Half and Associates. For these three structural plans, planning level real estate costs were prepared by the Real Estate Division in the Fort Worth District. For construction costs, quantities were reviewed by SWF Civil Section and new cost estimates prepared by SWF Cost Estimating. A summary table for each alternative is presented below. Dollars are expressed in October 2010 values. A Federal interest rate of 4.125% was used for annualizing costs. Note: these costs include \$2.2 million in environmental mitigation costs for the levee alternatives.

Additional evaluation for the 100 Year Levee with Channel Modification was conducted to ensure there were no induced damages downstream of the levee in Leon Creek Reaches 1 and 2. The charts below show the structures plotted at their river station and first floor elevations along with the water surface elevation for the eight AEP events for the with- and without project conditions for the two reaches to demonstrate no increased damages to those structures.



Figure A-10. Without Project Reach 1



Figure A-11. With Project Reach 1



Figure A-12. Without Project Reach 2



Figure A-13. With Project Reach 2

Alternative 2B: 100 Ye	Alternative 2B: 100 Year Levee with Channel Modifications for Hydraulic Mitigation						
INVESTMENT							
	ESTIMATED FIRST COST	\$14,609,877					
	ANNUAL INTEREST RATE	0.04125					
	PERIOD OF ANALYSIS (years)	50					
	CONSTRUCTION PERIOD (months)	18					
	COMPOUND INTEREST FACTOR	18.54					
	CAPITAL RECOVERY FACTOR	0.047551					
	INTEREST DURING CONSTRUCTION	\$1,046,912					
	INVESTMENT COST	\$15,656,789					
ANNUAL CHARGES							
	INTEREST	\$645,843					
	AMORTIZATION	\$98,653					
	OPERATION/MAINTENANCE (\$/year)	\$50,000					
	REPLACEMENTS	\$0					
	TOTAL ANNUAL CHARGES	\$794,496					
ANNUAL BENEFITS							
	FLOOD DAMAGE REDUCTION BENEFITS	\$1,749,500					
	RECREATION BENEFITS	\$0					
	TOTAL ANNUAL BENEFITS	\$1,749,500					
	NET BENEFITS	\$955,004					
	BENEFIT-TO-COST RATIO	2.20					

INVESTMENT		
	ESTIMATED FIRST COST	\$18,472,644
	ANNUAL INTEREST RATE	0.04125
	PERIOD OF ANALYSIS (years)	50
	CONSTRUCTION PERIOD (months)	18
	COMPOUND INTEREST FACTOR	18.54
	CAPITAL RECOVERY FACTOR	0.047551
	INTEREST DURING CONSTRUCTION	\$1,323,709
	INVESTMENT COST	\$19,796,353
ANNUAL CHARGES		
	INTEREST	\$816,600
	AMORTIZATION	\$124,737
	OPERATION/MAINTENANCE (\$/year)	\$50,000
	REPLACEMENTS	\$0
	TOTAL ANNUAL CHARGES	\$991,330
ANNUAL BENEFITS		
	FLOOD DAMAGE REDUCTION BENEFITS	\$1,750,260
	RECREATION BENEFITS	\$0
	TOTAL ANNUAL BENEFITS	\$1,750,260
	NET BENEFITS	\$758,924
	BENEFIT-TO-COST RATIO	1.77

INVESTMENT		
	ESTIMATED FIRST COST	\$19,610,811
	ANNUAL INTEREST RATE	0.04125
	PERIOD OF ANALYSIS (years)	50
	CONSTRUCTION PERIOD (months)	18
	COMPOUND INTEREST FACTOR	18.54
	CAPITAL RECOVERY FACTOR	0.047551
	INTEREST DURING CONSTRUCTION	\$1,405,268
	INVESTMENT COST	\$21,016,079
ANNUAL CHARGES		
	INTEREST	\$866,913
	AMORTIZATION	\$132,422
	OPERATION/MAINTENANCE (\$/year)	\$50,000
	REPLACEMENTS	\$0
	TOTAL ANNUAL CHARGES	\$1,049,336
ANNUAL BENEFITS		
	FLOOD DAMAGE REDUCTION BENEFITS	\$1,938,090
	RECREATION BENEFITS	\$0
	TOTAL ANNUAL BENEFITS	\$1,938,090
	NET BENEFITS	\$888.754
	BENEFIT-TO-COST RATIO	1.85

Of the three alternatives considered for AOI 2, alternative 2B, consisting of the 100 year levee and hydraulic mitigation provided the greatest net annual benefits, \$955,004. The combination of alternatives 2B and 4C generated net annual benefits of \$758,924, and the combination of alternatives 3 with hydraulic mitigation and 4c generated \$888,754 in net annual benefits. Alternative 2B will be a alternative carried forward to the tentatively selected plan.

Additional analysis was done to provide a bracket for the 100 year levee – a levee providing protection for the 50-year event and one for the 250-year event were tested to ensure net benefits were being maximized with the 100 year levee. The 50-year levee had an estimated cost of \$12,395,251, yielding an annual cost of \$681,642 at the 4.125% federal interest rate. The 50-year levee would generate \$1,634,340 in annual benefits, yielding annual net benefits of \$952,698 and a benefit-to-cost ratio of

2.40. The 250-year levee measure would require the addition of the bypass channel (as with the 500-year levee). This measure's estimated cost is \$16,272,655, with an annual cost of \$879,229. The measure's annual benefits would be \$1,935,270, yielding annual net benefits of \$1,056,042 and an benefit-to-cost ratio of 2.20. Given the annual net benefits, the 100-year levee provides the greatest net benefits.

Alternative 12 consisted of utilizing an existing quarry as a detention site. For purposes of bracketing the alternative, costs were developed as well as an additional HEC-FDA model for an enlarged detention area achieved by further excavation of the quarry pit. The larger quarry only provides a small amount of additional annual benefits (\$2,060,580 compared to \$2,026,620 for the smaller quarry). However, excavation of the quarry dramatically increased annual costs, \$3,791,810 compared to \$554,625 for the smaller quarry, which led to negative net annual benefits for the larger quarry alternative. The costs for the two alternatives are presented below.

Alternative 12: Helotes	Quarry	
INVESTMENT		
	ESTIMATED FIRST COST	\$10,004,112
	ANNUAL INTEREST RATE	0.04125
	PERIOD OF ANALYSIS (years)	50
	CONSTRUCTION PERIOD (months)	12
	COMPOUND INTEREST FACTOR	12.23
	CAPITAL RECOVERY FACTOR	0.047551
	INTEREST DURING CONSTRUCTION	\$608,175
	INVESTMENT COST	\$10,612,287
ANNUAL CHARGES		
	INTEREST	\$437,757
	AMORTIZATION	\$66,868
	OPERATION/MAINTENANCE (\$/year)	\$50,000
	REPLACEMENTS	\$0
	TOTAL ANNUAL CHARGES	\$554,625
ANNUAL BENEFITS		
	FLOOD DAMAGE REDUCTION BENEFITS	\$2,026,620
	RECREATION BENEFITS	\$0
	TOTAL ANNUAL BENEFITS	\$2,026,620
	NET BENEFITS	\$1,471,995
	BENEFIT-TO-COST RATIO	3.65

Alternative 12: Large H	lelotes Quarry	
INVESTMENT		
	ESTIMATED FIRST COST	\$74,180,830
	ANNUAL INTEREST RATE	0.04125
	PERIOD OF ANALYSIS (years)	50
	CONSTRUCTION PERIOD (months)	12
	COMPOUND INTEREST FACTOR	12.23
	CAPITAL RECOVERY FACTOR	0.047551
	INTEREST DURING CONSTRUCTION	\$4,509,635
	INVESTMENT COST	\$78,690,466
ANNUAL CHARGES		
	INTEREST	\$3,245,982
	AMORTIZATION	\$495,829
	OPERATION/MAINTENANCE (\$/year)	\$50,000
	REPLACEMENTS	\$0
	TOTAL ANNUAL CHARGES	\$3,791,810
ANNUAL BENEFITS		
	FLOOD DAMAGE REDUCTION BENEFITS	\$2,060,580
	RECREATION BENEFITS	\$0
	TOTAL ANNUAL BENEFITS	\$2,060,580
	NET BENEFITS	(\$1,731,230)
	BENEFIT-TO-COST RATIO	0.54

Alternative 21e, an 85 foot channel modification on Leon Creek returned negative net benefits of \$17,634 after costs were refined. As a result, it will not be carried forward as part of the tentatively selected plan.

Alternative 21e 85 ft. L	eon Creek Channel Modification	
INVESTMENT		
	ESTIMATED FIRST COST	\$5,008,601
	ANNUAL INTEREST RATE	0.04125
	PERIOD OF ANALYSIS (years)	50
	CONSTRUCTION PERIOD (months)	9
	COMPOUND INTEREST FACTOR	9.12
	CAPITAL RECOVERY FACTOR	0.047551
	INTEREST DURING CONSTRUCTION	\$68,134
	INVESTMENT COST	\$5,076,735
ANNUAL CHARGES		
	INTEREST	\$209,415
	AMORTIZATION	\$31,989
	OPERATION/MAINTENANCE (\$/year)	\$50,000
	TOTAL ANNUAL CHARGES	\$291,404
ANNUAL BENEFITS		
	FLOOD DAMAGE REDUCTION BENEFITS	\$273,770
	RECREATION BENEFITS	\$0
	TOTAL ANNUAL BENEFITS	\$273,770
	NET BENEFITS	(\$17,634)
	BENEFIT-TO-COST RATIO	0.94

### NEXT ADDED INCREMENT OF STRUCTURAL ALTERNATIVES

Because the levee alternative in AOI 2 were downstream of alternative 12, the Helotes Quarry, there was some potential that benefits from the quarry alternative could mute some of the benefits from the levee alternative. Additional HEC-FDA models were developed for the two structural alternatives as a combination of alternatives to ensure positive net benefits were still provided by the two alternatives. The annual net benefits of the two structural alternatives as a combined alternative are \$2,209,210, and the benefit-to-cost ratio is 2.69.

100 Year Levee with Hyd	Iraulic Mitigation at Test Cell and Helotes Quarry	
INVESTMENT		
	ESTIMATED FIRST COST	\$24,613,989
	ANNUAL INTEREST RATE	0.04125
	PERIOD OF ANALYSIS (years)	50
	CONSTRUCTION PERIOD (months)	18
	COMPOUND INTEREST FACTOR	18.54
	CAPITAL RECOVERY FACTOR	0.047551
	INTEREST DURING CONSTRUCTION	\$1,763,785
	INVESTMENT COST	\$26,377,774
ANNUAL CHARGES		
	INTEREST	\$1,088,083
	AMORTIZATION	\$166,206
	OPERATION/MAINTENANCE (\$/year)	\$50,000
	REPLACEMENTS	\$0
	TOTAL ANNUAL CHARGES	\$1,304,290
ANNUAL BENEFITS		
	FLOOD DAMAGE REDUCTION BENEFITS	\$3,513,500
	RECREATION BENEFITS	\$0
	TOTAL ANNUAL BENEFITS	\$3,513,500
	NET BENEFITS	\$2,209,210
	BENEFIT-TO-COST RATIO	2.69

## TENTATIVELY SELECTED PLAN

The tentatively selected plan is the National Economic Development (NED) Plan, which is the plan yielding the greatest net annual benefits. Fieldwork conducted by the team subsequent to this event established the fact that flood flows on Helotes Creek and its minor tributaries had resulted in channel movement in the vicinity of the Helotes Quarry project component. As a result of the channel migration, substantial amounts of flow now move into the quarry naturally. After extensive discussion and qualitative assessment, it was determined that most of the benefits estimated for this measure were being achieved without further expenditure. As a result, this measure was not carried forward. The NED plan consists of Alternative 2B with hydraulic mitigation and one nonstructural buyout alternative on Babcock Trib. Figure A-14 shows an inundation map should the project be exceeded. There would be residual damages for the area protected by the levee. Events beyond the protected areas would experience damages at flooding above the protected height. For the non-structural measure, since structures are removed, there would be no residual damages to those structures, and therefore they were not mapped.

Wes



Tentatively Selected Plan

1

INVESTMENT		
	ESTIMATED FIRST COST (Less relocation	\$17.411.621
		\$17,411,621
	ANNUAL INTEREST RATE	0.04125
	PERIOD OF ANALYSIS (years)	50
	CONSTRUCTION PERIOD (months)	24
	COMPOUND INTEREST FACTOR	24.97
	CAPITAL RECOVERY FACTOR	0.047551
	INTEREST DURING CONSTRUCTION	\$1,439,441
	INVESTMENT COST	\$18,851,062
ANNUAL CHARGES		
	INTEREST	\$777,606
	AMORTIZATION	\$118,781
	OPERATION/MAINTENANCE (\$/year)	\$59,000
	REPLACEMENTS	\$0
	TOTAL ANNUAL CHARGES	\$955,387
ANNUAL BENEFITS		
	FLOOD DAMAGE REDUCTION BENEFITS	\$2,108,080
	RECREATION BENEFITS	\$0
	specify	\$0
	TOTAL ANNUAL BENEFITS	\$2,108,809
	NET BENEFITS	\$1,152,693
	BENEFIT-TO-COST RATIO	2.21

The calculation of net annual benefits for the tentatively selected plan is shown below.

The resulting annual net benefits are \$1,152,693 with benefit-to-cost ratio of 2.21 using the 2008 price levels and a 4.125 federal interest rate used during plan formulation

Structure and vehicle values were adjusted to October 2012 price levels by taking a sample from the structure file and re-evaluating with Marshall and Swift Residential and Commercial estimating software. Cost estimates were also estimated at October 2012 prices, and annualized at the 3.75% federal interest rate. The following table provides the NED plan at the October 2012 price level and the 3.75% interest rate:

INVESTMENT		
	ESTIMATED FIRST COST (Less relocation assistance)	\$28,602,886
	ANNUAL INTEREST RATE	0.03750
	PERIOD OF ANALYSIS (years)	50.00
	CONSTRUCTION PERIOD (months)	24
	COMPOUND INTEREST FACTOR	24.88
	CAPITAL RECOVERY FACTOR	0.044574
	INTEREST DURING CONSTRUCTION	\$2,145,181
	INVESTMENT COST	\$30,748,067
ANNUAL CHARGES		
	INTEREST	\$1,153,053
	AMORTIZATION	\$217,518
	OPERATION/MAINTENANCE (\$/year)	\$59,00
	REPLACEMENTS	\$
	TOTAL ANNUAL CHARGES	\$1,429,57
ANNUAL BENEFITS		
	FLOOD DAMAGE REDUCTION BENEFITS	\$2,128,35
	RECREATION BENEFITS	\$0
	specify	\$
	TOTAL ANNUAL BENEFITS	\$2,128,350
	NET BENEFITS	\$598,78
	DENEELT TO COST DATIO	1.4

For budgeting purposes, the NED plan is also calculated at a 7.0% federal interest rate, as shown below:

INVESTMENT		
	ESTIMATED FIRST COST (Less relocation assistance)	\$28,602,886
	ANNUAL INTEREST RATE	0.07000
	PERIOD OF ANALYSIS (years)	50.00
	CONSTRUCTION PERIOD (months)	24
	COMPOUND INTEREST FACTOR	25.68
	CAPITAL RECOVERY FACTOR	0.072460
	INTEREST DURING CONSTRUCTION	\$4,077,246
	INVESTMENT COST	\$32,680,132
ANNOAL CHARGES	INTEDEST	\$2 287 600
		\$2,287,009
	OPERATION/MAINTENANCE (\$/year)	\$59,000
		\$0,000
	TOTAL ANNUAL CHARGES	\$2.426.996
		<i>4</i> <b>2</b> , <b>12</b> 0,220
ANNUAL BENEFITS		
	FLOOD DAMAGE REDUCTION BENEFITS	\$2,048,810
	RECREATION BENEFITS	\$0
	specify	\$0
	TOTAL ANNUAL BENEFITS	\$2,048,810
		(\$270 106)
		(\$3/8,180)
	BENEFIT-TO-COST RATIO	0.84

# **DEPTH-PERCENT DAMAGE FUNCTIONS**

Occ Name	Occ Description	Cat_Name	Parameter	Start_	Data														
S1	1 STORY RES. SLAB	R	Stage		-2	-1	0	1	2	3	4	5	6	7	8	9	10	11	12
S1			S		0	0	2.5	13.4	23.3	32.1	40.1	47.1	53.2	58.6	63.2	67.2	70.5	73.2	75.4
S1			SN		0	0	1.3	2	2	1.6	1.6	1.8	1.9	2	2.1	2.2	2.3	2.4	2.7
S1			Stage		-2	-1	0	1	2	3	4	5	6	7	8	9	10	11	12
S1			С		0	0	2.4	8.1	13.3	17.9	22	25.7	28.8	31.5	33.8	35.7	37.2	38.4	39.2
S1			CN		0	0	2.1	1.5	1.2	1.2	1.4	1.5	1.6	1.6	1.7	1.8	1.9	2.1	2.3
S1			Struct	Ν			0.5		Ν		10		Ν	100	10			901	
S1PB	AND BEAM	R	Stage		-2	-1	0	1	2	3	4	5	6	7	8	9	10	11	12
S1PB			S		0	2.5	13.4	23.3	32.1	40.1	47.1	53.2	58.6	63.2	67.2	70.5	73.2	75.4	77.2
S1PB			SN		0	0	1.3	2	2	1.6	1.6	1.8	1.9	2	2.1	2.2	2.3	2.4	2.7
S1PB			Stage		-2	-1	0	1	2	3	4	5	6	7	8	9	10	11	12
S1PB			С		0	2.4	8.1	13.3	17.9	22	25.7	28.8	31.5	33.8	35.7	37.2	38.4	39.2	39.7
S1PB			CN		0	0	2.1	1.5	1.2	1.2	1.4	1.5	1.6	1.6	1.7	1.8	1.9	2.1	2.3
S1PB			Struct	Ν			0.5		Ν		10		Ν	100	10			901	
SV	PRIVATE VEHICLE	POV	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
SV			S		0	20	50	80	100	100	100	100	100	100	100	100	100	100	100
SV			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
SV			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
SV			С		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SV			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
SV			Struct	Ν			0.2		Ν		10		Ν	0	10			901	
S2	garage/storage on bottom	R	Stage		-1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
S2			S		0	3	5	6	7	8	10	13	17	21	31.9	41.8	50.6	58.6	65.6
S2			SN		0	4.1	3.4	3	2.8	2.9	3.2	3.4	3.7	3.9	4	4.1	4.2	4.2	4.2

S2			Stage		-1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
S2			С		0	1	5	8.7	12.2	15.5	18.5	21.3	23.9	26.3	28.4	30.3	32	33.4	34.7
S2			CN		0	3.5	2.9	2.6	2.5	2.7	3	3.2	3.3	3.4	3.5	3.5	3.5	3.5	3.5
S2			Struct	Ν			0.2		Ν		5		Ν	100	10			901	
S3	2 STORY RES.	R	Stage		-2	-1	0	1	2	3	4	5	6	7	8	9	10	11	12
S3			S		0	0	3	9.3	15.2	20.9	26.3	31.4	36.2	40.7	44.9	48.8	52.4	55.7	58.7
S3			SN		0	0	3.4	3	2.8	2.9	3.2	3.4	3.7	3.9	4	4.1	4.2	4.2	4.2
S3			Stage		-2	-1	0	1	2	3	4	5	6	7	8	9	10	11	12
S3			С		0	0	1	5	8.7	12.2	15.5	18.5	21.3	23.9	26.3	28.4	30.3	33.4	34.7
S3			CN		0	0	2.9	2.6	2.5	2.7	3	3.2	3.3	3.4	3.5	3.5	3.5	3.5	3.5
S3			Struct	Ν			0.2		Ν		5		Ν	100	10			901	
S5	on the low side	R	Stage		-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4
S5			S		0	3	5	6	7	8	10	13	17	21	31.9	41.8	50.6	58.6	65.6
S5			SN		0	4.1	3.4	3	2.8	2.9	3.2	3.4	3.7	4.1	3.4	3	2.8	2.9	3.2
S5			Stage		-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4
S5			С		0	1	5	8.7	12.2	15.5	18.5	21.3	23.9	26.3	28.4	30.3	32	33.4	34.7
S5			CN		0	3.5	2.9	2.6	2.5	2.7	3	3.2	3.3	3.5	2.9	2.6	2.5	2.7	3
S5			Struct	Ν			0.2		Ν		5		Ν	100	10			901	
S4	MOBILE RES.	MR	Stage		-2	-1	0	1	2	3	4	5	6	7	8	9	10	11	12
S4			S		0	3	9.3	15.2	20.9	26.3	31.4	54	93	93.5	94	94.5	95	95.5	96
S4			SN		0	4.1	3.4	3	2.8	2.9	3.2	3.4	3.7	3.9	4	4.1	4.2	4.2	4.2
S4			Stage		-2	-1	0	1	2	3	4	5	6	7	8	9	10	11	12
S4			С		0	0	5	8.7	12	23	36	43	55	66	78	86	100	100	100
S4			CN		0	3.5	2.9	2.6	2.5	2.7	3	3.2	3.3	3.4	3.5	3.5	3.5	3.5	3.5
S4			Struct	Ν			0.2		Ν		10		Ν	100	10			901	
S6	1 STORY APT.	MFR	Stage		-2	-1	0	1	2	3	4	5	6	7	8	9	10	11	12
S6			S		0	0	13.4	23.3	32.1	40.1	47.1	53.2	58.6	63.2	67.2	70.5	73.2	75.4	77.2
S6			SN		0	2.7	2	2	1.6	1.6	1.8	1.9	2	2.1	2.2	2.3	2.4	2.7	3
S6			Stage		-2	-1	0	1	2	3	4	5	6	7	8	9	10	11	12

S6			С		0	0	8.1	13.3	17.9	22	25.7	28.8	31.5	33.8	35.7	37.2	38.4	39.2	39.7
S6			CN		0	2.1	1.5	1.2	1.2	1.4	1.5	1.6	1.6	1.7	1.8	1.9	2.1	2.3	2.6
S6			Struct	Ν			0.2		Ν		10		Ν	100	10			901	
S7	2 STORY APT.	MFR	Stage		-2	-1	0	1	2	3	4	5	6	7	8	9	10	11	12
S7			S		0	0	9.3	15.2	20.9	26.3	31.4	36.2	40.7	44.9	48.8	52.4	55.7	58.7	61.4
S7			SN		0	4.1	3.4	3	2.8	2.9	3.2	3.4	3.7	3.9	4	4.1	4.2	4.2	4.2
S7			Stage		-2	-1	0	1	2	3	4	5	6	7	8	9	10	11	12
S7			С		0	0	5	8.7	12.2	15.5	18.5	21.3	23.9	26.3	28.4	30.3	32	33.4	34.7
S7			CN		0	3.5	2.9	2.6	2.5	2.7	3	3.2	3.3	3.4	3.5	3.5	3.5	3.5	3.5
S7			Struct	Ν			0.2		Ν		10		Ν	100	10			- 901	
1	AIRPORT	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
1			S		0	0	17	17	20	23	27	28	30	32	34	40	40	40	40
1			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
1			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
1			С		0	0	22	30	35	40	53	55	57	57	57	57	70	70	70
1			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
1			Struct	Ν			0.2		Ν		15			- 901				- 901	
3	ANTIQUE SHOP	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
3			S		0	0	17	17	18	19	21	23	25	28	32	35	39	43	47
3			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
3			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
3			С		0	20	40	78	85	90	95	100	100	100	100	100	100	100	100
3			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
3			Struct	Ν			0.2		Ν		15			- 901				- 901	
5	APPLIANCE	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
5			S		0	0	17	17	18	19	21	23	25	28	32	35	39	43	47
5			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
5			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
5			С		0	0	64	71	90	95	98	100	100	100	100	100	100	100	100

5			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
5			Struct	Ν			0.2		Ν		15			901				901	
7	AUTO DEALERSHIP	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
7			S		0	0	17	17	18	19	21	23	25	28	32	35	39	43	49
7			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
7			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
7			С		0	10	40	70	90	90	90	90	90	90	90	90	95	95	95
7			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
7			Struct	Ν			1.5		Ν		37		Ν	648	37			901	
9	AUTO JUNKYARD	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
9			S		0	0	2	4	5	7	8	10	11	13	14	15	16	16	16
9			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
9			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
9			С		0	0	9	13	16	17	18	19	19	19	19	19	19	20	20
9			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
9			Struct	Ν			0.2		Ν		15			901				901	
11	AUTO PARTS	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
11			S		0	0	5	5	5	5	7	10	14	19	25	32	40	50	57
11			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
11			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
11			С		0	0	17	28	56	66	85	94	94	94	94	94	94	94	94
11			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
11			Struct	Ν			0.2		Ν		15			901				901	
13	AUTO REPAIR	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
13			S		0	0	3	3	3	4	5	8	12	17	23	31	40	48	56
13			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
13			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
13			С		0	23	53	74	100	100	100	100	100	100	100	100	100	100	100
13			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10

13			Struct	Ν			1.5		Ν		37		Ν	71	37			901	
15	AUTO SERVICE	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
15			S		0	0	3	3	3	4	5	8	12	17	23	31	40	48	56
15			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
15			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
15			С		0	10	40	60	85	100	100	100	100	100	100	100	100	100	100
15			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
15			Struct	Ν			0.2		Ν		15			901				901	
17	AUTO TRANS SVC	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
17			S		0	0	3	3	3	4	5	8	12	17	23	31	40	48	56
17			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
17			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
17			С		0	0	10	20	40	60	100	100	100	100	100	100	100	100	100
17			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
17			Struct	Ν			0.2		Ν		15			901				901	
19	BAIT STAND	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
19			S		0	0	1	2	5	8	12	17	22	28	36	43	50	58	66
19			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
19			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
19			С		0	0	3	7	11	16	22	29	36	44	52	60	69	79	88
19			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
19			Struct	Ν			0.2		Ν		15			901				901	
21	BAKERY	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
21			S		0	12	17	21	25	28	31	34	36	38	41	43	45	47	48
21			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
21			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
21			С		0	53	63	89	100	100	100	100	100	100	100	100	100	100	100
21			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
21			Struct	Ν			0.2		Ν		15			- 901				- 901	

23	BANK	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
23			S		0	0	11	11	12	13	15	17	19	22	24	28	31	34	37
23			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
23			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
23			С		0	0	50	78	87	100	100	100	100	100	100	100	100	100	100
23			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
23			Struct	Ν			1.5		Ν		37		Ν	39	37			901	
25	BARBER SHOP	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
25			S		0	0	13	17	18	24	31	37	41	45	47	49	50	50	51
25			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
25			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
25			С		0	21	28	38	49	63	79	96	96	96	96	96	96	96	96
25			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
25			Struct	Ν			0.2		Ν		15			901				901	
27	BATTERY MFG	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
27			S		0	0	3	3	3	4	5	8	10	17	23	31	40	48	48
27			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
27			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
27			С		0	0	10	13	20	23	32	38	42	42	45	45	45	45	55
27			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
27			Struct	Ν			0.2		Ν		15			901				901	
29	BEAUTY SHOP	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
29			S		0	0	10	14	17	23	28	34	38	43	47	50	54	57	61
29			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
29			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
29			С		0	20	46	61	74	100	100	100	100	100	100	100	100	100	100
29			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
29			Struct	Ν			1.5		Ν		37		Ν	74	37			901	
31	BICYCLE SHOP	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13

31			S		0	0	20	24	28	32	35	39	43	47	50	55	60	60	60
31			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
31			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
31			С		0	0	17	25	42	57	59	61	63	63	63	63	63	63	63
31			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
31			Struct	Ν			0.2		Ν		15			901				901	
33	BOAT PARTY FISH	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
33			S		0	10	20	20	20	20	20	20	20	20	20	20	20	20	20
33			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
33			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
33			С		0	27	62	76	76	92	92	92	92	92	92	92	92	92	92
33			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
33			Struct	Ν			0.2		Ν		15			- 901				- 901	
35	BOAT SALES	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
35			S		0	14	20	32	33	34	36	38	42	50	56	60	63	67	70
35			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
35			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
35			С		0	13	24	43	82	95	100	100	100	100	100	100	100	100	100
35			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
35			Struct	Ν			0.2		Ν		15			- 901				901	
37	BOAT STALLS	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
37			S		0	0	10	19	26	32	40	48	56	64	71	78	85	91	97
37			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
37			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
37			С		0	0	3	6	8	11	13	15	17	19	21	22	24	25	27
37			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
37			Struct	Ν			0.2		Ν		15			- 901				- 901	
39	BOAT STORAGE	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
39			S		0	0	4	5	7	10	13	16	22	26	31	37	43	49	55

		SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
		Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
		С		0	1	4	7	12	18	24	32	40	48	54	58	63	66	68
		CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
		Struct	Ν			0.2		Ν		15			901				901	
BOILER BUILDING	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
		S		0	0	1	1	13	5	8	12	16	21	26	32	38	45	45
		SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
		Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
		С		0	0	5	10	10	10	20	20	20	20	20	20	20	20	20
		CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
		Struct	Ν			0.2		Ν		15			901				901	
BOOK STORE	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
		S		0	0	2	3	5	8	10	12	15	17	20	23	27	31	35
		SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
		Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
		С		0	5	10	30	50	70	85	100	100	100	100	100	100	100	100
		CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
		Struct	Ν			1.5		Ν		37		Ν	40	37			901	
BOWLING ALLEY	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
		S		0	0	4	7	11	15	19	23	27	31	35	39	44	49	53
		SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
		Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
		С		0	10	30	50	70	85	100	100	100	100	100	100	100	100	100
		CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
		Struct	Ν			0.2		Ν		15			901				901	
BUSINESS SVCS.	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
		S		0	0	1	2	3	5	8	11	13	16	18	21	25	29	34
		SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
	BOILER BUILDING BOOK STORE BOWLING ALLEY BUSINESS SVCS.	BOILER BUILDING C BOOK STORE C BOWLING ALLEY C	SN Stage C CN Struct BOILER BUILDING C BOILER BUILDING C S SN SN SN S102 C SS SN S102 S SN S102 S SN SN S102 C S SN S102 S SN S102 S SN S102 S SN S102 S SN S102 S S10 S S102 S S102 S S10 S S102 S S10 S10 S10 S10 S10 S10 S10 S10 S10 S	BOILER BUILDING C BOILER BUILDING C BOILER BUILDING C BOILER BUILDING C BOOK STORE	SN         10           Stage         -0.1           C         0           CN         10           Struct         N           BOILER BUILDING         C         Stage         -0.1           S         0         SN         10           BOILER BUILDING         C         Stage         -0.1           S         0         SN         10           Stage         -0.1         C         0           Stage         -0.1         C         0           BOOK STORE         C         Stage         -0.1           Stage         -0.1         S         0           BOOK STORE         C         Stage         -0.1           Stage         -0.1         S         0           SN         10         Stage         -0.1           C         Stage         -0.1         S           BOWLING ALLEY         C         Stage         -0.1           S         0         SN         10           BUSINESS SVCS.         C         Stage         -0.1           S         0         SN         10           SN         0 <t< td=""><td>SN         10         10           Stage         -0.1         0           C         0         1           CN         10         10           Struct         N         10           BOILER BUILDING         C         Stage         -0.1           SN         10         I0         Stage           SN         10         I0         Stage           CN         10         I0         I0           Struct         N         I0         I0           SN         10         I0         I0</td><td>SN         10         10         10           Stage         -0.1         0         1           C         0         1         4           CN         10         10         10           BOILER BUILDING         C         Stage         -0.1         0         1           STruct         N         -         0.2         1         1           BOILER BUILDING         C         Stage         -0.1         0         1           SN         10         10         10         10         10           SN         10         10         10         10         10           Stage         -0.1         0         1         10         10           CN         10         10         10         10         10           BOOK STORE         C         Stage         -0.1         0         11           S         0         0         10         10         10           BOOK STORE         C         Stage         -0.1         0         11           C         0         1         10         10         10           BOWLING ALLEY         C         <td< td=""><td>SN         10         10         10         10           Stage         -0.1         0         1         2           C         0         1         4         7           CN         10         10         10         10           BOILER BUILDING         C         Stage         -0.1         0         1         2           BOILER BUILDING         C         Stage         -0.1         0         1         2           BOILER BUILDING         C         Stage         -0.1         0         1         2           SN         10         10         10         10         10         10           SN         10         10         10         10         10         10           Stage         -0.1         0         1         2         3         10         10         10         10           BOOK STORE         C         Stage         -0.1         0         1         2         3           SN         10         10         10         10         10         10         10           BOOK STORE         C         Stage         -0.1         0         1         &lt;</td><td>SN         10&lt;</td><td>SN         10&lt;</td><td>SN1010101010101010Stage-0.10147121824C0147121824CN1010101010101010BOILER BUILDINGCStage-0.10112345S00111358SN1010101010101010Stage-0.10111358SN1010101010101010Stage-0.1011010101010Stage-0.110101010101010BOOK STORECStage-0.1012345S0023581010101010SN101010101010101010101010SN101010101010101010101010SN101010101010101010101010SN101010101010101010101010&lt;</td><td>SN         10&lt;</td><td>SN101010101010101010Stage-0.101234567C01471218243240CN1010101010101010101010BOILER BUILDINGCStage-0.101234567S00111313581216STUCTN0111313581216S001111313567S001101010101010101010Stage-0.11010101010101010101010Stage-0.1101010101010101010101010BOOK STORECStage-0.101234567S011010101010101010101010SN10101010101010101010101010SN1010101010101</td><td>SN         10&lt;</td><td>SN         10&lt;</td><td>SN10<td>SN     10     &lt;</td><td>SN     10     &lt;</td></td></td<></td></t<>	SN         10         10           Stage         -0.1         0           C         0         1           CN         10         10           Struct         N         10           BOILER BUILDING         C         Stage         -0.1           SN         10         I0         Stage           SN         10         I0         Stage           CN         10         I0         I0           Struct         N         I0         I0           SN         10         I0         I0	SN         10         10         10           Stage         -0.1         0         1           C         0         1         4           CN         10         10         10           BOILER BUILDING         C         Stage         -0.1         0         1           STruct         N         -         0.2         1         1           BOILER BUILDING         C         Stage         -0.1         0         1           SN         10         10         10         10         10           SN         10         10         10         10         10           Stage         -0.1         0         1         10         10           CN         10         10         10         10         10           BOOK STORE         C         Stage         -0.1         0         11           S         0         0         10         10         10           BOOK STORE         C         Stage         -0.1         0         11           C         0         1         10         10         10           BOWLING ALLEY         C <td< td=""><td>SN         10         10         10         10           Stage         -0.1         0         1         2           C         0         1         4         7           CN         10         10         10         10           BOILER BUILDING         C         Stage         -0.1         0         1         2           BOILER BUILDING         C         Stage         -0.1         0         1         2           BOILER BUILDING         C         Stage         -0.1         0         1         2           SN         10         10         10         10         10         10           SN         10         10         10         10         10         10           Stage         -0.1         0         1         2         3         10         10         10         10           BOOK STORE         C         Stage         -0.1         0         1         2         3           SN         10         10         10         10         10         10         10           BOOK STORE         C         Stage         -0.1         0         1         &lt;</td><td>SN         10&lt;</td><td>SN         10&lt;</td><td>SN1010101010101010Stage-0.10147121824C0147121824CN1010101010101010BOILER BUILDINGCStage-0.10112345S00111358SN1010101010101010Stage-0.10111358SN1010101010101010Stage-0.1011010101010Stage-0.110101010101010BOOK STORECStage-0.1012345S0023581010101010SN101010101010101010101010SN101010101010101010101010SN101010101010101010101010SN101010101010101010101010&lt;</td><td>SN         10&lt;</td><td>SN101010101010101010Stage-0.101234567C01471218243240CN1010101010101010101010BOILER BUILDINGCStage-0.101234567S00111313581216STUCTN0111313581216S001111313567S001101010101010101010Stage-0.11010101010101010101010Stage-0.1101010101010101010101010BOOK STORECStage-0.101234567S011010101010101010101010SN10101010101010101010101010SN1010101010101</td><td>SN         10&lt;</td><td>SN         10&lt;</td><td>SN10<td>SN     10     &lt;</td><td>SN     10     &lt;</td></td></td<>	SN         10         10         10         10           Stage         -0.1         0         1         2           C         0         1         4         7           CN         10         10         10         10           BOILER BUILDING         C         Stage         -0.1         0         1         2           BOILER BUILDING         C         Stage         -0.1         0         1         2           BOILER BUILDING         C         Stage         -0.1         0         1         2           SN         10         10         10         10         10         10           SN         10         10         10         10         10         10           Stage         -0.1         0         1         2         3         10         10         10         10           BOOK STORE         C         Stage         -0.1         0         1         2         3           SN         10         10         10         10         10         10         10           BOOK STORE         C         Stage         -0.1         0         1         <	SN         10<	SN         10<	SN1010101010101010Stage-0.10147121824C0147121824CN1010101010101010BOILER BUILDINGCStage-0.10112345S00111358SN1010101010101010Stage-0.10111358SN1010101010101010Stage-0.1011010101010Stage-0.110101010101010BOOK STORECStage-0.1012345S0023581010101010SN101010101010101010101010SN101010101010101010101010SN101010101010101010101010SN101010101010101010101010<	SN         10<	SN101010101010101010Stage-0.101234567C01471218243240CN1010101010101010101010BOILER BUILDINGCStage-0.101234567S00111313581216STUCTN0111313581216S001111313567S001101010101010101010Stage-0.11010101010101010101010Stage-0.1101010101010101010101010BOOK STORECStage-0.101234567S011010101010101010101010SN10101010101010101010101010SN1010101010101	SN         10<	SN         10<	SN10 <td>SN     10     &lt;</td> <td>SN     10     &lt;</td>	SN     10     <	SN     10     <

47			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
47			С		0	0	2	6	10	15	19	24	28	33	38	44	49	55	62
47			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
47			Struct	Ν			0.2		Ν		15			- 901				- 901	
49	CABINET MFG	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
49			S		0	0	20	22	24	26	28	30	35	40	43	46	50	50	50
49			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
49			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
49			С		0	40	60	70	80	100	100	100	100	100	100	100	100	100	100
49			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
49			Struct	Ν			0.2		Ν		15			- 901				- 901	
51	CAR WASH	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
51			S		0	0	0	0	2	5	10	10	15	15	20	20	25	25	30
51			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
51			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
51			С		0	0	11	26	40	51	62	76	76	76	76	76	76	76	81
51			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
51			Struct	Ν			1.5		Ν		37		Ν	57	37			901	
53	CARPET AND PAINT	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
53			S		0	0	0	60	60	60	60	60	60	60	60	60	60	80	80
53			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
53			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
53			С		0	0	21	43	65	83	96	97	99	100	100	100	100	100	100
53			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
53			Struct	Ν			0.2		Ν		15			- 901				- 901	
55	CEMETARY COMPLEX	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
55			S		0	0	19	23	25	25	25	26	27	28	31	35	41	50	58
55			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
55			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13

55			С		0	0	38	43	79	90	97	97	97	97	97	97	97	97	97
55			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
55			Struct	Ν			0.2		Ν		15			901				901	
57	CERAMIC CRAFTS	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
57			S		0	0	20	22	24	26	27	28	29	30	40	50	50	50	50
57			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
57			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
57			С		0	0	20	60	80	96	96	96	96	96	96	96	96	96	96
57			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
57			Struct	Ν			0.2		Ν		15			901				- 901	
59	CHURCH	Р	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
59			S		0	0	10	11	11	12	12	13	14	14	15	17	19	24	30
59			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
59			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
59			С		0	10	38	62	76	87	92	96	98	99	100	100	100	100	100
59			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
59			Struct	Ν			1.5		Ν		37		Ν	11	37			- 901	
61	CITY HALL	Р	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
61			S		0	0	1	1	1	2	2	3	4	6	8	12	17	23	31
61			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
61			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
61			С		0	0	35	75	85	95	100	100	100	100	100	100	100	100	100
61			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
61			Struct	Ν			0.2		Ν		15			901				- 901	
63			_		0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
05	CLEANERS	С	Stage		-0.1	0													
63	CLEANERS	С	Stage S		-0.1	0	4	6	6	8	10	13	17	22	28	34	42	50	57
63 63	CLEANERS	С	Stage S SN		-0.1 0 10	0 10	4 10	6 10	6 10	8 10	10 10	13 10	17 10	22 10	28 10	34 10	42 10	50 10	57 10
63 63 63	CLEANERS	C	Stage S SN Stage		-0.1 0 10 -0.1	0 10 0	4 10 1	6 10 2	6 10 3	8 10 4	10 10 5	13 10 6	17 10 7	22 10 8	28 10 9	34 10 10	42 10 11	50 10 12	57 10 13

63			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
63			Struct	Ν			0.2		Ν		15			901				901	
65	SUBSTAION	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
65			S		0	0	4	6	6	8	10	13	17	22	28	34	42	50	57
65			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
65			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
65			С		0	0	47	72	89	100	100	100	100	100	100	100	100	100	100
65			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
65			Struct	Ν			0.2		Ν		15			901				- 901	
67	CLINIC: MEDICAL	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
67			S		0	0	1	2	2	3	4	6	8	11	14	17	21	25	29
67			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
67			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
67			С		0	10	20	40	60	80	90	95	100	100	100	100	100	100	100
67			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
67			Struct	Ν			0.2		Ν		15			901				901	
69	CLOTHING	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
69			S		0	0	8	10	11	13	15	18	21	24	28	32	37	41	46
69			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
69			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
69			С		0	6	37	49	74	87	100	100	100	100	100	100	100	100	100
69			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
69			Struct	Ν			0.2		Ν		15			901				901	
71	CLOTHING	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
71			S		0	0	15	20	20	20	20	22	24	25	25	25	25	25	25
71			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
71			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
71			С		0	0	19	27	39	49	59	59	59	59	59	59	59	59	59
71			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10

														-				-	
71			Struct	Ν			0.2		Ν		15			901				901	
73	CONCRETE MFG.	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
73			S		0	0	30	30	30	30	30	30	30	30	30	30	30	30	30
73			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
73			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
73			С		0	0	20	60	67	74	80	90	100	100	100	100	100	100	100
73			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
73			Struct	Ν			0.2		Ν		15			901				901	
75	CONTRACTOR: ELEC	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
75			S		0	0	4	7	9	12	13	14	15	15	15	15	18	20	21
75			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
75			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
75			С		0	0	13	25	33	41	46	49	51	52	53	53	56	57	58
75			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
75			Struct	Ν			0.2		Ν		15			901				901	
77	CONTRACTOR: GENL	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
77			S		0	0	14	22	26	29	32	33	34	35	35	35	41	43	45
77			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
77			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
77			С		0	0	25	41	54	63	72	82	91	100	100	100	100	100	100
77			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
77			Struct	Ν			0.2		Ν		15			901				901	
79	CONTRACTOR: ROOF	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
79			S		0	0	14	21	25	27	28	30	30	30	30	30	32	34	35
79			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
79			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
79			С		0	0	13	25	33	41	46	49	51	52	53	53	56	57	58
79			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
79			Struct	Ν			0.2		Ν		15			- 901				- 901	

81	CONSTRUCTION CO.	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
81			S		0	0	10	20	30	40	50	60	70	80	90	100	100	100	100
81			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
81			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
81			С		0	0	25	41	54	63	72	82	91	100	100	100	100	100	100
81			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
81			Struct	Ν			0.2		Ν		15			901				901	
83	CONVENIENCE STOR	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
83			S		0	0	20	22	24	26	28	30	32	34	36	38	39	40	43
83			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
83			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
83			С		0	0	40	50	70	80	95	95	96	96	96	96	96	96	97
83			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
83			Struct	Ν			1.5		Ν		37		Ν	76	37			901	
85	COOLING TOWER	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
85			S		0	0	10	20	20	50	50	60	60	75	75	80	80	80	80
85			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
85			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
85			С		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
85			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
85			Struct	Ν			0.2		Ν		15			901				901	
87	COUNTRY CLUB/GOLF	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
87			S		0	0	7	8	8	9	10	11	12	13	14	15	18	21	24
87			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
87			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
87			С		0	36	39	42	46	51	55	61	66	73	79	86	93	99	99
87			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
87			Struct	Ν			0.2		Ν		15			- 901				- 901	
89	DAIRY FARM	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13

89			S		0	0	20	22	24	28	30	32	34	38	42	45	50	55	55
89			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
89			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
89			С		0	0	25	50	75	95	95	95	95	95	95	95	95	95	95
89			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
89			Struct	Ν			0.2		Ν		15			901				901	
91	DAIRY PROCESSING	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
91			S		0	0	1	1	3	5	8	12	16	21	26	32	38	45	45
91			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
91			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
91			С		0	0	8	33	58	66	66	66	66	73	86	86	86	86	86
91			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
91			Struct	Ν			0.2		Ν		15			901				901	
93	DAY CARE CENTER	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
93			S		0	0	15	16	16	20	25	29	33	37	41	44	47	50	53
93			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
93			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
93			С		0	0	24	50	88	100	100	100	100	100	100	100	100	100	100
93			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
93			Struct	Ν			1.5		Ν		37		Ν	22	37			901	
95	DENTIST OFFICE	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
95			S		0	7	35	35	35	35	35	35	36	37	38	39	41	42	44
95			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
95			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
95			С		0	0	22	47	64	76	88	100	100	100	100	100	100	100	100
95			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
95			Struct	Ν			0.2		Ν		15			901				901	
97	DEODERIZER BLDG.	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
97			S		0	0	1	1	3	5	8	12	16	21	26	32	38	45	45

97			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
97			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
97			С		0	0	11	17	23	23	24	29	29	29	30	30	30	30	30
97			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
97			Struct	Ν			0.2		Ν		15			901				901	
99	DEPARTMENT STORE	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
99			S		0	0	3	7	7	7	9	11	14	17	20	23	26	30	33
99			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
99			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
99			С		0	0	18	33	65	88	95	100	100	100	100	100	100	100	100
99			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
99			Struct	Ν			0.2		Ν		15			901				901	
101	DOCTOR OFFICE	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
101			S		0	0	1	3	4	6	9	11	14	17	20	24	29	35	42
101			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
101			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
101			С		0	10	20	40	60	80	90	95	100	100	100	100	100	100	100
101			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
101			Struct	Ν			1.5		Ν		37		Ν	92	37			901	
103	DOOR MFG.	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
103			S		0	0	14	22	26	29	32	33	34	35	35	35	35	41	43
103			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
103			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
103			С		0	0	17	35	68	90	93	97	98	100	100	100	100	100	100
103			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
103			Struct	Ν			0.2		Ν		15			901				901	
105	DRAPERY SHOP	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
105			S		0	0	15	20	30	35	40	45	50	60	70	80	85	90	95
105			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
105			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
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105			С		0	0	18	30	45	63	83	100	100	100	100	100	100	100	100
105			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
105			Struct	Ν			0.2		Ν		15			901				901	
107	DRUG STORE	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
107			S		0	0	1	5	5	5	7	8	11	14	18	22	27	33	38
107			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
107			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
107			С		0	0	20	50	80	90	100	100	100	100	100	100	100	100	100
107			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
107			Struct	Ν			0.2		Ν		15			901				901	
109	ELECTRONICS SALES	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
109			S		0	0	13	20	24	27	28	30	30	30	30	30	32	33	34
109			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
109			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
109			С		0	0	25	42	59	76	88	100	100	100	100	100	100	100	100
109			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
109			Struct	Ν			0.2		Ν		15			901				901	
111	ELECTRONICS MFG.	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
111			S		0	0	13	20	24	27	28	30	30	30	30	30	32	33	34
111			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
111			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
111			С		0	0	16	32	48	64	73	82	91	100	100	100	100	100	100
111			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
111			Struct	Ν			0.2		Ν		15			901				901	
113	ENGINE ROOM	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
113			S		0	0	1	1	3	5	8	12	16	21	26	32	38	45	45
113			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
113			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13

113			С		0	0	20	25	30	35	40	45	50	55	65	65	65	65	65
113			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
113			Struct	Ν			0.2		Ν		15			901				901	
115	EQUIP. STORAGE	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
115			S		0	0	0	3	5	6	7	8	10	13	17	21	25	30	40
115			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
115			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
115			С		0	5	10	15	20	30	40	50	60	70	80	90	100	100	100
115			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
115			Struct	Ν			0.2		Ν		15			901				901	
117	FABRICATION SHOP	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
117			S		0	0	2	5	10	15	20	25	30	35	40	50	75	75	75
117			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
117			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
117			С		0	0	10	20	30	40	50	60	70	75	80	80	80	80	80
117			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
117			Struct	Ν			0.2		Ν		15			901				901	
119	FEED STORE	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
119			S		0	0	20	24	28	32	34	36	38.9	40	42	44	46	48	50
119			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
119			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
119			С		0	0	10	20	30	40	50	60	70	75	80	80	80	80	80
119			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
119			Struct	Ν			0.2		Ν		15			901				901	
121	FEED MILL	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
121			S		0	0	0	0	0	20	23	27	30	33	37	40	43	47	50
121			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
121			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
121			С		0	0	10	20	30	40	50	60	70	75	80	80	80	80	80

121			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
121			Struct	Ν			0.2		Ν		15			901				901	
123	FILTERING PLANT	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
123			S		0	0	5	15	30	60	90	90	90	90	90	90	90	90	90
123			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
123			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
123			С		0	0	10	20	30	40	50	60	70	75	80	80	80	80	80
123			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
123			Struct	Ν			0.2		Ν		15			901				901	
125	FIREWORKS SALES	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
125			S		0	0	0	10	15	15	15	15	15	15	15	15	15	15	15
125			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
125			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
125			С		0	0	10	20	30	40	50	60	70	75	80	80	80	80	80
125			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
125			Struct	Ν			0.2		Ν		15			901				901	
127	FIRE STATION	Р	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
127			S		0	0	1	5	5	5	6	8.7	9	11	14	17	20	24	28
127			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
127			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
127			С		0	0	10	20	30	40	50	60	70	75	80	80	80	80	80
127			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
127			Struct	Ν			1.5		Ν		37		Ν	326	37			901	
129	FLEA MARKET	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
129			S		0	1	2	2	3	4	4	4	4	4	4	4	4	4	4
129			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
129			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
129			С		0	40	60	80	100	100	100	100	100	100	100	100	100	100	100
129			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10

														-				-	
129			Struct	Ν			0.2		Ν		15			901				901	
131	FLOOR & CARPET	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
131			S		0	0	2	3	4	4	5	7	9	13	18	22	29	35	42
131			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
131			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
131			С		0	0	61	81	91	93	95	97	99	100	100	100	100	100	100
131			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
131			Struct	Ν			0.2		Ν		15			901				901	
133	FLORIST	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
133			S		0	0	7	7	8	9	11	13	16	19	22	26	30	34	38
133			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
133			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
133			С		0	0	61	81	91	93	95	97	99	100	100	100	100	100	100
133			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
133			Struct	Ν			0.2		Ν		15			901				901	
135	FOOD PROCESSOR	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
135			S		0	0	6	6	6	6	10	14	18	20	20	20	20	20	20
135			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
135			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
135			С		0	0	61	81	91	93	95	97	99	100	100	100	100	100	100
135			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
135			Struct	Ν			1.5		Ν		37		Ν	117	37			901	
137	FOOD WAREHOUSE	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
137			S		0	0	0	10	11	12	13	13	14	14	15	15	17	18	19
137			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
137			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
137			С		0	0	24	39	54	68	83	88	88	88	88	88	88	88	89
137			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
137			Struct	Ν			0.2		Ν		15			- 901				- 901	

FOUNDARY	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
		S		0	0	5	10	20	30	30	50	70	70	70	75	75	80	80
		SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
		Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
		С		0	10	17	24	29	34	38	43	45	50	58	62	66	69	74
		CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
		Struct	Ν			0.2		Ν		15			901				901	
FRAME SHOP	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
		S		0	0	20	22	24	26	28	30	35	40	43	46	50	50	50
		SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
		Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
		С		0	0	16	45	80	88	93	95	98	100	100	100	100	100	100
		CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
		Struct	Ν			0.2		Ν		15			- 901				- 901	
FRUIT STAND	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
		S		0	0	1	2	5	8	28	12	17	22	28	36	43	50	58
		SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
		Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
		С		0	0	45	80	90	100	100	100	100	100	100	100	100	100	100
		CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
		Struct	Ν			0.2		Ν		15			- 901				901	
FUNERAL HOME	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
		S		0	0	1	5	5	5	6	7	9	11	14	17	20	24	28
		SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
		Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
		С		0	0	10	30	60	90	100	100	100	100	100	100	100	100	100
		CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
		Struct	Ν			1.5		Ν		37		Ν	54	37			901	
FURNITURE	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
	FOUNDARY FRAME SHOP FRUIT STAND FUNERAL HOME	FOUNDARY C FRAME SHOP C FRUIT STAND C FUNERAL HOME C	FOUNDARY C Stage Suge SN Stage C CN Struct Struct Suge S SN Stage C CN Stage C CN Stage C CN Stage C Suge S Stage C CN Stage C CN Stage C CN Stage C CN Struct Suge C S S S S S S S S S S S S S	FOUNDARY       C       Stage         SN       Stage         C       SN         FRAME SHOP       C       C         FRAME SHOP       C       Stage         FRAME SHOP       C       Stage         FRUIT STAND       C       Stage         FRUIT STAND       C       Stage         FRUIT STAND       C       Stage         FRUIT STAND       C       Stage         FUNERAL HOME       C       S         FUNERAL HOME       C       Stage         C       SN       S         FUNERAL HOME       C       Stage         C       CN       S         FUNERAL HOME       C       Stage         FURNITURE       C       Stage	FOUNDARY       C       Stage       -0.1         S       0         SN       10         Stage       -0.1         C       0         Stage       -0.1         C       0         C       0         Stage       -0.1         C       0         Stage       -0.1         C       Stage         Struct       N         FRAME SHOP       C         Stage       -0.1         S       0         SN       10         Stage       -0.1         C       0         SN       10         Stage       -0.1         C       0         SN       10         Stage       -0.1         S       0         SN       10         Stage       -0.1         C       0         SN       10         Stage       -0.1         Stage       -0.1         Stage       -0.1         C       0         SN       10         Stage       -0.1	FOUNDARY       C       Stage       -0.1       0         S       0       S       0       0         SN       10       S       0       10         Stage       -0.1       0       0       10         Stage       -0.1       0       10       10         C       0       10       10       10         Struct       N       10       10       10         FRAME SHOP       C       Stage       -0.1       0         SN       10       10       10       10         Stage       -0.1       0       10       10         Struct       N       10       10       10         Stage       -0.1       0       10       10         Stage       -0.1       0       10       10       10 <td>FOUNDARY       C       Stage       -0.1       0       1         S       0       0       5         SN       10       10       10         Stage       -0.1       0       1         C       0       10       10         Stage       -0.1       0       10         C       0       10       10         C       0       10       10         FRAME SHOP       C       Stage       -0.1       0       10         S       0       0       20       5N       10       10       10         FRAME SHOP       C       Stage       -0.1       0       1</td> <td>FOUNDARY       C       Stage       -0.1       0       1       2         S       0       0       5       10         SN       10       10       10       10         Stage       -0.1       0       1       2         C       0       10       10       10         Stage       -0.1       0       1       2         C       0       10       10       10         FRAME SHOP       C       Stage       -0.1       0       1       2         SN       10       10       10       10       10       10       10         FRAME SHOP       C       Stage       -0.1       0       1       2         SN       10       10       10       10       10       10       10         Stage       -0.1       0       1       2</td> <td>FOUNDARY     C     Stage     -0.1     0     1     2     3       S     0     0     5     10     20       SN     10     10     10     10     10       Stage     -0.1     0     1     2     3       C     0     10     10     10     10     10       Stage     -0.1     0     10     10     10     10       FRAME SHOP     C     Stage     -0.1     0     1     2     3       SN     10     10     10     10     10     10     10       Stage     -0.1     0     1     2     3       S     0     0     10     10     10       Stage     -0.1     0     1     2     3       S     0     0     10     10     10       Stage     -0.1     0     1     2     3       FRUIT STAND     C     Stage     -0.1     0     1     2       S     0     0     1     2     3       S     0     10     10     10     10       S     0     1     2     3       S</td> <td>FOUNDARYCStage-0.101234S005102030SN10101010101010Stage-0.1011242934C01017242934CN101010101010StructN-0.22224SN0020222426SN101010101010Stage-0.101234CStage-0.101234SN10101010101010Stage-0.101234C00110101010Stage-0.101234C001234S001234S001234FRUIT STANDCStage-0.101234S001101010101010StructN01234CS0011234FUNERAL HOME<td>FOUNDARY     C     Stage     -0.1     0     1     2     3     4     5       S     0     0     5     10     20     30     30       SN     10     10     10     10     10     10     10     10       Stage     -0.1     0     1     2     3     4     5       C     0     10     10     10     10     10     10       Stage     -0.1     0     17     24     29     34     38       CN     10     10     10     10     10     10     10       Struct     N     -     0     1     10     10     10       Struct     N     -     0     1     2     3     4     5       Stage     -0.1     0     1     2     3     4     5       Stage     -0.1     0     10     10     10     10     10       Stage     -0.1     0     1     2     3     4     5       Stage     -0.1     0     10     10     10     10     10       FRUIT STAND     Stage     -0.1     0     1     2</td><td>FOUNDARY     C     Stage     -0.1     0     1     2     3     4     5     6       S     0     0     5     10     20     30     30     50       SN     10     10     10     10     10     10     10     10     10     10       Stage     -0.1     0     1     2     3     4     5     6       C     0     10     10     10     10     10     10     10     10     10       Stage     -0.1     0     1     2     3     4     5     6       C     0     10     10     10     10     10     10     10     10       Struct     N     -     0.1     10     10     10     10     10     10       SN     10     10     10     10     10     10     10     10     10     10       Stage     -0.1     0     1     2     3     4     5     6       C     Stage     -0.1     0     10     10     10     10     10       FUIT STAND     C     Stage     -0.1     0     1     2     3<td>FOUNDARYCStage-0.101234567S005102030305070SN1010101010101010101010Stage-0.101234567C0101010101010101010StructN-01234567FRAME SHOPCStage-0.10122034384567StructN-0122426283035567Stage-0.101234567567Stage-0.101234567567Stage-0.101234567567Stage-0.101234567567StructN-011010101010101010Stage-0.101234567567FRUIT STANDCStage-0.10</td><td>FOUNDARY     C     Stage     -0.1     0     1     2     3     4     5     6     7     8       S     0     0     5     10     20     30     30     50     70       SN     10     10     10     10     10     10     10     10     10     10     10     10       Stage     -0.1     10     <t< td=""><td>FOUNDARY     C     Stage     -0.1     0     1     2     3     4     5     6     7     8     9       S     0     0     5     10     20     30     30     50     70     70       SN     10&lt;</td><td>FOUNDARY     C     Stage     -0.1     0     1     2     3     4     5     6     7     8     9     10       S     0     5     10     20     30     30     50     7</td><td>FOUNDARYCSinge-0.101234567891011S00001010102030305070</td><td>FOUNDARY     C     Singe     -0.1     0     1     2     3     4     5     6     7     8     9     10     11     12       S     0&lt;</td></t<></td></td></td>	FOUNDARY       C       Stage       -0.1       0       1         S       0       0       5         SN       10       10       10         Stage       -0.1       0       1         C       0       10       10         Stage       -0.1       0       10         C       0       10       10         C       0       10       10         FRAME SHOP       C       Stage       -0.1       0       10         S       0       0       20       5N       10       10       10         FRAME SHOP       C       Stage       -0.1       0       1	FOUNDARY       C       Stage       -0.1       0       1       2         S       0       0       5       10         SN       10       10       10       10         Stage       -0.1       0       1       2         C       0       10       10       10         Stage       -0.1       0       1       2         C       0       10       10       10         FRAME SHOP       C       Stage       -0.1       0       1       2         SN       10       10       10       10       10       10       10         FRAME SHOP       C       Stage       -0.1       0       1       2         SN       10       10       10       10       10       10       10         Stage       -0.1       0       1       2	FOUNDARY     C     Stage     -0.1     0     1     2     3       S     0     0     5     10     20       SN     10     10     10     10     10       Stage     -0.1     0     1     2     3       C     0     10     10     10     10     10       Stage     -0.1     0     10     10     10     10       FRAME SHOP     C     Stage     -0.1     0     1     2     3       SN     10     10     10     10     10     10     10       Stage     -0.1     0     1     2     3       S     0     0     10     10     10       Stage     -0.1     0     1     2     3       S     0     0     10     10     10       Stage     -0.1     0     1     2     3       FRUIT STAND     C     Stage     -0.1     0     1     2       S     0     0     1     2     3       S     0     10     10     10     10       S     0     1     2     3       S	FOUNDARYCStage-0.101234S005102030SN10101010101010Stage-0.1011242934C01017242934CN101010101010StructN-0.22224SN0020222426SN101010101010Stage-0.101234CStage-0.101234SN10101010101010Stage-0.101234C00110101010Stage-0.101234C001234S001234S001234FRUIT STANDCStage-0.101234S001101010101010StructN01234CS0011234FUNERAL HOME <td>FOUNDARY     C     Stage     -0.1     0     1     2     3     4     5       S     0     0     5     10     20     30     30       SN     10     10     10     10     10     10     10     10       Stage     -0.1     0     1     2     3     4     5       C     0     10     10     10     10     10     10       Stage     -0.1     0     17     24     29     34     38       CN     10     10     10     10     10     10     10       Struct     N     -     0     1     10     10     10       Struct     N     -     0     1     2     3     4     5       Stage     -0.1     0     1     2     3     4     5       Stage     -0.1     0     10     10     10     10     10       Stage     -0.1     0     1     2     3     4     5       Stage     -0.1     0     10     10     10     10     10       FRUIT STAND     Stage     -0.1     0     1     2</td> <td>FOUNDARY     C     Stage     -0.1     0     1     2     3     4     5     6       S     0     0     5     10     20     30     30     50       SN     10     10     10     10     10     10     10     10     10     10       Stage     -0.1     0     1     2     3     4     5     6       C     0     10     10     10     10     10     10     10     10     10       Stage     -0.1     0     1     2     3     4     5     6       C     0     10     10     10     10     10     10     10     10       Struct     N     -     0.1     10     10     10     10     10     10       SN     10     10     10     10     10     10     10     10     10     10       Stage     -0.1     0     1     2     3     4     5     6       C     Stage     -0.1     0     10     10     10     10     10       FUIT STAND     C     Stage     -0.1     0     1     2     3<td>FOUNDARYCStage-0.101234567S005102030305070SN1010101010101010101010Stage-0.101234567C0101010101010101010StructN-01234567FRAME SHOPCStage-0.10122034384567StructN-0122426283035567Stage-0.101234567567Stage-0.101234567567Stage-0.101234567567Stage-0.101234567567StructN-011010101010101010Stage-0.101234567567FRUIT STANDCStage-0.10</td><td>FOUNDARY     C     Stage     -0.1     0     1     2     3     4     5     6     7     8       S     0     0     5     10     20     30     30     50     70       SN     10     10     10     10     10     10     10     10     10     10     10     10       Stage     -0.1     10     <t< td=""><td>FOUNDARY     C     Stage     -0.1     0     1     2     3     4     5     6     7     8     9       S     0     0     5     10     20     30     30     50     70     70       SN     10&lt;</td><td>FOUNDARY     C     Stage     -0.1     0     1     2     3     4     5     6     7     8     9     10       S     0     5     10     20     30     30     50     7</td><td>FOUNDARYCSinge-0.101234567891011S00001010102030305070</td><td>FOUNDARY     C     Singe     -0.1     0     1     2     3     4     5     6     7     8     9     10     11     12       S     0&lt;</td></t<></td></td>	FOUNDARY     C     Stage     -0.1     0     1     2     3     4     5       S     0     0     5     10     20     30     30       SN     10     10     10     10     10     10     10     10       Stage     -0.1     0     1     2     3     4     5       C     0     10     10     10     10     10     10       Stage     -0.1     0     17     24     29     34     38       CN     10     10     10     10     10     10     10       Struct     N     -     0     1     10     10     10       Struct     N     -     0     1     2     3     4     5       Stage     -0.1     0     1     2     3     4     5       Stage     -0.1     0     10     10     10     10     10       Stage     -0.1     0     1     2     3     4     5       Stage     -0.1     0     10     10     10     10     10       FRUIT STAND     Stage     -0.1     0     1     2	FOUNDARY     C     Stage     -0.1     0     1     2     3     4     5     6       S     0     0     5     10     20     30     30     50       SN     10     10     10     10     10     10     10     10     10     10       Stage     -0.1     0     1     2     3     4     5     6       C     0     10     10     10     10     10     10     10     10     10       Stage     -0.1     0     1     2     3     4     5     6       C     0     10     10     10     10     10     10     10     10       Struct     N     -     0.1     10     10     10     10     10     10       SN     10     10     10     10     10     10     10     10     10     10       Stage     -0.1     0     1     2     3     4     5     6       C     Stage     -0.1     0     10     10     10     10     10       FUIT STAND     C     Stage     -0.1     0     1     2     3 <td>FOUNDARYCStage-0.101234567S005102030305070SN1010101010101010101010Stage-0.101234567C0101010101010101010StructN-01234567FRAME SHOPCStage-0.10122034384567StructN-0122426283035567Stage-0.101234567567Stage-0.101234567567Stage-0.101234567567Stage-0.101234567567StructN-011010101010101010Stage-0.101234567567FRUIT STANDCStage-0.10</td> <td>FOUNDARY     C     Stage     -0.1     0     1     2     3     4     5     6     7     8       S     0     0     5     10     20     30     30     50     70       SN     10     10     10     10     10     10     10     10     10     10     10     10       Stage     -0.1     10     <t< td=""><td>FOUNDARY     C     Stage     -0.1     0     1     2     3     4     5     6     7     8     9       S     0     0     5     10     20     30     30     50     70     70       SN     10&lt;</td><td>FOUNDARY     C     Stage     -0.1     0     1     2     3     4     5     6     7     8     9     10       S     0     5     10     20     30     30     50     7</td><td>FOUNDARYCSinge-0.101234567891011S00001010102030305070</td><td>FOUNDARY     C     Singe     -0.1     0     1     2     3     4     5     6     7     8     9     10     11     12       S     0&lt;</td></t<></td>	FOUNDARYCStage-0.101234567S005102030305070SN1010101010101010101010Stage-0.101234567C0101010101010101010StructN-01234567FRAME SHOPCStage-0.10122034384567StructN-0122426283035567Stage-0.101234567567Stage-0.101234567567Stage-0.101234567567Stage-0.101234567567StructN-011010101010101010Stage-0.101234567567FRUIT STANDCStage-0.10	FOUNDARY     C     Stage     -0.1     0     1     2     3     4     5     6     7     8       S     0     0     5     10     20     30     30     50     70       SN     10     10     10     10     10     10     10     10     10     10     10     10       Stage     -0.1     10 <t< td=""><td>FOUNDARY     C     Stage     -0.1     0     1     2     3     4     5     6     7     8     9       S     0     0     5     10     20     30     30     50     70     70       SN     10&lt;</td><td>FOUNDARY     C     Stage     -0.1     0     1     2     3     4     5     6     7     8     9     10       S     0     5     10     20     30     30     50     7</td><td>FOUNDARYCSinge-0.101234567891011S00001010102030305070</td><td>FOUNDARY     C     Singe     -0.1     0     1     2     3     4     5     6     7     8     9     10     11     12       S     0&lt;</td></t<>	FOUNDARY     C     Stage     -0.1     0     1     2     3     4     5     6     7     8     9       S     0     0     5     10     20     30     30     50     70     70       SN     10<	FOUNDARY     C     Stage     -0.1     0     1     2     3     4     5     6     7     8     9     10       S     0     5     10     20     30     30     50     7	FOUNDARYCSinge-0.101234567891011S00001010102030305070	FOUNDARY     C     Singe     -0.1     0     1     2     3     4     5     6     7     8     9     10     11     12       S     0<

147			S		0	0	2	4	4	5	6	7	9	11	14	17	21	25	29
147			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
147			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
147			С		0	40	60	70	80	100	100	100	100	100	100	100	100	100	100
147			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
147			Struct	Ν			0.2		Ν		15			901				901	
149	FURNITURE MFG.	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
149			S		0	0	10	20	24	28	32	38	42	46	48	50	50	50	50
149			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
149			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
149			С		0	40	60	70	80	100	100	100	100	100	100	100	100	100	100
149			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
149			Struct	Ν			0.2		Ν		15			901				901	
151	GARAGE	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
151			S		0	0	3	5	6	7	8	10	13	17	21	25	30	35	41
151			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
151			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
151			С		0	0	11	17	20	23	25	29	35	42	51	63	77	93	100
151			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
151			Struct	Ν			0.2		Ν		15			901				901	
153	GAS-BUTANE SUPPL	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
153			S		0	17	17	17	17	23	32	45	55	61	66	69	73	76	78
153			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
153			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
153			С		0	0	25	46	65	75	81	86	90	94	96	100	100	100	100
153			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
153			Struct	Ν			0.2		Ν		15			- 901				- 901	
155	GIFT SHOP	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
155			S		0	0	5	8	9	9	9	11	14	18	24	31	40	50	58

155			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
155			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
155			С		0	0	54	63	75	88	100	100	100	100	100	100	100	100	100
155			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
155			Struct	Ν			0.2		Ν		15			901				901	
157	GOLF COURSE	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
157			S		0	0	1	4	6	8	9	11	14	17	21	26	31	37	43
157			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
157			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
157			С		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
157			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
157			Struct	Ν			0.2		Ν		15			901				901	
159	GREENHOUSE	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
159			S		0	0	5	11	16	21	26	31	37	42	47	52	56	61	65
159			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
159			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
159			С		0	0	62	84	96	97	98	99	100	100	100	100	100	100	100
159			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
159			Struct	Ν			1.5		Ν		37		Ν	85	37			- 901	
161	GROCERY	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
161			S		0	0	3	4	5	6	7	10	14	20	29	37	44	50	55
161			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
161			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
161			С		0	4	31	51	77	97	100	100	100	100	100	100	100	100	100
161			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
161			Struct	Ν			1.5		Ν		37		Ν	282	37			901	
163	GROCERY: DRIVE-IN	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
163			S		0	0	3	4	5	6	7	10	14	20	29	37	44	50	55
163			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10

163			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
163			С		0	2	56	69	85	98	100	100	100	100	100	100	100	100	100
163			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
163			Struct	Ν			0.2		Ν		15			901				901	
165	GUNSHOP	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
165			S		0	0	10	10	10	11	12	13	14	16	18	20	22	25	29
165			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
165			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
165			С		0	21	37	56	85	100	100	100	100	100	100	100	100	100	100
165			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
165			Struct	Ν			0.2		Ν		15			901				901	
167	HALL	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
167			S		0	0	1	5	5	5	5	6	8	9	11	14	18	22	28
167			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
167			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
167			С		0	0	5	8	10	12	14	18	24	32	44	60	85	95	100
167			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
167			Struct	Ν			0.2		Ν		15			901				901	
169	HARDWARE	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
169			S		0	0	12	12	12	12	12	12	14	15	18	21	25	30	35
169			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
169			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
169			С		0	7	29	46	62	68	80	92	93	95	96	97	99	100	100
169			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
169			Struct	Ν			0.2		Ν		15			901				901	
171	HEALTH CENTER	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
171			S		0	0	18	20	20	20	20	20	22	27	33	39	44	49	53
171			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
171			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13

171			С		0	0	25	45	75	90	100	100	100	100	100	100	100	100	100
171			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
171	HEAT EXCHANGER		Struct	Ν			0.2		Ν		15			901				901	
173	MFG.	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
173			S		0	0	3	4	5	6	20	7	7	7	7	7	8	9	9
173			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
173			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
173			С		0	0	11	18	24	29	33	36	38	41	43	45	50	55	59
173			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
173			Struct	Ν			0.2		Ν		15			901				901	
175	HWY. MATL. STORAGE	Р	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
175			S		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
175			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
175			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
175			С		0	0	4	4	8	8	19	19	38	38	38	58	58	58	58
175			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
175			Struct	Ν			0.2		Ν		15			901				901	
177	HOBBY SHOP	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
177			S		0	0	18	20	20	20	20	20	22	27	33	39	44	49	53
177			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
177			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
177			С		0	0	28	53	67	78	88	99	99	99	99	99	99	99	99
177			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
177			Struct	Ν			0.2		Ν		15			901				901	
179	HOSPITAL	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
179			S		0	0	5	10	20	25	30	35	40	43	47	50	53	55	57
179			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
179			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
179			С		0	0	10	15	20	25	35	58	66	74	82	95	95	95	95

179			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
179			Struct	Ν			1.5		Ν		37		Ν	128	37			901	
181	HOTEL	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
181			S		0	0	1	2	2	2	3	5	6	9	11	15	18	22	26
181			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
181			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
181			С		0	0	11	22	28	33	37	41	44	46	49	54	60	69	81
181			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
181			Struct	Ν			1.5		Ν		37		Ν	36	37			- 901	
183	IMPORT SALES	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
183			S		0	0	25	30	35	40	42	44	46	48	50	50	65	65	65
183			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
183			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
183			С		0	0	59	65	70	75	80	90	90	90	90	90	90	90	90
183			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
183			Struct	Ν			0.2		Ν		15			901				901	
185	INSTRUMENT MFG.	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
185			S		0	0	5	8	12	14	16	17	19	20	20	20	24	26	28
185			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
185			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
185			С		0	0	59	65	70	75	80	90	90	90	90	90	90	90	90
185			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
185			Struct	Ν			0.2		Ν		15			901				901	
187	JEWELRY SALES	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
187			S		0	0	1	2	2	2	3	4	6	8	9	12	15	20	25
187			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
187			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
187			С		0	0	22	40	62	81	86	90	92	94	95	96	96	96	96
187			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10

														-				-	
187			Struct	Ν			0.2		Ν		15			901				901	
189	JEWELRY MFG.	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
189			S		0	0	20	22	24	26	28	30	32	34	36	36	36	40	40
189			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
189			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
189			С		0	0	22	62	81	81	83	90	92	94	95	96	96	96	96
189			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
189			Struct	Ν			0.2		Ν		15			901				901	
191	LABORATORY: CHEM	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
191			S		0	0	1	3	5	8	12	16	21	26	32	38	45	45	45
191			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
191			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
191			С		0	0	27	28	51	51	60	70	79	89	89	90	90	91	91
191			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
191			Struct	Ν			0.2		Ν		15			- 901				901	
193	LAUNDRY	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
193			S		0	0	2	5	8	12	15	18	21	23	26	28	31	33	36
193			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
193			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
193			С		0	0	20	55	78	100	86	95	100	100	100	100	100	100	100
193			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
193			Struct	Ν			0.2		Ν		15			901				901	
195	LAWNMOWER SALES	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
195			S		0	0	12	13	15	16	17	18	21	25	30	35	42	50	57
195			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
195			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
195			С		0	0	9	76	89	91	93	94	96	97	98	100	100	100	100
195			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
195			Struct	Ν			0.2		Ν		15			- 901				901	

197	LEATHER GOODS MFG.	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
197			S		0	0	9	15	17	21	23	24	25	25	25	25	30	31	33
197			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
197			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
197			С		0	0	4	7	10	13	16	19	22	25	27	30	33	36	39
197			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
197			Struct	Ν			0.2		N		15			- 901				- 901	
199	LIBRARY	Р	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
199			S		0	0	1	2	2	2	3	4	6	8	9	12	15	20	25
199			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
199			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
199			С		0	0	35	50	75	95	100	100	100	100	100	100	100	100	100
199			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
199			Struct	Ν			0.2		Ν		15			901				- 901	
201	LIQUOR STORE	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
201			S		0	0	1	1	2	2	3	5	6	8	11	16	22	29	39
201			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
201			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
201			С		0	0	19	39	58	79	99	100	100	100	100	100	100	100	100
201			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
201			Struct	Ν			0.2		Ν		15			901				901	
203	LOADING DOCK: IND.	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
203			S		0	0	1	1	1	3	3	5	8	12	16	21	26	32	38
203			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
203			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
203			С		0	0	8	8	8	10	10	14	18	30	30	30	30	30	38
203			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
203			Struct	Ν			1.5		Ν		37		Ν	833	37			901	
205	LUMBER MILL	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13

		S		0	0	3	5	8	10	13	15	18	20	23	25	28	30	33
		SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
		Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
		С		0	0	0	0	0	0	0	0	0	0	0	0	0	100	100
		CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
		Struct	Ν			0.2		Ν		15			901				901	
LUMBER YARD	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
		S		0	0	1	1	1	1	1	4	4	5	5	7	9	13	17
		SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
		Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
		С		0	0	20	30	45	60	75	90	100	100	100	100	100	100	100
		CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
		Struct	Ν			0.2		Ν		15			- 901				- 901	
MARINE SERVICE	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
		S		0	0	1	2	3	4	5	6	7	8	9	10	10	10	10
		SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
		Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
		С		0	40	52	89	100	100	100	100	100	100	100	100	100	100	100
		CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
		Struct	Ν			0.2		Ν		15			- 901				- 901	
MACHINE SHOP: LT	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
		S		0	0	1	1	1	3	5	8	12	16	21	26	32	38	40
		SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
		Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
		С		0	0	1	37	47	57	57	58	67	67	68	68	68	69	78
		CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
		Struct	Ν			1.5		Ν		37		Ν	107	37			- 901	
MACHINE SHOP: HVY	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
		S		0	0	1	1	1	3	5	8	12	16	21	26	32	38	40
	LUMBER YARD MARINE SERVICE MACHINE SHOP: LT	LUMBER YARD C MARINE SERVICE C MACHINE SHOP: LT C	S SN Stage C CN Struct LUMBER YARD LUMBER YARD C Stage S SN Stage C CN Struct Stage S SN Stage S SN Stage S SN Stage C S SN Stage S SN Stage S SN Stage S SN Stage C CN Struct Stage C CN Stage S SN Stage S SN Stage S SN Stage S SN Stage S S SN Stage S S SN Stage S S S S S S S S S S S S S S S S S S S	N       SN         Stage       C         LUMBER YARD       C       Stage         LUMBER YARD       C       Stage         SN       S       S         MARINE SERVICE       C       S         MACHINE SHOP: LT       C       Stage         C       S       S         MACHINE SHOP: HYY       C       Stage         MACHINE SHOP: HYY       C       Stage	S         0           SN         10           Stage         -0.1           C         0           CN         10           Struct         N           LUMBER YARD         C         Stage         -0.1           S         0         Struct         N           LUMBER YARD         C         Stage         -0.1           S         0         SN         10           Struct         N         10         Stage         -0.1           Kage         -0.1         C         0         O	S         0         0           SN         10         10           Stage         -0.1         0           C         0         0           CN         10         10           Struct         N         10           LUMBER YARD         C         Stage         -0.1           S         0         0         10           Struct         N         10         10           Stage         -0.1         0         10           Stage         -0.1         0         10           C         Stage         -0.1         0           CN         10         10         10           Stage         -0.1         0         10           CN         10         10         10           Struct         N         10         10           Stage         -0.1         0         10           CN         10         10         10           Struct         N         10         10           Stage         -0.1         0         10           Stage         -0.1         0         10           Stage	S         0         0         3           SN         10         10         10           Stage         -0.1         0         1           C         0         0         0           CN         10         10         10           Struct         N         -01         0           LUMBER YARD         C         Stage         -0.1         0         1           SN         10         10         10         10         10           SN         10         10         10         10         10           SN         10         10         10         10         10           Stage         -0.1         0         1         10         10           MARINE SERVICE         C         Stage         -0.1         0         1           SN         10         10         10         10         10           MARINE SERVICE         C         Stage         -0.1         0         1           SN         10         10         10         10         10           SN         10         10         10         10         10         10 <t< td=""><td>S         0         0         3         5           SN         10         10         10         10         10           Stage         -0.1         0         1         2           C         0         0         0         0         0           CN         10         10         10         10         10           Struct         N         -         0.2         -         10           Struct         N         -         0.2         -         10         10           Struct         N         -         0.2         -         10         10         10           Struct         N         10         10         10         10         10         10           Stage         -0.1         0         1         2         C         0         0         10         10           MARINE SERVICE         C         Stage         -0.1         0         1         2           SN         10         10         10         10         10         10         10           Stage         -0.1         0         1         2         S         0         1<!--</td--><td>S         0         0         3         5         8           SN         10         10         10         10         10         10           Stage         -0.1         0         1         2         3           C         0         0         0         0         0         0           CN         10         10         10         10         10         10           Struct         N        </td><td>S0035810SN10101010101010Stage-0.1000000CN10101010101010StructN</td><td>S003581013SN10101010101010101010Stage-0.10000000000CN1010101010101010101010StructN-011111111StructN-011111111StructN0101010101010101010Stage-0.10111</td></td></t<> <td>S00358101315SN1010101010101010101010Stage0.10123456C0000000000StructN-52N-15LUMBER YARDCStage0.10111111SN00111111111SN1010101010101010101010SN101010101010101010101010Stage-0.1012345610&lt;</td> <td>S     0     0     3     5     8     10     13     18       SN     10     10     10     10     10     10     10     10     10       Stage     -0.1     0     1     2     3     4     5     6     7       C     0     0     10     10     10     10     10     10     10     10       Stage     -0.1     0     10     10     10     10     10     10     10       Stage     -0.1     10     10     10     10     10     10     10     10       Stage     -0.1     10     10     10     10     10     10     10     10       Stage     -0.1     10     10     10     10     10     10     10     10       Stage     -0.1     10     10     10     10     10     10     10     10       Marine Service     C     Stage     -0.1     10     10     10     10     10     10     10       Stage     -0.1     10     10     10     10     10     10     10     10       Stage     -0.1     10     10</td> <td>S00358101010101010SN101010101010101010101010Stage-0.100</td> <td>S     0     0     0     5     8     10     13     16     18     20     23       SN     10<!--</td--><td>S     0     0     3     5     8     10     13     15     18     20     23     25       SN     10<!--</td--><td>S0035810131518202328SN10101010101010101010101010Stage0.000<td>S     0     0     0     3     5     8     10     13     15     16     20     23     25     28     30       SN     10</td></td></td></td>	S         0         0         3         5           SN         10         10         10         10         10           Stage         -0.1         0         1         2           C         0         0         0         0         0           CN         10         10         10         10         10           Struct         N         -         0.2         -         10           Struct         N         -         0.2         -         10         10           Struct         N         -         0.2         -         10         10         10           Struct         N         10         10         10         10         10         10           Stage         -0.1         0         1         2         C         0         0         10         10           MARINE SERVICE         C         Stage         -0.1         0         1         2           SN         10         10         10         10         10         10         10           Stage         -0.1         0         1         2         S         0         1 </td <td>S         0         0         3         5         8           SN         10         10         10         10         10         10           Stage         -0.1         0         1         2         3           C         0         0         0         0         0         0           CN         10         10         10         10         10         10           Struct         N        </td> <td>S0035810SN10101010101010Stage-0.1000000CN10101010101010StructN</td> <td>S003581013SN10101010101010101010Stage-0.10000000000CN1010101010101010101010StructN-011111111StructN-011111111StructN0101010101010101010Stage-0.10111</td>	S         0         0         3         5         8           SN         10         10         10         10         10         10           Stage         -0.1         0         1         2         3           C         0         0         0         0         0         0           CN         10         10         10         10         10         10           Struct         N	S0035810SN10101010101010Stage-0.1000000CN10101010101010StructN	S003581013SN10101010101010101010Stage-0.10000000000CN1010101010101010101010StructN-011111111StructN-011111111StructN0101010101010101010Stage-0.10111	S00358101315SN1010101010101010101010Stage0.10123456C0000000000StructN-52N-15LUMBER YARDCStage0.10111111SN00111111111SN1010101010101010101010SN101010101010101010101010Stage-0.1012345610<	S     0     0     3     5     8     10     13     18       SN     10     10     10     10     10     10     10     10     10       Stage     -0.1     0     1     2     3     4     5     6     7       C     0     0     10     10     10     10     10     10     10     10       Stage     -0.1     0     10     10     10     10     10     10     10       Stage     -0.1     10     10     10     10     10     10     10     10       Stage     -0.1     10     10     10     10     10     10     10     10       Stage     -0.1     10     10     10     10     10     10     10     10       Stage     -0.1     10     10     10     10     10     10     10     10       Marine Service     C     Stage     -0.1     10     10     10     10     10     10     10       Stage     -0.1     10     10     10     10     10     10     10     10       Stage     -0.1     10     10	S00358101010101010SN101010101010101010101010Stage-0.100	S     0     0     0     5     8     10     13     16     18     20     23       SN     10 </td <td>S     0     0     3     5     8     10     13     15     18     20     23     25       SN     10<!--</td--><td>S0035810131518202328SN10101010101010101010101010Stage0.000<td>S     0     0     0     3     5     8     10     13     15     16     20     23     25     28     30       SN     10</td></td></td>	S     0     0     3     5     8     10     13     15     18     20     23     25       SN     10 </td <td>S0035810131518202328SN10101010101010101010101010Stage0.000<td>S     0     0     0     3     5     8     10     13     15     16     20     23     25     28     30       SN     10</td></td>	S0035810131518202328SN10101010101010101010101010Stage0.000 <td>S     0     0     0     3     5     8     10     13     15     16     20     23     25     28     30       SN     10</td>	S     0     0     0     3     5     8     10     13     15     16     20     23     25     28     30       SN     10

213			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
213			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
213			С		0	0	6	13	20	28	35	42	50	58	67	72	79	84	85
213			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
213			Struct	Ν			0.2		Ν		15			901				901	
215	MAINT.BLDG.: MFG.	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
215			S		0	0	5	10	20	30	50	70	70	70	70	70	70	80	80
215			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
215			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
215			С		0	0	10	15	20	25	35	45	45	45	45	50	50	50	55
215			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
215			Struct	Ν			0.2		Ν		15			901				901	
217	MFG.: DETERGENT	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
217			S		0	0	1	1	3	5	8	12	16	21	26	32	38	45	50
217			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
217			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
217			С		0	0	19	28	35	41	47	50	52	55	59	64	81	90	91
217			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
217			Struct	Ν			0.2		Ν		15			901				901	
219	MEAT MARKET	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
219			S		0	0	10	10	10	11	12	14	17	23	31	38	44	50	55
219			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
219			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
219			С		0	0	84	86	88	93	100	100	100	100	100	100	100	100	100
219			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
219			Struct	Ν			0.2		Ν		15			- 901				901	
221	MEAT PACKING	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
221			S		0	0	20	23	26	29	32	35	38	41	44	47	50	55	56
221			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10

221			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13	
221			С		0	0	21	21	52	79	83	90	93	97	97	97	97	97	97	
221			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	
221			Struct	Ν			0.2		Ν		15			901				901		
223	MEDICAL SUPPLIES	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13	
223			S		0	0	15	23	27	30	32	33	34	35	35	35	41	43	45	
223			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	
223			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13	
223			С		0	0	17	33	48	63	67	71	75	80	85	89	93	98	100	
223			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	
223			Struct	Ν			0.2		Ν		15			901				901		
225	METAL COATING SV	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13	
225			S		0	0	18	25	25	25	25	25	25	25	25	25	26	27	27	
225			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	
225			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13	
225			С		0	0	37	56	68	78	89	100	100	100	100	100	100	100	100	
225			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	
225			Struct	Ν			0.2		Ν		15			901				901		
227	DTRGNT	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13	
227			S		0	0	1	1	3	5	8	12	16	21	26	32	38	45	45	
227			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	
227			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13	
227			С		0	0	15	34	52	69	69	69	69	69	73	73	77	77	81	
227			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	
227			Struct											0.5				901		
229	MOTEL	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13	
229			S		0	0	4	7	10	12	15	18	22	26	31	37	43	50	56	
229			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	
229			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13	

229			С		0	0	30	48	63	75	90	100	100	100	100	100	100	100	100
229			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
229			Struct	Ν			1.5		Ν		37		Ν	36	37			901	
231	MOTORCYCLE SALES	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
231			S		0	0	20	25	30	35	40	45	50	60	70	80	80	80	80
231			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
231			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
231			С		0	0	45	75	90	90	90	90	90	90	90	90	95	95	95
231			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
231			Struct	Ν			0.2		Ν		15			901				901	
233	MUN. STRG. WHSE.	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
233			S		0	0	1	5	10	10	10	10	20	30	50	50	50	50	55
233			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
233			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
233			С		0	0	11	17	20	22	24	29	36	48	67	85	90	90	90
233			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
233			Struct	Ν			1.5		Ν		37		Ν	16	37			901	
235	MUSIC CENTER	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
235			S		0	5	10	13	14	15	15	15	16	18	23	27	37	50	59
235			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
235			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
235			С		0	0	63	70	75	95	100	100	100	100	100	100	100	100	100
235			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
235			Struct	Ν			0.2		Ν		15			901				901	
237	NEWSPAPER PLANT	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
237			S		0	0	2	3	4	5	6	7	8	8	9	11	14	19	24
237			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
237			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
237			С		0	0	5	8	11	13	16	20	25	31	39	48	59	70	82

237			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
237			Struct	Ν			0.2		Ν		15			901				901	
239	NEWSPAPER OFC.	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
239			S		0	10	15	18	24	25	25	26	27	28	31	33	36	40	43
239			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
239			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
239			С		0	0	5	11	23	37	77	100	100	100	100	100	100	100	100
239			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
239			Struct	Ν			0.2		Ν		15			901				901	
241	NURSING HOME	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
241			S		0	10	10	10	14	15	15	16	18	20	23	26	30	34	38
241			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
241			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
241			С		0	0	38	60	73	81	88	94	100	100	100	100	100	100	100
241			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
241			Struct	Ν			1.5		Ν		37		Ν	37	37			901	
243	NURSERY PLANT	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
243			S		0	2	2	3	6	10	15	22	27	32	37	41	46	50	54
243			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
243			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
243			С		0	0	50	65	75	95	100	100	100	100	100	100	100	100	100
243			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
243			Struct	Ν			0.2		Ν		15			901				901	
245	NURSERY: CHILD	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
245			S		0	0	15	16	16	20	25	29	33	37	41	44	47	50	53
245			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
245			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
245			С		0	0	24	50	88	100	100	100	100	100	100	100	100	100	100
245			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10

245			Struct	Ν			0.2		Ν		15			- 901				- 901	
247	OFFICE: MFG. FAC	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
247			S		0	0	2	10	15	28	32	39	43	44	45	51	58	62	65
247			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
247			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
247			С		0	0	0	12	20	30	40	48	56	66	78	88	96	96	100
247			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
247			Struct	Ν			0.2		Ν		15			- 901				901	
249	OFFICE BUILDING	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
249			S		0	0	12	14	17	19	23	27	31	35	40	45	50	55	59
249			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
249			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
249			С		0	0	16	21	24	25	26	28	31	36	42	50	71	84	100
249			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
249			Struct	Ν			1.5		Ν		37		Ν	10	37			901	
251	OIL STORAGE TANKS	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
251			S		0	0	0	0	0	0	0	2	2	2	2	2	2	2	2
251			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
251			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
251			С		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
251			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
251			Struct	Ν			0.2		Ν		15			901				901	
253	PAINT STORE	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
253			S		0	0	20	30	37	43	55	60	67	75	80	83	86	90	90
253			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
253			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
253			С		0	0	10	20	40	59	69	72	75	79	79	79	79	79	79
253			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
253			Struct	Ν			0.2		Ν		15			- 901				- 901	

255	PAPER PROD. WHSE.	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
255			S		0	0	18	25	25	25	25	25	25	25	25	25	26	27	27
255			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
255			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
255			С		0	0	18	29	38	47	56	64	71	76	82	91	98	100	100
255			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
255			Struct	Ν			0.2		Ν		15			901				901	
257	PAWN SHOP	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
257			S		0	0	20	30	33	36	39	42	45	47	50	50	50	60	60
257			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
257			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
257			С		0	0	19	38	91	91	93	93	94	94	94	94	94	94	94
257			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
257			Struct	Ν			0.2		Ν		15			901				901	
259	PHOTO STUDIO	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
259			S		0	0	20	25	30	35	40	45	50	60	65	70	75	75	75
259			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
259			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
259			С		0	0	20	40	60	80	100	100	100	100	100	100	100	100	100
259			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
259			Struct	Ν			0.2		Ν		15			901				901	
261	PHOTO SVC.L AERIAL	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
261			S		0	0	11	17	22	24	27	28	29	30	30	30	35	37	39
261			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
261			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
261			С		0	0	72	87	92	95	97	99	99	99	100	100	100	100	100
261			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
261			Struct	Ν			0.2		Ν		15			901				901	
263	PIERS	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13

263			S		0	20	40	60	80	85	100	100	100	100	100	100	100	100	100
263			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
263			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
263			С		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
263			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
263			Struct	Ν			0.2		Ν		15			901				901	
265	PIER DRILLING Co.	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
265			S		0	0	35	35	35	35	41	47	53	60	60	60	60	60	60
265			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
265			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
265			С		0	0	20	23	39	55	55	56	56	57	57	57	57	57	57
265			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
265			Struct	Ν			0.2		Ν		15			901				901	
267	PIPE THREADER FAC.	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
267			S		0	0	1	5	10	10	10	20	30	50	50	50	75	75	75
267			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
267			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
267			С		0	0	25	25	50	50	50	50	75	75	75	75	90	90	90
267			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
267			Struct	Ν			0.2		Ν		15			901				901	
269	PLBG/HTG. CNTRCTR.	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
269			S		0	0	0	20	25	30	35	40	45	50	60	60	60	60	60
269			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
269			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
269			С		0	0	40	50	60	70	80	80	80	80	80	80	80	80	80
269			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
269			Struct	Ν			0.2		Ν		15			- 901				- 901	
271	PLASTIC MFG.	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
271			S		0	0	12	18	23	24	27	28	29	30	30	30	35	37	39

271			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	
271			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13	
271			С		0	0	40	50	60	70	80	80	80	80	80	80	80	80	80	
271			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	
271			Struct	Ν			0.2		Ν		15			901				901		
273	PLUMBING CO.	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13	
273			S		0	0	20	32	40	47	53	57	61	64	67	70	72	74	77	
273			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	
273			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13	
273			С		0	0	19	41	51	70	95	95	95	95	95	95	100	100	100	
273			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	
273			Struct	Ν			0.2		Ν		15			901				901		
275	POLICE STATION	Р	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13	
275			S		0	0	12	14	17	19	23	27	31	35	40	45	50	55	59	
275			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	
275			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13	
275			С		0	0	5	15	25	35	48	62	78	95	100	100	100	100	100	
275			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	
275			Struct	Ν			0.2		Ν		15			901				901		
277	POST OFFICE	Р	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13	
277			S		0	0	8	15	24	25	26	27	29	32	36	40	45	50	56	
277			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	
277			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13	
277			С		0	25	43	63	70	80	100	100	100	100	100	100	100	100	100	
277			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	
277			Struct	Ν			1.5		Ν		37		Ν	24	37			901		
279	PRESSURE TEST FAC.	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13	
279			S		0	0	1	5	10	10	10	20	30	50	50	50	75	75	75	
279			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	

279			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13	
279			С		0	0	20	20	25	25	30	30	40	40	40	40	40	40	40	
279			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	
279			Struct	Ν			0.2		Ν		15			901				901		
281	PRINTING: COMMER	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13	
281			S		0	0	20	23	26	29	32	35	39	42	45	47	50	60	60	
281			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	
281			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13	
281			С		0	20	40	60	80	100	100	100	100	100	100	100	100	100	100	
281			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	
281			Struct	Ν			0.2		Ν		15			901				901		
283	PRIVATE CLUB	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13	
283			S		0	0	5	8	8	9	9	9	10	12	14	17	21	26	32	
283			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	
283			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13	
283			С		0	0	28	36	41	45	50	54	60	66	73	84	92	97	100	
283			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	
283			Struct	Ν			0.2		Ν		15			901				901		
285	PRIVATE STORAGE	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13	
285			S		0	0	0	4	8	12	16	20	25	30	35	40	45	50	50	
285			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	
285			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13	
285			С		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
285			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	
285			Struct	Ν			1.5		Ν		37		Ν	16	37			901		
287	QUONSET HUT STRG.	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13	
287			S		0	0	2	4	5	8	10	12	15	20	25	35	45	60	70	
287			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	
287			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13	

287			С		0	0	11	16	19	21	23	28	35	47	67	85	90	90	90
287			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
287			Struct	Ν			0.2		Ν		15			901				901	
289	RADIO STATION	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
289			S		0	0	8	15	24	25	26	27	29	32	36	40	45	50	56
289			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
289			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
289			С		0	0	20	40	65	85	95	100	100	100	100	100	100	100	100
289			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
289			Struct	Ν			0.2		Ν		15			901				901	
291	REAL ESTATE OFC.	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
291			S		0	0	8	15	24	25	26	27	29	32	36	40	45	50	56
291			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
291			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
291			С		0	12	21	35	55	77	95	100	100	100	100	100	100	100	100
291			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
291			Struct	Ν			0.2		Ν		15			901				901	
293	RECYCLING: METAL	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
293			S		0	0	5	10	20	40	50	60	70	80	100	100	100	100	100
293			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
293			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
293			С		0	0	0	0	10	20	20	20	40	40	40	40	40	40	50
293			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
293			Struct	Ν			0.2		Ν		15			901				901	
295	RECREATION FAC.	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
295			S		0	0	0	0	2	5	10	10	15	15	20	20	25	25	35
295			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
295			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
295			С		0	0	15	30	35	53	73	80	80	80	80	80	80	80	80

295			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
295			Struct	Ν			1.5		Ν		37		Ν	69	37			901	
297	MTL.	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
297			S		0	0	1	1	3	5	8	12	16	21	26	32	38	45	45
297			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
297			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
297			С		0	0	37	48	73	78	78	78	79	79	79	79	79	79	80
297			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
297			Struct	Ν			0.2		Ν		15			901				901	
299	REFINERY: LEAD	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
299			S		0	0	2	10	15	20	32	39	43	44	45	51	58	62	65
299			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
299			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
299			С		0	0	11	20	30	40	49	59	69	79	81	81	81	81	81
299			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
299			Struct	Ν			0.2		Ν		15			901				901	
301	REMNANT SHOP	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
301			S		0	0	10	15	15	20	25	30	35	40	45	50	55	65	75
301			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
301			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
301			С		0	0	15	22	40	58	77	86	91	95	95	95	95	95	95
301			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
301			Struct	Ν			0.2		Ν		15			901				901	
303	RENDERING PLANT	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
303			S		0	0	12	14	17	19	23	27	31	35	40	45	45	50	50
303			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
303			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
303			С		0	0	17	29	50	67	83	87	87	87	87	87	87	87	87
303			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10

			-											-				-	
303	RESEARCH LAB		Struct	Ν			0.2		Ν		15			901				901	
305	MACH.	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
305			S		0	0	12	14	17	19	23	27	31	35	40	45	50	55	60
305			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
305			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
305			С		0	0	20	32	43	55	60	63	64	65	66	68	68	68	70
305			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
305			Struct	Ν			1.5		Ν		37		Ν	96	37			901	
307	RESTAURANT	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
307			S		0	0	15	18	20	23	25	27	28	30	33	37	43	50	58
307			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
307			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
307			С		0	0	20	40	80	90	92	94	100	100	100	100	100	100	100
307			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
307			Struct	Ν			1.5		Ν		37		Ν	39	37			- 901	
309	RESTAURANT: DRIV	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
309			S		0	0	2	4	7	10	14	18	23	28	33	39	44	50	56
309			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
309			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
309			С		0	0	25	50	90	100	100	100	100	100	100	100	100	100	100
309			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
309			Struct	Ν			1.5		Ν		37		Ν	96	37			- 901	
311	REUPHOLSTERY SHOP	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
311			S		0	0	10	10	10	11	12	13	14	15	20	30	30	30	30
311			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
311			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
311			C		0	0	23	28	36	41	45	50	53	58	58	59	60	60	60
311			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
311			Struct	Ν			0.2		N		15			- 901				- 901	

313	SAFETY EQUIPMENT	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
313			S		0	0	8	16	23	28	33	37	39	40	40	40	43	44	45
313			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
313			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
313			С		0	0	12	25	37	50	62	75	85	93	97	100	100	100	100
313			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
313			Struct	Ν			0.2		Ν		15			901				901	
315	SAND & GRAVEL CO	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
315			S		0	0	2	4	6	8	10	11	12	13	14	15	15	15	15
315			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
315			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
315			С		0	0	0	1	5	7	8	9	10	11	12	13	18	23	23
315			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
315			Struct	Ν			0.2		Ν		15			901				901	
317	SANDBLASTING CO.	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
317			S		0	0	1	1	1	1	1	1	1	1	1	1	1	1	1
317			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
317			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
317			С		0	0	15	45	68	90	90	90	90	90	90	90	90	90	90
317			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
317			Struct	Ν			0.2		Ν		15			901				901	
319	SCHOOL	Р	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
319			S		0	0	8	12	15	15.5	16	17	19	22	25	28	32	36	40
319			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
319			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
319			С		0	10	18	26	45	66	76	88	100	100	100	100	100	100	100
319			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
319			Struct	Ν			1.5		Ν		37		Ν	11	37			901	
321	SCALE BUILDING	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13

321			S		0	0	1	1	3	5	8	12	16	21	26	32	38	45	45
321			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
321			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
321			С		0	0	0	5	15	25	40	50	75	85	100	100	100	100	100
321			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
321			Struct	Ν			0.2		Ν		15			901				901	
323	SEPARATORS	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
323			S		0	0	2	2	2	2	2	2	2	2	2	2	2	2	2
323			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
323			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
323			С		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
323			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
323			Struct	Ν			0.2		Ν		15			901				901	
325	SERVICE STATION	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
325			S		0	0	1	2	3	5	7	10	13	16	19	23	27	33	38
325			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
325			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
325			С		0	0	13	40	60	90	100	100	100	100	100	100	100	100	100
325			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
325			Struct	Ν			1.5		Ν		37		Ν	156	37			901	
327	SEWAGE TREATMENT	Ρ	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
327			S		0	0	2	4	4	4	5	6	8	12	16	21	27	34	42
327			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
327			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
327			С		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
327			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
327			Struct	Ν			0.2		Ν		15			901				901	
329	SHEET METAL	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
329			S		0	0	30	30	30	30	33	36	39	40	40	40	40	40	40

329			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
329			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
329			С		0	0	29	41	46	58	58	58	58	58	58	58	58	58	58
329			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
329			Struct	Ν			0.2		Ν		15			901				901	
331	SHOE STORE	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
331			S		0	0	3	6	9	12	15	18	21	24	27	30	33	36	39
331			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
331			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
331			С		0	0	10	23	35	48	59	73	85	98	98	98	98	98	98
331			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
331			Struct	Ν			0.2		N		15			- 901				- 901	
333	SKATING RINK	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
333			S		0	0	12	15	15	15	15	15	15	15	15	15	16	16	16
333			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
333			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
333			С		0	0	10	25	50	100	100	100	100	100	100	100	100	100	100
333			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
333			Struct	Ν			0.2		N		15			- 901				- 901	
335	SPORTING GOODS WHSE.	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
335			S		0	0	10	17	22	24	15	26	27	28	30	30	35	37	39
335			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
335			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
335			С		0	0	10	35	50	63	75	87	100	100	100	100	100	100	100
335			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
335			Struct	Ν			0.2		Ν		15			- 901				- 901	
337	STORAGE: MACH. PARTS	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
337			S		0	0	5	10	20	30	50	70	70	70	70	70	70	70	70
337			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10

337			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
337			С		0	0	20	30	40	50	50	50	75	75	75	100	100	100	100
337			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
337			Struct	Ν			0.2		Ν		15			901				901	
339	STORAGE: CHEM.	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
339			S		0	0	1	1	3	5	8	12	16	21	26	32	38	45	45
339			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
339			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
339			С		0	0	11	16	22	28	38	48	60	72	80	80	80	80	80
339			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
339			Struct	Ν			0.2		Ν		15			901				901	
341	SWIMMING POOL	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
341			S		0	0	7	7	7	7	7	7	7	7	7	7	7	7	7
341			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
341			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
341			С		0	0	25	50	75	100	100	100	100	100	100	100	100	100	100
341			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
341			Struct	Ν			0.2		Ν		15			901				901	
343	TAR VAT BUILDING	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
343			S		0	0	1	1	3	5	8	12	16	21	26	32	38	45	51
343			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
343			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
343			С		0	0	5	10	15	25	35	50	50	60	60	60	60	60	60
343			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
343			Struct	Ν			0.2		Ν		15			901				901	
345	TAVERN	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
345			S		0	0	15	18	20	22	24	27	31	34	38	42	46	50	54
345			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
345			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13

345			С		0	38	60	74	89	97	100	100	100	100	100	100	100	100	100
345			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
345			Struct	Ν			1.5		Ν		37		Ν	45	37			901	
347	TELEPHONE EXCHAN	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
347			S		0	0	12	14	17	19	23	27	31	35	40	45	50	55	59
347			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
347			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
347			С		0	0	100	100	100	100	100	100	100	100	100	100	100	100	100
347			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
347			Struct	Ν			0.2		Ν		15			901				901	
349	THEATER	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
349			S		0	0	2	3	4	4	4	5	7	10	13	16	21	25	30
349			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
349			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
349			С		0	0	3	4	5	6	6	6	9	12	16	22	28	37	46
349			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
349			Struct	Ν			0.2		Ν		15			901				901	
351	THEATER: DRIVE-IN	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
351			S		0	0	0	1	1	1	1	2	2	2	3	4	5	5	6
351			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
351			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
351			С		0	0	0	2	2	2	4	5	9	13	18	23	30	37	46
351			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
351			Struct	Ν			0.2		Ν		15			901				901	
353	TRACTOR SALES	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
353			S		0	0	9	13	18	21	22	23	24	25	25	25	26	27	28
353			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
353			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
353			С		0	0	6	17	29	44	58	69	76	80	83	87	91	94	98

		CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
		Struct	Ν			0.2		Ν		15			901				901	
TRAILER MFG.	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
		S		0	0	2	2	2	2	3	4	5	6	7	10	10	10	10
		SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
		Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
		С		0	0	27	30	37	40	40	40	40	40	40	40	40	40	40
		CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
		Struct	Ν			0.2		Ν		15			901				901	
TRANSPORT CO.	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
		S		0	0	9	11	12	16	20	24	28	30	30	30	30	30	30
		SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
		Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
		С		0	0	60	75	90	90	90	90	90	90	90	90	90	90	90
		CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
		Struct	Ν			0.2		Ν		15			901				901	
TRAILER SALES	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
		S		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
		Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
		С		0	0	18	37	60	80	100	100	100	100	100	100	100	100	100
		CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
		Struct	Ν			0.2		Ν		15			901				901	
TRAILER PARTS	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
		S		0	0	0	5	10	15	20	25	30	32	36	38	40	50	60
		SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
		Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
		С		0	0	0	7	13	24	27	34	36	39	50	50	50	50	55
		CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
	TRAILER MFG. TRANSPORT CO. TRAILER SALES TRAILER PARTS	TRAILER MFG. C TRANSPORT CO. C TRAILER SALES C TRAILER PARTS C	TRAILER MFG. C Stage TRAILER MFG. C Stage SN Stage C CN Struct TRANSPORT CO. C Stage S SN Stage C CN Stage C SN SN Stage C SN SN Stage C CN Stage C SN SN Stage C CN Stage C SN Stage C SN SN Stage C SN SN Stage C SN SN Stage SN SN Stage SN SN Stage SN SN Stage SN SN Stage SN SN SN Stage SN SN SN SN SN Stage SN SN SN SN Stage SN SN SN SN SN STAGE SN SN SN SN STAGE SN SN SN STAGE SN SN SN STAGE SN SN STAGE SN SN SN STAGE SN SN STAGE SN SN SN SN SN SN SN SN SN SN	TRAILER MFG. C TRAILER MFG. C TRAILER PARTS C TRAILER PARTS C C C C C C C C C C C C C	TRAILER MFG.       C       Struct       N         TRAILER MFG.       C       Stage       -0.1         S       0       SN       10         Stage       -0.1       C       0         Stage       -0.1       C       0         TRAILER MFG.       C       Stage       -0.1         Stage       -0.1       C       0         TRANSPORT CO.       C       Stage       -0.1         Struct       N       10       10         Struct       N       10       10         TRAILER SALES       C       Stage       -0.1         CN       10       Stage       -0.1         TRAILER SALES       C       Stage       -0.1         Stage       -0.1       S       0         SN       10       Stage       -0.1         CN       Stage       -0.1       10         TRAILER PARTS       C       Stage       -0.1         SN       10       Stage       -0.1         SN       10       Stage       -0.1         SN       10       Stage       -0.1         SN       10       Stage	CN       10       10         Struct       N	CN         10         10         10         10           TRAILER MFG.         C         Struct         N         0         1           S         0         0         2         SN         10         10         10           S         0         0         2         SN         10         10         10           Stage         -0.1         0         1         10         10         10           CN         10         10         10         10         10         10           Struct         N         -         0         10         10         10           Struct         N         -         0         10         10         10           Struct         N         10         10         10         10         10           Stage         -0.1         0         10         10         10         10           TRAILER SALES         C         Stage         -0.1         0         1         10           SN         10         10         10         10         10         10         10           SN         0         0         1         10	CN         10         10         10         10           Struct         N         -0.2           TRAILER MFG.         C         Stage         -0.1         0         1         2           SN         10         10         10         10         10         10           SN         10         10         10         10         10         10           Stage         -0.1         0         1         2         2         30           C         0         0         27         30         10         10         10           Stage         -0.1         10         10         10         10         10           Struct         N         -         0.2         11         2         30         10	CN101010101010StructN0.2NTRAILER MFG.CStage-0.10123S002222SN101010101010Stage-0.10123C00273037CN101010101010Stage-0.10123CN101010101010StructN-0.2NTRANSPORT CO.CStage-0.1012SN101010101010Stage-0.10123CN101010101010Stage-0.10123CN101010101010Stage-0.10123CN101010101010Stage-0.10123CN101010101010StructN012Stage-0.10123CN101010101010StructN-0123	CN10101010101010StructN-0.2NTRAILER MFG.CStage-0.101234S0022222SN10101010101010Stage-0.101234C0027303740CN10101010101010Stage-0.1010101010StructN-0.2-NTRANSPORT CO.CStage-0.10123StructN-010101010StructN-01234C0060759090StructN-010101010StructN-0.2N-TRAILER SALESCStage-0.10123StructN-0.2-N-TRAILER PARTSCStage-0.1011010Stage-0.1011111Stage-0.1011234CStage-0.101101010 </td <td>CN1010101010101010StructNTRAILER MFG.CStage-0.101010101010101010SN.00.00.2.2.2.2.2.2.3</td> <td>CN101010101010101010TRAILER MFG.CStage-0.10123456S0011010101010101010Stage-0.10101010101010101010Stage-0.10123456C002730374040CN1010101010101010StructN-0.2N1516StructN-0.11010101010Stage-0.101101010101010StructN-01101010101010Stage-0.1011010101010101010Stage-0.101101010101010101010Stage-0.1010101010101010101010Stage-0.101010101010101010101010Stage-0.1010101010101010&lt;</td> <td>CN10101010101010101010TRAILER MFG.CStage-0.101234567S0022222345SN10101010101010101010Stage-0.10123037404040C00273037404040CN101010101010101010Stage-0.101234567TRAINSPORT CO.CStage-0.101234567StructN-0112134567StructN-011234567StructN10101010101010101010StructN-01234567CStage-0.1011010101010101010Stage-0.101010101010101010101010TRAILER SALESCStage-0.1<td>CN10<td>CN10<td>CN10<td>CN10<td>CN     10     &lt;</td></td></td></td></td></td>	CN1010101010101010StructNTRAILER MFG.CStage-0.101010101010101010SN.00.00.2.2.2.2.2.2.3	CN101010101010101010TRAILER MFG.CStage-0.10123456S0011010101010101010Stage-0.10101010101010101010Stage-0.10123456C002730374040CN1010101010101010StructN-0.2N1516StructN-0.11010101010Stage-0.101101010101010StructN-01101010101010Stage-0.1011010101010101010Stage-0.101101010101010101010Stage-0.1010101010101010101010Stage-0.101010101010101010101010Stage-0.1010101010101010<	CN10101010101010101010TRAILER MFG.CStage-0.101234567S0022222345SN10101010101010101010Stage-0.10123037404040C00273037404040CN101010101010101010Stage-0.101234567TRAINSPORT CO.CStage-0.101234567StructN-0112134567StructN-011234567StructN10101010101010101010StructN-01234567CStage-0.1011010101010101010Stage-0.101010101010101010101010TRAILER SALESCStage-0.1 <td>CN10<td>CN10<td>CN10<td>CN10<td>CN     10     &lt;</td></td></td></td></td>	CN10 <td>CN10<td>CN10<td>CN10<td>CN     10     &lt;</td></td></td></td>	CN10 <td>CN10<td>CN10<td>CN     10     &lt;</td></td></td>	CN10 <td>CN10<td>CN     10     &lt;</td></td>	CN10 <td>CN     10     &lt;</td>	CN     10     <

361			Struct	Ν			0.2		Ν		15			- 901				901	
363	TRUCK MFG. & SALES	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
363			S		0	0	12	18	23	26	27	28	29	30	30	30	32	33	35
363			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
363			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
363			С		0	0	39	57	63	70	75	80	83	90	91	91	100	100	100
363			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
363			Struct	Ν			0.2		Ν		15			901				901	
365	TROPHY SHOP	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
365			S		0	0	8	9	10	12	15	17	18	18	19	20	23	29	33
365			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
365			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
365			С		0	0	17	26	31	49	62	66	69	71	71	72	73	74	76
365			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
365			Struct	Ν			0.2		Ν		15			901				901	
367	TV REPAIR	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
367			S		0	0	5	10	20	30	40	50	60	70	75	80	80	80	80
367			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
367			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
367			С		0	0	10	15	20	37	54	71	76	80	80	81	81	82	82
367			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
367			Struct	Ν			0.2		Ν		15			901				901	
369	TV STATION	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
369			S		0	0	1	5	5	5	5	5	6	6	8	10	14	19	25
369			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
369			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
369			С		0	0	20	40	65	85	95	100	100	10	100	100	100	100	100
369			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
369			Struct	Ν			0.2		Ν		15			- 901				- 901	

371	USED APPL. & CLOTHING	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
371			S		0	0	10	12	14	16	18	20	23	26	30	40	45	55	55
371			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
371			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
371			С		0	0	18	33	65	88	95	100	100	100	100	100	100	100	100
371			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
371			Struct	Ν			0.2		Ν		15			- 901				- 901	
373	USED FURNITURE	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
373			S		0	0	10	20	24	28	32	36	40	44	48	50	50	55	55
373			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
373			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
373			С		0	40	60	70	80	100	100	100	100	100	100	100	100	100	100
373			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
373			Struct	Ν			0.2		Ν		15			901				901	
375	UTILITY COMPANY	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
375			S		0	0	3	5	10	14	18	22	26	30	34	36	38	40	40
375			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
375			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
375			С		0	0	1	1	5	7	10	11	12	13	14	15	15	16	16
375			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
375			Struct	Ν			0.2		Ν		15			901				901	
377	SALES	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
377			S		0	0	10	15	20	25	30	33	36	40	50	55	60	60	60
377			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
377			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
377			С		0	0	44	58	66	71	74	78	78	78	85	85	85	85	93
377			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
377			Struct	Ν			0.2		Ν		15			901				901	
379	VACANT BLDG.: CN	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13

379			S		0	0	1	1	3	5	8	12	16	21	26	32	38	45	45
379			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
379			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
379			С		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
379			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
379			Struct	Ν			0.2		Ν		15			- 901				- 901	
381	VARIETY STORE	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
381			S		0	0	8	9	10	12	15	17	18	18	19	20	23	26	29
381			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
381			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
381			С		0	10	20	40	70	85	90	95	100	100	100	100	100	100	100
381			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
381			Struct	Ν			0.2		Ν		15			- 901				901	
383	VETERINARY CLINI	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
383			S		0	0	1	3	4	6	9	11	14	17	20	24	29	35	42
383			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
383			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
383			С		0	25	50	90	100	100	100	100	100	100	100	100	100	100	100
383			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
383			Struct	Ν			1.5		Ν		37		Ν	41	37			901	
385	MACH.	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
385			S		0	0	2	4	5	6	7	8	10	13	17	21	25	30	35
385			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
385			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
385			С		0	0	9	24	24	33	38	47	70	71	72	73	74	75	84
385			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
385			Struct	Ν			0.2		Ν		15			- 901				- 901	
387	WAREHOUSE: BEER	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
387			S		0	0	2	4	5	6	7	8	10	13	17	21	25	30	30

387			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
387			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
387			С		0	0	21	84	88	92	96	97	97	97	97	97	97	97	97
387			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
387			Struct	Ν			0.2		Ν		15			901				901	
389	GASES	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
389			S		0	0	1	2	3	4	5	8	12	16	21	26	32	38	45
389			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
389			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
389			С		0	0	8	8	8	14	16	20	28	28	30	30	30	30	38
389			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
389			Struct	Ν			0.2		Ν		15			901				901	
391	WAREHOUSE: PETR.	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
391			S		0	0	2	4	5	6	7	8	10	13	17	21	25	30	30
391			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
391			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
391			С		0	0	0	0	9	20	40	59	77	77	77	78	78	78	78
391			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
391			Struct	Ν			0.2		Ν		15			901				901	
393	WAREHOUSE:CEMENT	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
393			S		0	0	1	1	3	5	8	12	16	21	26	32	38	45	45
393			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
393			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
393			С		0	0	20	40	60	80	100	100	100	100	100	100	100	100	100
393			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
393			Struct	Ν			0.2		Ν		15			901				901	
395	WAREHOUSE	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
395			S		0	0	0	1	1	1	3	5	8	12	16	21	26	32	38
395			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10

395			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
395			С		0	20	30	40	50	60	70	80	90	100	100	100	100	100	100
395			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
395			Struct	Ν			1.5		Ν		37		Ν	176	37			901	
397	WASHATERIA	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
397			S		0	0	6	6	6	7	8	10	12	15	18	23	27	32	38
397			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
397			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
397			С		0	0	20	55	78	100	86	95	100	100	100	100	100	100	100
397			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
397			Struct	Ν			0.2		Ν		15			901				901	
399	WATER SUPPLY	Р	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
399			S		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
399			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
399			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
399			С		0	0	0	0	25	25	25	25	25	25	25	25	25	25	25
399			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
399			Struct	Ν			0.2		Ν		15			901				901	
401	WATER WELL SVC.	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
401			S		0	0	5	20	40	60	60	60	60	60	60	60	60	60	60
401			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
401			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
401			С		0	0	0	25	50	50	50	50	50	50	50	50	50	50	50
401			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
401			Struct	Ν			0.2		Ν		15			901				901	
403	WELDING REPAIR	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
403			S		0	17	17	17	17	23	32	45	55	61	66	69	73	76	78
403			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
403			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
403			С		0	0	1	6	15	18	20	21	22	24	27	30	33	37	41
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403			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
403			Struct	Ν			0.2		Ν		15			901				901	
405	WELDING SOPL WHLSL	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
405			S		0	17	7	13	18	22	25	27	30	32	34	37	40	44	47
405			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
405			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
405			С		0	0	15	35	45	50	57	66	80	100	100	100	100	100	100
405			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
405			Struct	Ν			0.2		Ν		15			901				901	
407	WELLHEAD	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
407			S		0	0	0	0	0	0	2	2	2	2	2	2	2	2	2
407			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
407			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
407			С		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
407			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
407			Struct	Ν			0.2		Ν		15			901				901	
409	STORE	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
409			S		0	0	4	6	7	11	11	18	24	30	36	41	46	50	53
409			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
409			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
409			С		0	0	21	46	69	84	97	97	97	98	98	98	99	99	99
409			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
409			Struct	Ν			0.2		Ν		15			901				901	
411	X-RAY SERVICE	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
411			S		0	0	5	7	12	13	14	15	15	15	15	15	18	19	20
411			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
411			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
411			С		0	0	20	40	80	100	100	100	100	100	100	100	100	100	100

411			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
411			Struct	Ν			0.2		Ν		15			901				901	
413	YMCA	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
413			S		0	0	25	33	33	33	33	33	33	33	33	33	35	35	35
413			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
413			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
413			С		0	0	0	5	24	50	82	100	100	100	100	100	100	100	100
413			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
413			Struct	Ν			0.2		Ν		15			- 901				- 901	
415	BALL PARK	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
415			S		0	0	10	26	42	52	57	61	66	70	73	77	80	80	80
415			SN		0	10	10	10	10	10	10	10	10	10	10	10	10	10	10
415			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
415			С		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
415			CN		0	10	10	10	10	10	10	10	10	10	10	10	10	10	10
415			Struct	Ν			0.2		Ν		15			901				901	
417	BARN	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
417			S		0	0	8	13	18	25	35	45	55	65	72	78	85	85	85
417			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
417			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
417			С		0	0	8	13	18	25	35	45	55	65	72	78	85	85	85
417			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
417			Struct	Ν			1.5		Ν		37		Ν	100	37			901	
419	TENNIS COURT	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
419			S		0	0	25	29	33	35	35	35	35	35	35	35	35	35	35
419			SN		0	10	10	10	10	10	10	10	10	10	10	10	10	10	10
419			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
419			С		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
419			CN		0	10	10	10	10	10	10	10	10	10	10	10	10	10	10

419			Struct	Ν			0.2		Ν		15			901				901	
421	GENL. OFFICE COM	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
421			S		0	0	8	10	12	14	17	20	23	26	30	34	38	43	48
421			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
421			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
421			С		0	12	21	55	77	95	100	100	100	100	100	100	100	100	100
421			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
421			Struct	Ν			0.2		Ν		15			901				901	
423	GENL. RETAIL COM	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
423			S		0	0	8	10	12	14	16	19	22	25	29	33	38	43	48
423			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
423			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
423			С		0	0	18	33	65	88	95	100	100	100	100	100	100	100	100
423			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
423			Struct	Ν			1.5		Ν		37		Ν	117	37			901	
425	GENL. WHLSL. & I	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
425			S		0	1	4	8	10	14	18	23	26	30	33	38	42	46	48
425			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
425			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
425			С		0	0	9	16	21	24	28	31	34	37	41	45	46	47	48
425			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
425			Struct	Ν			1.5		Ν		37		Ν	85	37			901	
427	GENL. PUB. OPEN SP.	Р	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
427			S		0	0	15	23	30	34	35	37	39	41	43	45	48	50	52
427			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
427			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
427			С		0	4	12	13	21	23	25	26	26	27	28	29	30	31	31
427			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
427			Struct	Ν			1.5		Ν		37		N	21	37			- 901	

429	GENL. PUB. STRUC	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
429			S		0	0	8	9	11	12	13	14	17	18	21	24	27	30	36
429			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
429			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
429			С		0	3	26	45	59	69	74	79	81	84	87	90	93	96	98
429			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
429	FLEC POWER		Struct	Ν			0.2		Ν		15			901				901	
431	SUBSTA.	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
431			S		0	0	6	12	18	24	27	30	33	36	39	42	45	48	51
431			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
431			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
431			С		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
431			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
431			Struct	Ν			1.5		Ν		37		Ν	0	37			901	
433	RAILROAD	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
433			S		0	0	6	12	18	24	27	30	33	36	39	42	45	48	51
433			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
433			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
433			С		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
433			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
433	AIRCRAFT PARTS		Struct	Ν			0.2		Ν		15			901				901	
551	MFG.	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
551			S		0	1	4	8	10	14	18	23	26	30	33	38	42	46	48
551			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
551			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
551			С		0	0	20	40	60	80	100	100	100	100	100	100	100	100	100
551			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
551			Struct	Ν			0.2		Ν		15			901				901	
553	CORK AND SEAL MFG.	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13

553			S		0	1	4	8	10	14	18	23	26	30	33	38	42	46	48
553			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
553			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
553			С		0	0	10	20	35	50	60	70	80	90	95	100	100	100	100
553			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
553			Struct	Ν			0.2		Ν		15			901				901	
555	BOTTLING	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
555			S		0	1	4	8	10	14	18	23	26	30	33	38	42	46	48
555			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
555			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
555			С		0	0	20	60	80	100	100	100	100	100	100	100	100	100	100
555			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
555			Struct	Ν			0.2		Ν		15			- 901				- 901	
557	CHEMICAL MFG. CO.	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
557			S		0	1	4	8	10	14	18	23	26	30	33	38	42	46	48
557			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
557			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
557			С		0	0	20	40	68	80	90	100	100	100	100	100	100	100	100
557			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
557			Struct	Ν			0.2		Ν		15			901				901	
559	FACILITY	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
559			S		0	1	4	8	10	14	18	23	26	30	33	38	42	46	48
559			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
559			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
559			С		0	0	100	100	100	100	100	100	100	100	100	100	100	100	100
559			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
559			Struct	Ν			0.2		Ν		15			- 901				- 901	
561	OIL FIELD SUPPLIES	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
561			S		0	1	4	8	10	14	18	23	26	30	33	38	42	46	48

561			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
561			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
561			С		0	0	10	20	40	75	100	100	100	100	100	100	100	100	100
561			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
561			Struct	Ν			0.2		Ν		15			901				901	
563	OFFICE SUPPLIES	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
563			S		0	0	8	10	12	14	16	19	22	25	29	33	38	43	48
563			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
563			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
563			С		0	0	20	40	65	90	100	100	100	100	100	100	100	100	100
563			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
563			Struct	Ν			0.2		Ν		15			901				901	
565	CLOCK SHOP	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
565			S		0	0	8	10	12	14	16	19	22	25	29	33	38	43	48
565			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
565			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
565			С		0	20	80	83	86	90	93	96	100	100	100	100	100	100	100
565			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
565			Struct	Ν			0.2		Ν		15			- 901				901	
567	CAMERAS & PHOTO SUP	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
567			S		0	0	8	10	12	14	16	19	22	25	29	33	38	43	48
567			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
567			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
567			С		0	0	20	40	60	80	100	100	100	100	100	100	100	100	100
567			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
567			Struct	Ν			0.2		Ν		15			- 901				- 901	
569	SHOE & BOOT REPAIR	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
569			S		0	0	8	10	12	14	16	19	22	25	29	33	38	43	48
569			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10

		Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
		С		0	0	10	15	20	60	100	100	100	100	100	100	100	100	100
		CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
		Struct	Ν			0.2		Ν		15			901				901	
AIR CONDITIONING	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
		S		0	0	8	10	12	14	16	19	22	25	29	33	38	43	48
		SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
		Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
		С		0	20	40	60	80	100	100	100	100	100	100	100	100	100	100
		CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
		Struct	Ν			0.2		Ν		15			901				901	
VIDEO RENTAL STO	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
		S		0	0	8	10	12	14	16	19	22	25	29	33	38	43	48
		SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
		Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
		С		0	0	10	20	40	60	80	100	100	100	100	100	100	100	100
		CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
		Struct	Ν			0.2		Ν		15			901				901	
PARK	Р	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
		S		0	0	10	26	42	52	57	61	66	70	73	77	80	80	80
		SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
		Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
		С		0	20	40	60	80	100	100	100	100	100	100	100	100	100	100
		CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
		Struct	Ν			0.2		Ν		15			901				901	
CAMPGROUND	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
		S		0	0	10	26	42	52	57	61	66	70	73	77	80	80	80
		SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
		Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
	AIR CONDITIONING VIDEO RENTAL STO PARK CAMPGROUND	AIR CONDITIONING C VIDEO RENTAL STO C PARK P CAMPGROUND C	StageCCNStructAIR CONDITIONINGCSageSNStageCStageCCNStructSNSageCSNSageSSNSageSNSNSageCSNSageCSNStageSSNSageSSNSageCSNSageCSNStageCCNSitageSSitageCAMPGROUNDCSitageSNSNSNSitageSNSNSitageSN <td>AIR CONDITIONING C CN AIR CONDITIONING C Stage AIR CONDITIONING C Stage C C C C C C C C C C C C C</td> <td>Stage     -0.1       C     0       CN     10       Struct     N       AIR CONDITIONING     C     Stage     -0.1       Struct     N     10       Struct     N     10       Stage     -0.1     S     0       SN     10     Stage     -0.1       Stage     -0.1     C     0       VIDEO RENTAL STO     C     Stage     -0.1       VIDEO RENTAL STO     C     Stage     -0.1       SN     10     Struct     N       VIDEO RENTAL STO     C     Stage     -0.1       SN     10     Stage     -0.1       SN     10     Stage     -0.1       PARK     P     Stage     -0.1       SN     10     Stage     -0.1       Stage     -0.1     Stage     -0.1       CAMPGROUND     C     Stage     -0.1       SN     10     Stage     -0.1       <t< td=""><td>Stage     -0.1     0       C     0     0       CN     10     10       Struct     N     10       AIR CONDITIONING     C     Stage     -0.1     0       S     0     0     10     10       Stage     -0.1     0     10     10       Stage     -0.1     0     10     10       Stage     -0.1     0     20     20       C     0     10     10     10       Stage     -0.1     0     20     20       CN     10     10     10     10       Struct     N     10     10     10       Stage     -0.1     0     10     10       Stage     -0.1     0     10     10       PARK     P     Stage     -0.1     0       SN     10     10     10     10       Stage     -0.1     0     20     20</td><td>Stage     -0.1     0     1       C     0     0     10       CN     10     10     10       Struct     N     -0.2       AIR CONDITIONING     C     Stage     -0.1     0     11       STRUCT     N     0     10     10     10       AIR CONDITIONING     C     Stage     -0.1     0     10       Stage     -0.1     0     10     10     10     10       Stage     -0.1     0     10     10     10     10       VIDEO RENTAL STO     C     Stage     -0.1     0     10     10       Struct     N     10     10     10     10     10     10       VIDEO RENTAL STO     C     Stage     -0.1     0     10     10     10     10       Stage     -0.1     0     10     10     10     10     10     10       PARK     P     Stage     -0.1</td><td>Stage     -0.1     0     1     2       C     0     0     10     15       CN     10     10     10     10       AIR CONDITIONING     C     Stage     -0.1     0     1     2       Struct     N     -     0     1     2       S     0     0     1     2       S     0     10     10     10       Stage     -0.1     0     1     2       C     0     10     10     10     10       Stage     -0.1     0     1     2       C     0     10     10     10     10       Stage     -0.1     0     1     2       VIDEO RENTAL STO     C     Stage     -0.1     0     1     2       VIDEO RENTAL STO     C     Stage     -0.1     0     1     2       SN     10     10     10     10     10     2</td><td>Stage     -0.1     0     1     2     3       C     0     0     10<td>Stage-0.101234C0010152060CN10101010101010StructN-0.2NNAIR CONDITIONINGCStage-0.101234S00881012141010101010Stage-0.101101010101010101010Stage-0.10110101010101010101010OLDO RENTAL STOCStage-0.10123410</td><td>Stage-0.1012345C0010152060100CN1010101010101010AIR CONDITIONINGCStage-0.1012345S00810121416SN1010101010101010Stage-0.1012345C02040608010010CN1010101010101010Stage-0.1011010101010CNNNNN1010101010VIDEO RENTAL STOCStage-0.1012345S001010101010101010VIDEO RENTAL STOCStage-0.1012345S00101010101010101010PARKPStage-0.1012345S001010101010101010Stage-0.10101010101010&lt;</td><td>Stage-0.10123456C001015206010010CN101010101010101010AIR CONDITIONINGCStage-0.10123456S00110101012141619AIR CONDITIONINGCStage-0.1011010101010SN1010101010101010101010Stage-0.10123456C0201010101010101010Stage-0.10123456C0201010101010101010VIDEO RENTAL STOCStage-0.10123456S001234566</td><td>Stage-0.101234567C001010102060100100100CN1010101010101010101010StructN-5-N567S00122N-15-10SN101010101010101010Stage-0.101234567Stage-0.1101010101010101010CN1010101010101010101010Stage-0.101234567VIDEO RENTAL STOCStage-0.10123456Stage-0.10101010101010101010VIDEO RENTAL STOCStage-0.101234567VIDEO RENTAL STOCStage-0.1101010101010101010Stage-0.1101010101010101010101010Stage-0.1<t< td=""><td>Stage -0.1 0 -1 2 3 4 5 6 7 8   C 0 0 10 10 10 10 10 10 10 10 10   CN 10 10 10 10 10 10 10 10 10 10 10   AIR CONDITIONING C Stage -0.1 0 1 2 3 4 5 6 7 8   AIR CONDITIONING C Stage -0.1 0 10 &lt;</td><td>Stage -0.1 0 1 2 3 4 5 6 7 8 9   C 0 0 10 15 20 60 100 100 100 100   AIR CONDITIONING C 100 0 10 10 10 10 10 10 10 10   AIR CONDITIONING C Stage -0.1 0 10 10 12 3 4 16 19 22 23 4 16 19 22 3 10   Stage -0.1 0 10 10 12 13 4 16 19 22 23 10   Stage -0.1 0 10 10 12 13 4 5 6 7 8 9   Stage -0.1 0 10</td><td>Slage -0.1 0 1 2 3 4 5 6 7 8 9 10   C 0 10 10 10 10 10 10 10 100</td><td>Siage 0.0 0.0 10 2 3 4 5 6 7 8 9 10 11   C 0 0 10 15 20 60 100 1</td><td>Slinge -0.1 0 1 2 3 4 5 6 7 8 9 10 10 10   C 00 0 0 10</td></t<></td></td></t<></td>	AIR CONDITIONING C CN AIR CONDITIONING C Stage AIR CONDITIONING C Stage C C C C C C C C C C C C C	Stage     -0.1       C     0       CN     10       Struct     N       AIR CONDITIONING     C     Stage     -0.1       Struct     N     10       Struct     N     10       Stage     -0.1     S     0       SN     10     Stage     -0.1       Stage     -0.1     C     0       VIDEO RENTAL STO     C     Stage     -0.1       VIDEO RENTAL STO     C     Stage     -0.1       SN     10     Struct     N       VIDEO RENTAL STO     C     Stage     -0.1       SN     10     Stage     -0.1       SN     10     Stage     -0.1       PARK     P     Stage     -0.1       SN     10     Stage     -0.1       Stage     -0.1     Stage     -0.1       CAMPGROUND     C     Stage     -0.1       SN     10     Stage     -0.1 <t< td=""><td>Stage     -0.1     0       C     0     0       CN     10     10       Struct     N     10       AIR CONDITIONING     C     Stage     -0.1     0       S     0     0     10     10       Stage     -0.1     0     10     10       Stage     -0.1     0     10     10       Stage     -0.1     0     20     20       C     0     10     10     10       Stage     -0.1     0     20     20       CN     10     10     10     10       Struct     N     10     10     10       Stage     -0.1     0     10     10       Stage     -0.1     0     10     10       PARK     P     Stage     -0.1     0       SN     10     10     10     10       Stage     -0.1     0     20     20</td><td>Stage     -0.1     0     1       C     0     0     10       CN     10     10     10       Struct     N     -0.2       AIR CONDITIONING     C     Stage     -0.1     0     11       STRUCT     N     0     10     10     10       AIR CONDITIONING     C     Stage     -0.1     0     10       Stage     -0.1     0     10     10     10     10       Stage     -0.1     0     10     10     10     10       VIDEO RENTAL STO     C     Stage     -0.1     0     10     10       Struct     N     10     10     10     10     10     10       VIDEO RENTAL STO     C     Stage     -0.1     0     10     10     10     10       Stage     -0.1     0     10     10     10     10     10     10       PARK     P     Stage     -0.1</td><td>Stage     -0.1     0     1     2       C     0     0     10     15       CN     10     10     10     10       AIR CONDITIONING     C     Stage     -0.1     0     1     2       Struct     N     -     0     1     2       S     0     0     1     2       S     0     10     10     10       Stage     -0.1     0     1     2       C     0     10     10     10     10       Stage     -0.1     0     1     2       C     0     10     10     10     10       Stage     -0.1     0     1     2       VIDEO RENTAL STO     C     Stage     -0.1     0     1     2       VIDEO RENTAL STO     C     Stage     -0.1     0     1     2       SN     10     10     10     10     10     2</td><td>Stage     -0.1     0     1     2     3       C     0     0     10<td>Stage-0.101234C0010152060CN10101010101010StructN-0.2NNAIR CONDITIONINGCStage-0.101234S00881012141010101010Stage-0.101101010101010101010Stage-0.10110101010101010101010OLDO RENTAL STOCStage-0.10123410</td><td>Stage-0.1012345C0010152060100CN1010101010101010AIR CONDITIONINGCStage-0.1012345S00810121416SN1010101010101010Stage-0.1012345C02040608010010CN1010101010101010Stage-0.1011010101010CNNNNN1010101010VIDEO RENTAL STOCStage-0.1012345S001010101010101010VIDEO RENTAL STOCStage-0.1012345S00101010101010101010PARKPStage-0.1012345S001010101010101010Stage-0.10101010101010&lt;</td><td>Stage-0.10123456C001015206010010CN101010101010101010AIR CONDITIONINGCStage-0.10123456S00110101012141619AIR CONDITIONINGCStage-0.1011010101010SN1010101010101010101010Stage-0.10123456C0201010101010101010Stage-0.10123456C0201010101010101010VIDEO RENTAL STOCStage-0.10123456S001234566</td><td>Stage-0.101234567C001010102060100100100CN1010101010101010101010StructN-5-N567S00122N-15-10SN101010101010101010Stage-0.101234567Stage-0.1101010101010101010CN1010101010101010101010Stage-0.101234567VIDEO RENTAL STOCStage-0.10123456Stage-0.10101010101010101010VIDEO RENTAL STOCStage-0.101234567VIDEO RENTAL STOCStage-0.1101010101010101010Stage-0.1101010101010101010101010Stage-0.1<t< td=""><td>Stage -0.1 0 -1 2 3 4 5 6 7 8   C 0 0 10 10 10 10 10 10 10 10 10   CN 10 10 10 10 10 10 10 10 10 10 10   AIR CONDITIONING C Stage -0.1 0 1 2 3 4 5 6 7 8   AIR CONDITIONING C Stage -0.1 0 10 &lt;</td><td>Stage -0.1 0 1 2 3 4 5 6 7 8 9   C 0 0 10 15 20 60 100 100 100 100   AIR CONDITIONING C 100 0 10 10 10 10 10 10 10 10   AIR CONDITIONING C Stage -0.1 0 10 10 12 3 4 16 19 22 23 4 16 19 22 3 10   Stage -0.1 0 10 10 12 13 4 16 19 22 23 10   Stage -0.1 0 10 10 12 13 4 5 6 7 8 9   Stage -0.1 0 10</td><td>Slage -0.1 0 1 2 3 4 5 6 7 8 9 10   C 0 10 10 10 10 10 10 10 100</td><td>Siage 0.0 0.0 10 2 3 4 5 6 7 8 9 10 11   C 0 0 10 15 20 60 100 1</td><td>Slinge -0.1 0 1 2 3 4 5 6 7 8 9 10 10 10   C 00 0 0 10</td></t<></td></td></t<>	Stage     -0.1     0       C     0     0       CN     10     10       Struct     N     10       AIR CONDITIONING     C     Stage     -0.1     0       S     0     0     10     10       Stage     -0.1     0     10     10       Stage     -0.1     0     10     10       Stage     -0.1     0     20     20       C     0     10     10     10       Stage     -0.1     0     20     20       CN     10     10     10     10       Struct     N     10     10     10       Stage     -0.1     0     10     10       Stage     -0.1     0     10     10       PARK     P     Stage     -0.1     0       SN     10     10     10     10       Stage     -0.1     0     20     20	Stage     -0.1     0     1       C     0     0     10       CN     10     10     10       Struct     N     -0.2       AIR CONDITIONING     C     Stage     -0.1     0     11       STRUCT     N     0     10     10     10       AIR CONDITIONING     C     Stage     -0.1     0     10       Stage     -0.1     0     10     10     10     10       Stage     -0.1     0     10     10     10     10       VIDEO RENTAL STO     C     Stage     -0.1     0     10     10       Struct     N     10     10     10     10     10     10       VIDEO RENTAL STO     C     Stage     -0.1     0     10     10     10     10       Stage     -0.1     0     10     10     10     10     10     10       PARK     P     Stage     -0.1	Stage     -0.1     0     1     2       C     0     0     10     15       CN     10     10     10     10       AIR CONDITIONING     C     Stage     -0.1     0     1     2       Struct     N     -     0     1     2       S     0     0     1     2       S     0     10     10     10       Stage     -0.1     0     1     2       C     0     10     10     10     10       Stage     -0.1     0     1     2       C     0     10     10     10     10       Stage     -0.1     0     1     2       VIDEO RENTAL STO     C     Stage     -0.1     0     1     2       VIDEO RENTAL STO     C     Stage     -0.1     0     1     2       SN     10     10     10     10     10     2	Stage     -0.1     0     1     2     3       C     0     0     10 <td>Stage-0.101234C0010152060CN10101010101010StructN-0.2NNAIR CONDITIONINGCStage-0.101234S00881012141010101010Stage-0.101101010101010101010Stage-0.10110101010101010101010OLDO RENTAL STOCStage-0.10123410</td> <td>Stage-0.1012345C0010152060100CN1010101010101010AIR CONDITIONINGCStage-0.1012345S00810121416SN1010101010101010Stage-0.1012345C02040608010010CN1010101010101010Stage-0.1011010101010CNNNNN1010101010VIDEO RENTAL STOCStage-0.1012345S001010101010101010VIDEO RENTAL STOCStage-0.1012345S00101010101010101010PARKPStage-0.1012345S001010101010101010Stage-0.10101010101010&lt;</td> <td>Stage-0.10123456C001015206010010CN101010101010101010AIR CONDITIONINGCStage-0.10123456S00110101012141619AIR CONDITIONINGCStage-0.1011010101010SN1010101010101010101010Stage-0.10123456C0201010101010101010Stage-0.10123456C0201010101010101010VIDEO RENTAL STOCStage-0.10123456S001234566</td> <td>Stage-0.101234567C001010102060100100100CN1010101010101010101010StructN-5-N567S00122N-15-10SN101010101010101010Stage-0.101234567Stage-0.1101010101010101010CN1010101010101010101010Stage-0.101234567VIDEO RENTAL STOCStage-0.10123456Stage-0.10101010101010101010VIDEO RENTAL STOCStage-0.101234567VIDEO RENTAL STOCStage-0.1101010101010101010Stage-0.1101010101010101010101010Stage-0.1<t< td=""><td>Stage -0.1 0 -1 2 3 4 5 6 7 8   C 0 0 10 10 10 10 10 10 10 10 10   CN 10 10 10 10 10 10 10 10 10 10 10   AIR CONDITIONING C Stage -0.1 0 1 2 3 4 5 6 7 8   AIR CONDITIONING C Stage -0.1 0 10 &lt;</td><td>Stage -0.1 0 1 2 3 4 5 6 7 8 9   C 0 0 10 15 20 60 100 100 100 100   AIR CONDITIONING C 100 0 10 10 10 10 10 10 10 10   AIR CONDITIONING C Stage -0.1 0 10 10 12 3 4 16 19 22 23 4 16 19 22 3 10   Stage -0.1 0 10 10 12 13 4 16 19 22 23 10   Stage -0.1 0 10 10 12 13 4 5 6 7 8 9   Stage -0.1 0 10</td><td>Slage -0.1 0 1 2 3 4 5 6 7 8 9 10   C 0 10 10 10 10 10 10 10 100</td><td>Siage 0.0 0.0 10 2 3 4 5 6 7 8 9 10 11   C 0 0 10 15 20 60 100 1</td><td>Slinge -0.1 0 1 2 3 4 5 6 7 8 9 10 10 10   C 00 0 0 10</td></t<></td>	Stage-0.101234C0010152060CN10101010101010StructN-0.2NNAIR CONDITIONINGCStage-0.101234S00881012141010101010Stage-0.101101010101010101010Stage-0.10110101010101010101010OLDO RENTAL STOCStage-0.10123410	Stage-0.1012345C0010152060100CN1010101010101010AIR CONDITIONINGCStage-0.1012345S00810121416SN1010101010101010Stage-0.1012345C02040608010010CN1010101010101010Stage-0.1011010101010CNNNNN1010101010VIDEO RENTAL STOCStage-0.1012345S001010101010101010VIDEO RENTAL STOCStage-0.1012345S00101010101010101010PARKPStage-0.1012345S001010101010101010Stage-0.10101010101010<	Stage-0.10123456C001015206010010CN101010101010101010AIR CONDITIONINGCStage-0.10123456S00110101012141619AIR CONDITIONINGCStage-0.1011010101010SN1010101010101010101010Stage-0.10123456C0201010101010101010Stage-0.10123456C0201010101010101010VIDEO RENTAL STOCStage-0.10123456S001234566	Stage-0.101234567C001010102060100100100CN1010101010101010101010StructN-5-N567S00122N-15-10SN101010101010101010Stage-0.101234567Stage-0.1101010101010101010CN1010101010101010101010Stage-0.101234567VIDEO RENTAL STOCStage-0.10123456Stage-0.10101010101010101010VIDEO RENTAL STOCStage-0.101234567VIDEO RENTAL STOCStage-0.1101010101010101010Stage-0.1101010101010101010101010Stage-0.1 <t< td=""><td>Stage -0.1 0 -1 2 3 4 5 6 7 8   C 0 0 10 10 10 10 10 10 10 10 10   CN 10 10 10 10 10 10 10 10 10 10 10   AIR CONDITIONING C Stage -0.1 0 1 2 3 4 5 6 7 8   AIR CONDITIONING C Stage -0.1 0 10 &lt;</td><td>Stage -0.1 0 1 2 3 4 5 6 7 8 9   C 0 0 10 15 20 60 100 100 100 100   AIR CONDITIONING C 100 0 10 10 10 10 10 10 10 10   AIR CONDITIONING C Stage -0.1 0 10 10 12 3 4 16 19 22 23 4 16 19 22 3 10   Stage -0.1 0 10 10 12 13 4 16 19 22 23 10   Stage -0.1 0 10 10 12 13 4 5 6 7 8 9   Stage -0.1 0 10</td><td>Slage -0.1 0 1 2 3 4 5 6 7 8 9 10   C 0 10 10 10 10 10 10 10 100</td><td>Siage 0.0 0.0 10 2 3 4 5 6 7 8 9 10 11   C 0 0 10 15 20 60 100 1</td><td>Slinge -0.1 0 1 2 3 4 5 6 7 8 9 10 10 10   C 00 0 0 10</td></t<>	Stage -0.1 0 -1 2 3 4 5 6 7 8   C 0 0 10 10 10 10 10 10 10 10 10   CN 10 10 10 10 10 10 10 10 10 10 10   AIR CONDITIONING C Stage -0.1 0 1 2 3 4 5 6 7 8   AIR CONDITIONING C Stage -0.1 0 10 <	Stage -0.1 0 1 2 3 4 5 6 7 8 9   C 0 0 10 15 20 60 100 100 100 100   AIR CONDITIONING C 100 0 10 10 10 10 10 10 10 10   AIR CONDITIONING C Stage -0.1 0 10 10 12 3 4 16 19 22 23 4 16 19 22 3 10   Stage -0.1 0 10 10 12 13 4 16 19 22 23 10   Stage -0.1 0 10 10 12 13 4 5 6 7 8 9   Stage -0.1 0 10	Slage -0.1 0 1 2 3 4 5 6 7 8 9 10   C 0 10 10 10 10 10 10 10 100	Siage 0.0 0.0 10 2 3 4 5 6 7 8 9 10 11   C 0 0 10 15 20 60 100 1	Slinge -0.1 0 1 2 3 4 5 6 7 8 9 10 10 10   C 00 0 0 10

577			С		0	20	40	60	80	100	100	100	100	100	100	100	100	100	100
577			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
577			Struct	Ν			0.2		Ν		15			901				901	
579	PECAN FARM	С	Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
579			S		0	0	8	13	18	25	35	45	55	65	72	78	85	85	85
579			SN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
579			Stage		-0.1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
579			С		0	20	10	40	80	100	100	100	100	100	100	100	100	100	100
579			CN		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
579			Struct	Ν			0.2		Ν		15			901				901	