ACME TOWNSHIP

MASTER PLAN

Created Summer 1999 Updated 2005 With Amendments through May 18, 2009

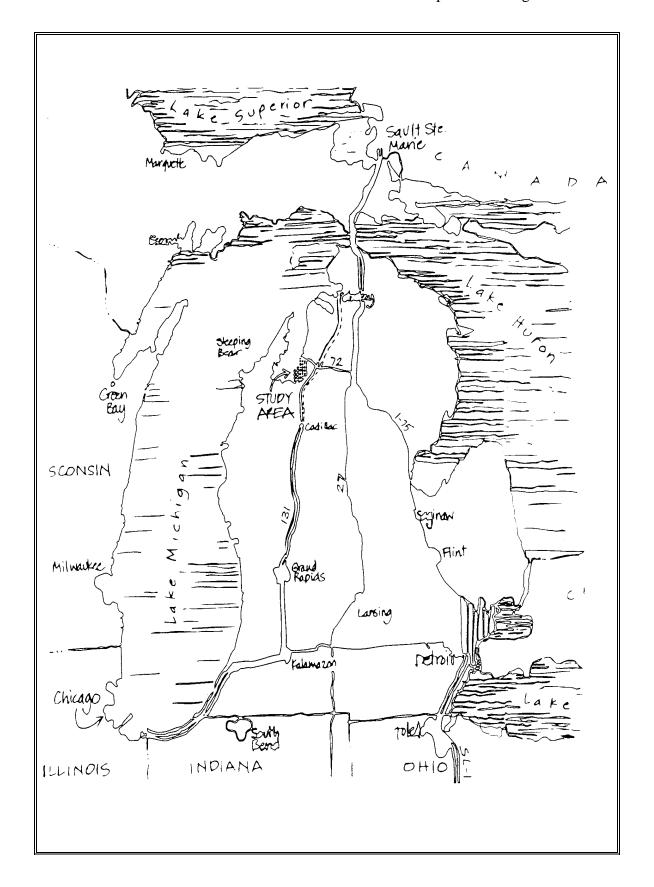
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Township Board

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	Through 11/19/2004		
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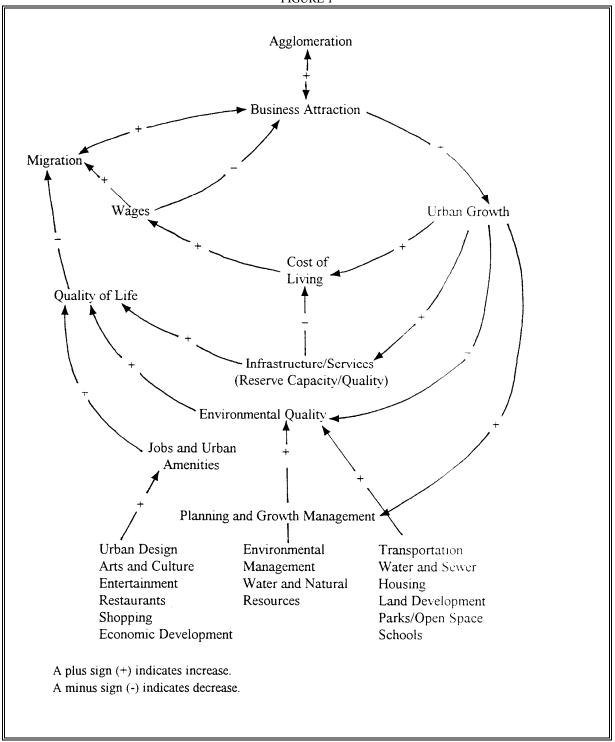
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The 1997 Acme Township Master Plan contains summaries of, or has referred to, the following studies in preparing this plan and are included by reference:

- "The Acme Township Economic Review"
- "The Acme Township Community Opinion Survey"
- "The Acme Township Visual Preference SurveyTM"
- "Sanitary Sewer System Evaluation Study Update and Relief Sewer Study for Acme Township"
- "Conservancy Land Thoughts and Viewsheds"
- "The Acme Township Agricultural Study Group Report"
- "A Summary of Water Quality Problems in the Acme and Yuba Creek Watersheds"
- "The Acme Creek Watershed Planning Report"
- "Final Report for the Grand Traverse Bay Initiative: Part II, Water Quality of the Bay and Tributaries"
- "Acme Creek Watershed Planning Project"
- "Acme Build-out Projections" (NWMCOG)
- "A Natural Areas Inventory of Grand Traverse County, Michigan" (MDNR)
- "Grand Traverse Bay Region Development Guidebook"
- "Prime and Unique Farmlands Map"
- "Grand Traverse County Soils Inventory"
- "Grand Traverse County Tart Cherry Site Inventory"

System of Relationships Linking Development Processes, Quality of Life, and Urban Planning

FIGURE 1



Source: Dowell Myers, "The Ecology of 'Quality of Life and Urban Growth," in *Understanding Growth Management: Critical Issues and a Research Agenda* (Washington, D.C.: The Urban Land Institute, 1989), page 93.

THE PROCESS

As indicated by the studies on page vi, Acme Township residents have been examining their community in some detail for a number of years. The process was recently accelerated though by a visioning session, facilitated by the Grand Traverse County Extension Service, and a community attitude survey sponsored by the Grand Traverse Regional Land Conservancy and the Frey Foundation. With these as a base, and the subsequent *Visual Preference Survey*TM (also funded by the Frey Foundation) the master plan process proceeded in earnest with regular sessions of the Steering Committee leading to this policy plan and the accompanying Master Land Use Plan Map.

The Steering Committee, assisted by the consultant, endeavored to devise a plan that would incorporate the wishes of community residents, as expressed by the visioning session and the attitude and visual surveys, as well as the many individuals who participated in the planning sessions, into a method of growth management appropriate for guiding an expanding population and the changing social and economic conditions of the township. Despite the complexity and immensity of the task (see figure 1 which served as a guide for the committee during the process) the steering committee has completed this Master Land Use Plan to set the pattern for the development of Acme Township over the next several years.

BACKGROUND

Acme Township-- A Brief History

Acme Township's history and its present economic and social conditions have been shaped and determined by its geography and its abundant natural resources. Prior to European settlement in Acme Township, forests were the principal land cover, primarily sugar maple, elm, basswood, yellow birch, hemlock, and white pine, with poor sandy soil areas supporting jack pine and red pine barrens, including oak, aspen, red maple, and some white pines. These forests originally provided for and spurred the economic development of the area, with trapping and then with logging. Being located on the Great Lakes made this area accessible first to European venturers and mercantilism, and later to American settlement and expansion by facilitating the export of the area's raw materials.

Although there were settlements, forts, and travel routes in the Acme area throughout this period, the effects of human activity were not significant until the nineteenth century when cheap land was made available by the federal government, and the demand for construction wood, railroad ties and trestles, and fuel in expanding communities throughout the East and Midwest was increasing rapidly.

The village of Acme was established by L. S. Hoxsie in 1855, when he arrived from Lenawee County. The village became a station stop for the Pere Marquette Railroad and was originally part of Whitewater Township. Acme was heralded as a "coming industrial town." In 1858 Hoxsie built a saw mill and from 1880-1890 the village boomed, boasting a hotel, several stores, and a shingle mill.

In 1891 John Pulcipher organized Acme Township and became its supervisor for the next 28 years. By the early 1900's most of the virgin timber in the area had been cut over and the farmsteads created on poor soils had reverted back to the state for delinquent taxes. Resale and cut over of second growth occurred in some areas, but farming of the good lands began taking hold.

In 1901 John Hoxsie and John Scripture started a woolen mill west of the village on Acme Creek. A second one was opened soon after but closed within a year. In 1903 the village had a saw mill, saw and planing mill, shingle mill, general store, woolen mill, and a blacksmith shop; and the township contained three saw mills, two shingle mills, a township hall, the Methodist Episcopal Church, a Masonic lodge and three school buildings with four rooms total. The population of the township was then about 200 souls.²

_

¹Barnes, 1976.

²Sprague, 1903.

Updated Through 05/18/2009

Other early settlements within Acme Township were Bates and Yuba. Bates was also a station stop

on the Pere Marquette Railroad. It had a general store, a post office, and a cold storage warehouse.

Because of the warehouse, Bates became a central farm distribution point for farm produce,

especially potatoes and fruit plus lumber, cordwood, logs and tanbark. Yuba was located on a wagon

road about 11 miles northeast of Traverse City on the way to Elk Rapids and was the "center of a

flourishing farm community." Further, north on Petobego Swamp a cement factory operated, mining

the marl from the pond and swamp.

The real lifeblood of the area was timber and as it was cut off the prosperity of these "coming

industrial town[s]" waned. Stores were closed and the hotel razed and, with competition from other

areas, the woolen mill was eventually closed as well.

Throughout the early part of the twentieth century, state lands were consolidated and farmers on

marginal lands were relocated. Railroads had expanded, and in 1919, the state began highway

construction with a fifty million dollar bond issue followed in 1925 by a two cent per gallon gasoline

tax to fund highway construction.⁴ Also about 1910 the state's urban population exceeded its rural

population and was growing at a rate of 30% per decade, with a dramatic increase in per capita

wealth.⁵ All of these factors led to increased tourism in the north. Resorts and summer vacation

properties began appearing all along the Grand Traverse Bay.

Up through the 1920's the number of farms increased in the area and the planting of orchards

increased steadily on most of these farms. The largest percentage of farm acreage was used to

produce tart cherries, with apples, sweet cherries and other fruits taking up most of the rest.

During the Great Depression many properties, especially farms in poor soil areas, reverted to the state

Conservation Department and the U.S. Forest Service bought thousands of acres. Much of this land

was replanted by the Civilian Conservation Corps which planted almost 500 million trees in

Michigan.6

³Sprague, 1903.

⁴MSPO, 1995.

⁵MSPO, 1995.

⁶Titus, 1945.

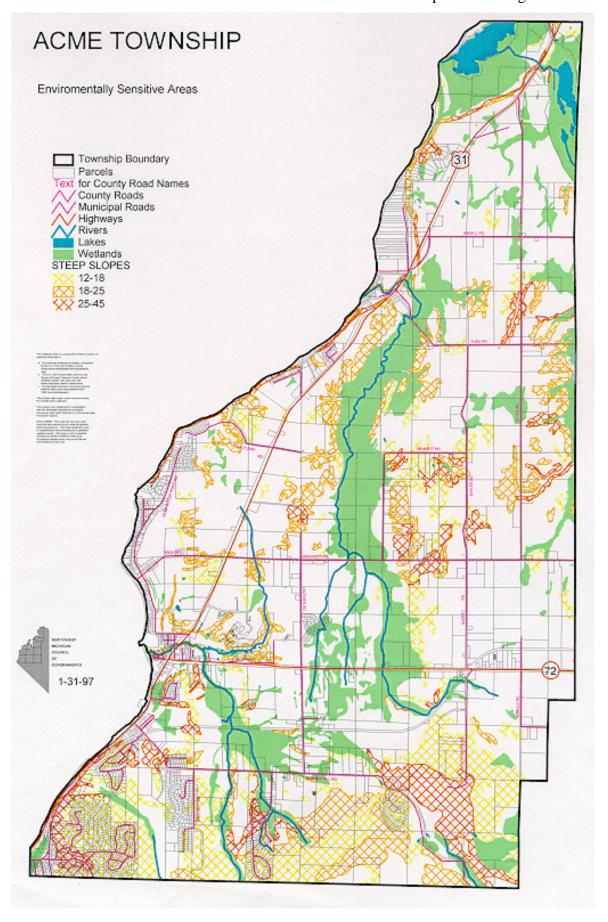
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During the 1930's people left rural area for the cities and rural population growth halted or declined. In 1970 this trend ended, and Michigan's rural population, and the Traverse City area's population in particular, began to grow steadily.⁷ As we have seen this growth has been not in farm population, but is dominated in Acme Township by retirees and others servicing the increasing tourist trade. Also the household size has dropped dramatically, all of which has expanded the use of land for non-agricultural purposes and has had a profound effect on the landscape and ecology of the area.

In the early 1970's, a nine-hole golf course was constructed near the intersection of M 72 and US 31. This course was later purchased and expanded to become the Grand Traverse Resort. Despite ups and downs, the resort continues to expand, now having two eighteen-hole golf courses, with two more planned, over 300 dwelling units, plus a hotel and convention center. Commercial activity has also been growing along the US 31 and M 72 corridors in response to the increasing township population and to the burgeoning tourist trade of the entire area.

⁷Ferris & McVeigh, 1995.

5



Geography

Come Township is a general law township of Grand Traverse County and is located north of East Bay Township on the east side of the Grand Traverse Bay. It is about 25.2 square miles in territory and has about 3,450 people or approximately 137 persons per square mile. Acme Township is one of the main gateways to the Traverse City area having the juncture of M-72 and US 31 within its bounds.

Acme Township's climate is greatly affected by its location on the Grand Traverse Bay. This quasimarine climate moderates changes in temperature and precipitation and allows a longer frost-free growing period for plants than would be usual at this latitude. The average growing season for the township is approximately 120-140 days and the average annual rainfall is 29 inches. The average daily maximum and minimum temperatures in January are 30° F and 17°F, and in July are 82°F and 59°F. The average snowfall is 70 to 80 inches.

The topography of Acme Township was created by the receding Wisconsin ice age glaciers that left the Manistee moraine in the area roughly south of M72 stretching from Kalkaska around Traverse City into Leelanau County, forming a large plateau in the south and on the eastern edge of the township. North of the Manistee moraine and in the northern two thirds of the township is a large ground moraine. The ground moraines is characterized by hills (drumlins) roughly 1/4 to 2 miles long and 1/8 mile wide that rise 35 to 100 feet above the adjacent creeks and other drainage ways. Glacial lake plains are associated with the shore areas of the Grand Traverse Bay (see Physiographic Features Map on page 31).

Existing land cover and natural resources and other ecological information are covered in the "State of the Land" section (see page 22).

Temperature and Precipitation in Traverse City Grand Traverse County, Michigan 12

	Temperature				Precipitation				
Month	Avg. Daily Max.	Avg. Daily Min.	will have	ars in 10 e at least s with	Avg. Total	One Year in 10 will have		Days with snow cover of 1 inch or more	Avg. Depth of snow on days with snow cover
			Max Temp.	Min. Temp.		Less Than	More Than		
	°F	°F	°F	°F	Inches	Inches	Inches	Inches	Inches
January	30	17	41	-1	1.9	1.2	2.8	30	8
February	30	15	42	-3	1.3	0.7	2.4	28	10
March	38	21	59	2	1.6	1	3	22	8
April	52	32	73	20	2	1.8	3.7	3	2
May	65	41	81	30	3.1	1.4	4.4	0	0
June	76	53	89	40	2.6	1.7	4	0	0
July	82	59	90	46	2.6	1.4	5.7	0	0
August	79	58	92	45	2.6	1.5	4.7	0	0
September	71	51	85	36	3.7	1.2	5.1	0	0
October	59	41	76	27	2.9	0.9	5.1	0	0
November	44	30	61	14	3	1.8	4.2	9	4
December	33	22	47	6	1.7	1.6	2.3	24	5
Year	55	37	95	4 -10	29.1	26.3	33.6	116	3 6

¹ Prepared by A. Eichmeier, climatologist for Michigan, National Weather Service, U.S. Department of Commerce.

 $^{2\,\}mathrm{Period}$ of record $1930\,\mathrm{to}\ 1952$

³ Average annual maximum

⁴ Average annual minimum

Probabilities of Last Freezing Temperatures in Spring and First in Fall at Traverse City Grand Traverse County, Michigan

Probability	Dates for Given Probability and Temperature				
_	24°F or colder	28°F or colder	32°F or colder		
Spring					
1 year in 10 later than	April 28	May 13	May 22		
2 years in 10 later than	April 24	May 09	May 18		
5 years in 10 later than	April 16	May 01	May 10		
Fall					
1 year in 10 earlier than	October 30	October 12	September 24		
2 years in 10 earlier than	November 03	October 16	September 28		
5 years in 10 earlier than	November 12	October 25	October 07		

Demographics and Economy Acme Township Demographics - 1990 Census

LAND AND PEOPLE

3,447 people; 25.2 square miles; 137 persons per square mile

SOCIAL

20% born out of state

58% living in different locations five years earlier

50% of renters

19% of homeowners moved in by 1989; only 8% and 14% before 1969 approximately 1,000 households - 52% with children less than 18 years

2.76 persons per household

3.16 persons per family (average for area)

median age 35 years (quite elderly)

very few 18-24 year olds

a few more men than women; almost all white

EDUCATION

high education levels

very few 16-19 not in school or unemployed

DISABILITIES

	Work	Mobility, etc.
very few	4%	3%
elderly	-	21%

INCOME AND POVERTY

\$38k median household income (quite high)

very low poverty only 4.8% persons and 4.0% families below poverty level

HOUSING/TRANSPORTATION

40% of housing built 1980-1990

50% are on public sewer; 19% public or private water system

76% on natural gas

±83% owner occupied

±75% single family; about 16% of all units seasonal

occupancy rates very high

median owner-occupied housing unit - \$86.5k

median rent \$431 per month (most rentals single family housing)

76% of households have 2 or more vehicles available

virtually 100% use auto or truck to commute

0.4% public transit

ACME TOWNSHIP- GRAND TRAVERSE COUNTY GENERAL DEMOGRAPHIC STATISTICS AND TRENDS

Uring the 20 year period, 1970 through 1990, Acme Township's population grew by 107%. Much of this population growth occurred between 1970 and 1980. Census detail clearly shows not only a gross population increase, but a significant shift in the composition of the area's population, particularly since 1980.

- Households have grown at twice the rate of gross population having expanded by 211% over the 20 year period. As expected, household average size shrank dramatically going from a 1970) acreage of 3.3 persons per household to 2.2 in 1990.
- During the same 20 year period, median age increased from 26.6 years to 34.8 years.
- The percentage of persons under 18 fell relative to the total population increase, In absolute numbers, Acme residents under 18 years increased by 61% from 1970 to 1990. but only by 5%, during the period 1980 to 1990.
- Acme residents 65 and over have increased by 162% during the 20 year period. with 79% of that growth coming since 1980.
- Acme Township residents have a very low disability rate for both the general population and the over 65 years segment of the population. Of 2,227 persons age 16 to 65, only 28 have a mobility or self care disability and 364 persons are 65 plus, only 31 have a mobility or self care disability.
- Based on 1990 census data, median household income for Acme residents was \$37,946, while median Acme family income was \$43,062. Comparable numbers for all of Grand Traverse County were \$27,406 and \$31,217, respectively.
- Of 2,257 Acme residents age 25 or older, 91.3% had at least a high school education.

- Acme residents work predominantly at private wage and salary employment, drive to work (82% alone) and commute an average of 17 minutes in the process. Durable and non-durable manufacturing, retail and wholesale trade, financial and personal services, health care and education, together with the catch-all category "other professional services" account for 1,361 of the 1,783 employed persons age 16 or older who were residents of Acme Township at the time of the 1990 census. These numbers do not include the self-employed such as most farmers.
- Only 207 farm operators considered their primary occupation to be farming. When these operators are joined with 64 workers classified as agriculture, forestry, and fisheries workers in 1990 census and an allowance is added for secondary occupations which clearly have an agricultural component, the number of farm workers in Acme Township is still modest.

POPULATION UPDATES: GRAND TRAVERSE/ACME

Population increases are the engine of change for all of the greater Traverse City area. Two sources of population information beyond the 1990 census data have been examined. The first is a population projection found in the Grand Traverse County Master Plan FOCUS 2020 materials which were compiled by the Earth Tech Group. The Focus 2020 post 1990 data is presented in two segments: 1) a 1994 population update, and 2) population projections for the years 2000, 2010 and 2020. The source for the 1994 information is listed as the Northwest Council of Governments. Population projections are from Earth Tech.

The 1994 population update was compared with information obtained from the Michigan State Demographer's office, which has also produced a 1994 population update for Michigan and its 83 counties. According to the State Demographer information, Grand Traverse County has grown at a much faster rate during the 1990-1994 period than is shown in the Focus material: a total of 8.26% versus 5.4%.

A growth rate of 8.2% (calculated by the State Demographer's office for a four year period) equates to a compound rate of approximately 2% per year versus the Earth Tech equivalent of approximately 1.4% annual compound growth.

An examination of the state generated population numbers show that the reason growth rates are so high is because of persons moving to the area. The concept of high migration to the area is entirely consistent with mobility information on Acme Township residents contained in the 1990 Census, which show that of 3,195 Acme residents age 5 or older, only 1,340 have lived in the same house five years earlier. Moreover, 1,126 Acme residents (35.2%) had been living in a different county or state five years previously.

POPULATION PROJECTIONS

The Focus Group projections for the year 2000 are the equivalent of an annual increase in excess of 3% for the decade of the 1990's. The Focus 2020 information lists a total growth rate of 37% for the period 1990 to 2000 and 20% per decade growth thereafter. This is a very aggressive growth model, as compared to the State Demographer's model, and produces Acme Township populations of 4,772 persons in the year 2000 and 6,858 by the year 2020.

Acme Township Business-Facts: Daytime Employment

BUSINESS EMPLOYMENT		TOTALS	
TYPE OF BUSINESS#	BUS	# EMPS	EMPS/BUS
Total Businesses	168	2112	12.6
Retail Trade	48	555	11.6
Home Improvement Stores	2	18	9.0
General Merchandise	1	70	70.0
Food Stores	6	104	17.3
Auto Dealers & Gas Stations	7	33	4.7
Apparel & Accessory Stores	2	8	4.0
Furniture/Home Furnishing	5	18	3.6
Eating and Drinking	9	239	26.6
Miscellaneous Retail	16	65	4.1
Finance-Insurance-Real Estate	17	93	5.5
Banks, S&L's, Lending Inst.	4	18	4.5
Securities Brokers & Invest.	2	7	3.5
Insurance Carriers & Agencies	7	13	1.9
Real Estate-Trust-Holding Co	4	55	13.8
Services	63	1227	19.5
Hotels and Lodging	10	868	86.8
Personal Services	6	15	2.5
Business Services	11	32	2.9
Motion Picture & Amusement	7	89	12.7
Health Services	5	35	7.0
Legal Services	2	24	12.0
Education Services	$\frac{2}{2}$	36	18.0
Social Services	1	2	2.0
Other Services	19	126	6.6
Agriculture	5	22	4.4
Mining	2	4	2.0
Construction	11	39	3.5
Manufacturing	8	61	7.6
Trans., Commun/Pub Util	4	47	11.8
Wholesale Trade	9	58	6.4
Government	1	6	6.0
Population During the Daytime		2112	
Daytime Population / Business		2112	12.6
Residential Population		3687	12.0
Residential Population / Business		3007	21.9
Residential I Opulation / Dusiness			21.9

Values from multiple public/private sources: Year end 1995

Acme Township Business Facts Retail Sales By Category (\$ Millions)

Total Retail	\$ 39
Food Stores	6
Eating & Drinking	3
Drug & Proprietary	1
Gasoline	3
General Merchandise	4
Apparel & Accessory	1
Furniture / Furnishings	2
Automotive Dealer	14
Hardware Lumber & Garden	3
Other	2

Multiple Sources: public and private: updated 1995

Household Segmentation Analysis

REF	CATEGORY	#	ACME %	U.S. %	ACME/U.S (INDEX)	
3	Established Wealth	1	0.1	1.9	4	
4	Mid-Life Success	24	1.6	2.8	59	
6	Good Family Life	802	54.1	1.8	3005	
7	Comfortable Times	22	1.5	0.7	221	
9	Building A Home Life	3	0.2	0.1	242	
14	Middle Years	1	0.1	0.4	15	
16	Country Home Families	418	28.1	6.0	467	
18	White Picket Fence	1	0.1	4.7	1	
19	Young and Carefree	1	0.1	0.1	61	
20	Secure Adults	24	1.6	1.7	95	
21	American Classics	1	0.1	0.4	14	
22	Traditional Times	2	0.2	2.3	7	
23	Settled In	82	5.5	5.0	110	
25	Bedrock America	18	1.2	3.2	37	
27	Middle of the Road	2	0.1	0.3	43	
28	Building A Family	24	1.6	1.6	102	
29	Establishing Roots	2	0.1	0.5	23	
30	Domestic Duos	3	0.2	1.2	18	
31	Country Classics	6	0.4	0.6	60	
33	Living Off the Land	3	0.2	0.4	44	
38	Rustic Homesteaders	37	2.5	8.5	30	
39	On Their Own	7	0.4	3.7	12	
	Totals	1484	100.0			
		Aggreg	ated Data			
01	Accumulated Wealth	828	55.9	11.4	489	
02	Mainstream Families	541	36.4	41.3	88	
03	Young Accumulators	45	3.1	4.9	62	
04	Mainstream Singles	7	0.4	21.2	2	
05	Asset-Building Families	4	0.2	0.8	31	
06	Conservative Classics	56	3.8	4.6	82	
07	Cautious Couples	3	0.2	0.6	31	
	Totals	1484	100.0			

INDEX: At a Value of 100, the local population has exactly the same proportion of the sample group as does the U.S. population. Values above 100 mean Acme has more; below 100, less. See "The Acme Township Economic Review" for category definitions.

ACME TOWNSHIP BUILDING PERMITS ISSUED

Year	No.	Total (1000s)	No.	Total (1000s)	No.	Total (1000s)
1977	69	2428	_	-	7	430
1978	88	2068	-	-	5	561
1979	53	3225	-	-	5	5689
1980	35	1758	-	-	9	1869
1981	21	1008	-	-	8	619
1982	23	1152	-	-	9	2750
1983	38	1966	1	19	8	2600
1984	25	1522	-	-	33	7471
1985	48	2792	1	36	7	12186
1986	44	3085	1	40	5	3134
1987	36	2617	1	40	7	432
1988	27	2215	-	-	8	5218
1989	24	2679	1	50	2	238
1990	36	3166	1	66	7	786
1991	24	2948	-	-	3	702
1992	38	3592	2	82	3	545
1993	32	2613	1	93	2	267
1994	41	4120	1	50	6	1854
1995	41	4151	-	-	9	5117
1996	48	5728	-	-	5	929
1997	21		-	-	5	
1998	44		-	-	5	

ACME TOWNSHIP MILLAGE RATES: 1965-1997

1970	37.5	TC
	28.9	ER
1975	38.0	TC
	37.2	ER
1980	40.5	TC
	33.8	ER
1985	41.0	TC
	37.1	ER
1990	51.3	TC
	40.0	ER
1995	43.2	TC
	40.7	ER
1996	42.7	TC
	40.3	ER
1997	41.7	TC
	40.4	ER
1998	41.2	TC
	40.4	ER

SCHOOL DISTRICTS: **BV=BERTHA VOS**

TC=TRAVERSE CITY

ER=ELK RAPIDS

STATE OF THE LAND

A total of 2,229 acres, or three-fours of one percent (0.75%) of Grand Traverse County's land area, was identified as qualifying as a natural area...development or unfavorable land use has eliminated 99% of the natural area quality landscape of Grand Traverse County.

A Natural Areas Inventory of Grand Traverse County, Michigan Gary Reese, et al. 1990

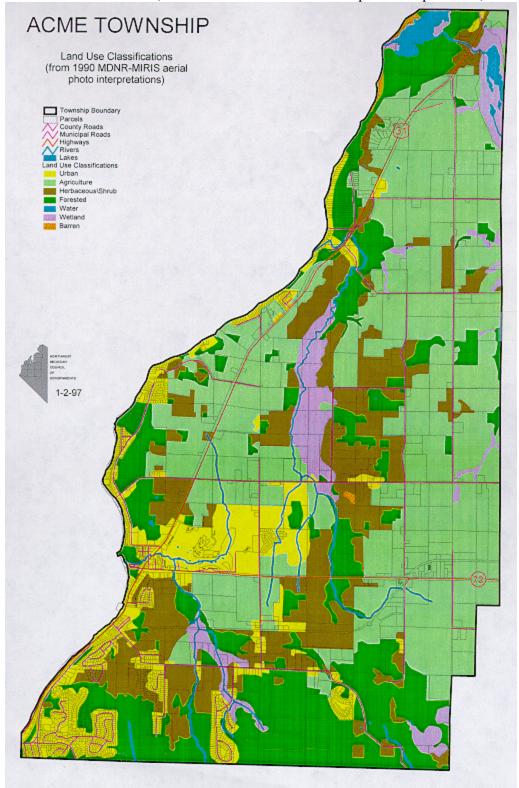
hat too many people refuse to understand is that the global economy's existence depends upon the global environment, not the other way around.

One cannot negotiate jobs, development, or rates of economic growth with nature.

Ross Gelbspan, 1995

ACME TOWNSHIP

Land Use Classifications (from 1990 MDNR-MIRIS aerial photo interpretations)

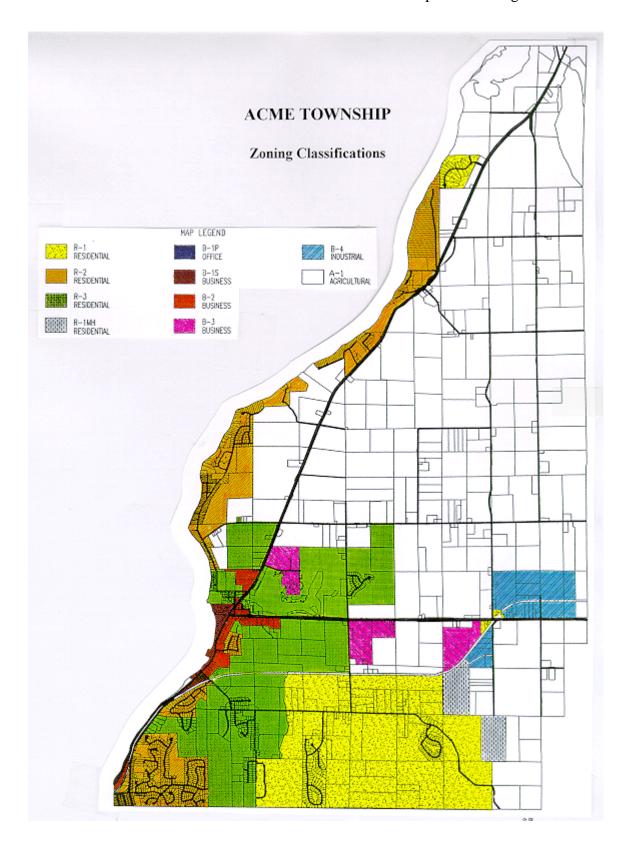


EXISTING LAND COVER AND USES

Cree Township has four predominant land covers. In the area north of M 72, beyond the Grand Traverse Resort and away from the Grand Traverse Bay, orchards dominate the landscape with other types of farming here and there, notably a large dairy farm along US 31 near the intersection with Bates Road. Forests cover about a sixth of the township and are the primary land cover along the southern tier of the township, mainly south of Bunker Hill Road, and again at the northern end of the township where they surround and penetrate the Petobego swamp and wildlife areas.

Single family subdivisions are concentrated in the southwest quadrant of the township and all along the bay front to the Maple Bay Farm in the north. There are also transient and permanent single and multi-family structures throughout the Grand Traverse Resort. The resort, located at the juncture of M 72 and US 31, covers roughly 1,400 acres with two 18 hole golf courses, over 300 residences, and a hotel and convention center.

The last prominent feature of the landscape are the township's main corridors, US 31 running north-south through the township, Traverse City to Elk Rapids, and M 72, running east-west, Acme towards Kalkaska. Small resorts and strip commercial businesses line most of US 31 from East Bay Township in the south to just north of its intersection with M 72. Commercial and industrial establishments front sporadically along M 72 as it runs eastward, with more concentration closer to the Acme "downtown" area and near the old Bates village area.



TOWNSHIP BUILDOUT STATISTICS* Based upon current zoning

Current Population

Acreage Totals (Land Classifications)

Land Type	Total Acres
Developable	9892.46
Wetlands	2697.62
Lakes & Ponds	154.87
Public Land	1017.18
Developed	2450.95
Slopes 12-25%	2847.20
Slopes >25%	764.15
Township Area	15466.26
Forested Land	3579.78
Prime Farmland	4984.75

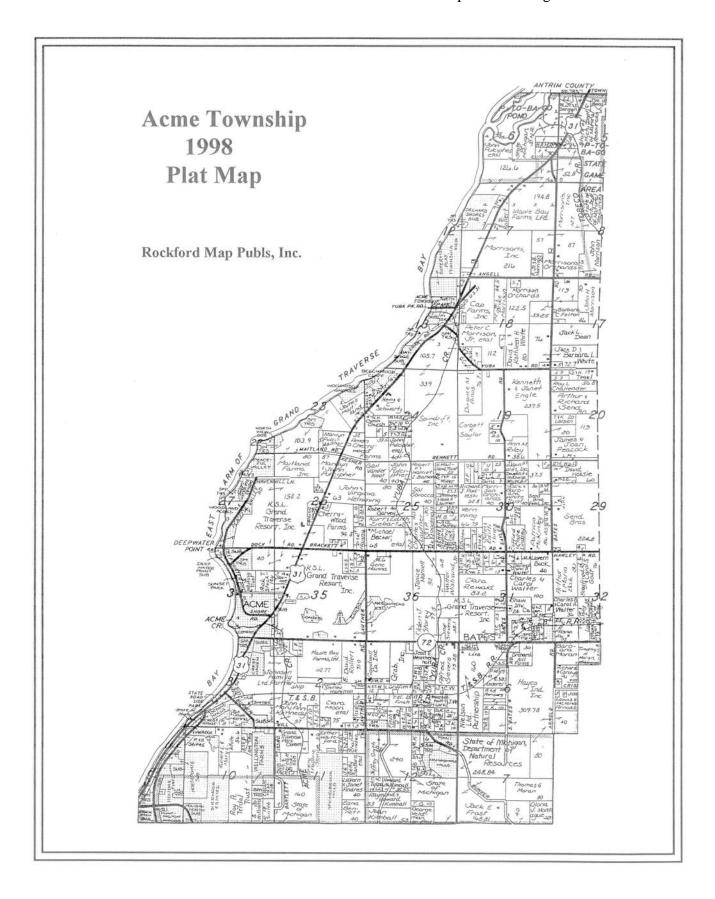
Acreage Totals Per Zone (Based on Developable Areas)

(Bused on Developuble Theus)							
Zone ID	Number of Lots	Total Acreage	Average Lot Size (Acres)				
A	166	6176.5	37.21				
B-1S	14	26.16	1.87				
R-1	117	1290.09	11.03				
R-2	213	385.44	1.81				
R-3	150	1537.78	10.25				
Totals	660	9415.97	12.43				

Buildout Population Projection

Buildout I optilation I Tojection							
Zone ID	Total Acres	Density Units per acre	Minimum Lot Size	Total Possible Lots	Average Persons (# lots x 2.3)		
A	6774.55	0.20	5	1355	3116		
B-1P	0.13	2.90	0.34	0	0		
B-1S	8.23	2.91	0.34	24	55		
B-2	21.85	4.15	0.24	91	0		
B-3	93.23	0	0	0	0		
B-4	482.10	0	0	0	0		
R-1	1158.00	1	1	1158	2663		
R-2	278.02	2.90	0.34	839	1930		
R-3	1041.67	2.90	0.34	3025	6957		
Total	9857.78	average = 1.89	average = .84	6492	14721.00		

^{* 1995} Estimated (State of Michigan Demographer)



ECOLOGY AND NATURAL RESOURCES

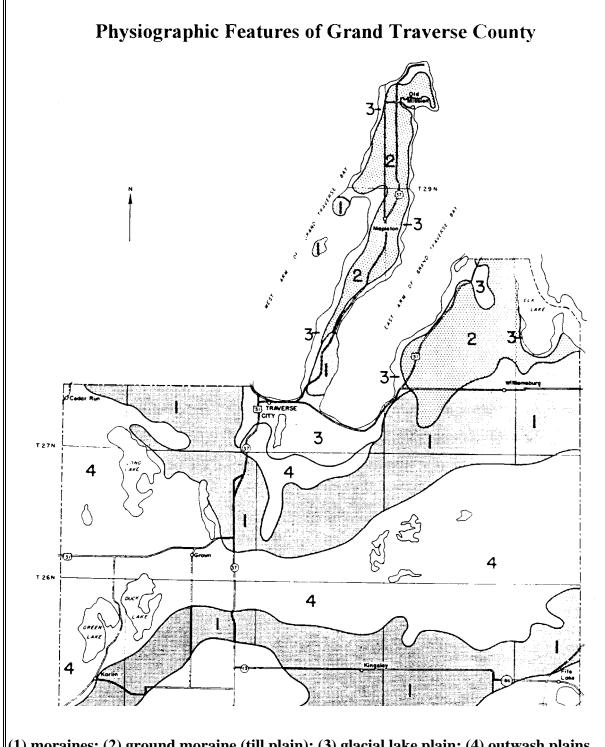
Physical Features Topographic Maps

Acme Township is mapped on the 1983 Provisional Edition of Michigan, USGS topographic quadrangle maps, 7.5 minute series.

Topographic Elevations and Physiographic Features

he Township is located within the Lake Michigan Watershed Basin of Northern Lower Michigan, and virtually the entire western border abuts the East Arm of the Grand Traverse Bay. The two main watersheds of the township are Yuba Creek and Acme Creek (see Watersheds Map, page 38) which drain about two-thirds of the township into the Grand Traverse Bay. Areas to the west of these watersheds also drain either directly, or through various small systems, into the Bay. Most of the eastern area of the township is associated with the Petobego Creek Watershed which drains into the Manistee Moraine and a ground moraine of drumlins mainly arranged in a north-south orientation, forms the northern two-thirds of the township. Most steep slopes are associated with the edge of the Manistee Moraine but others can be found in various locations associated with the ground moraine formations.

Surface elevations range from a mean lake level at the Bay of 580 feet to approximately 860 feet near the southern boundary of the township, an elevation gradient of 280 feet.

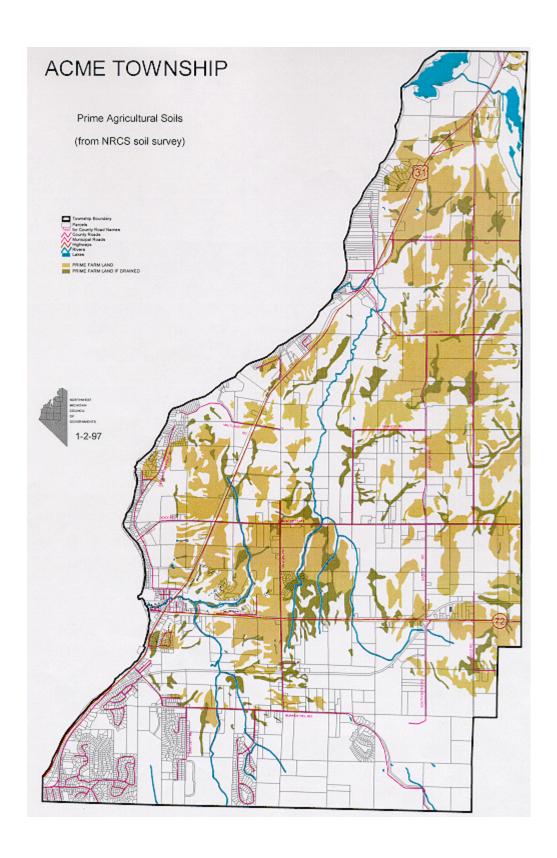


(1) moraines; (2) ground moraine (till plain); (3) glacial lake plain; (4) outwash plains and spillways.

Geologic Formations

In Ellsworth Shale bedrock underlies the Acme area at a depth of approximately 400 feet. This geologic formation is the result of marine conditions that existed approximately 325 million years ago during the Mississippian period of the Paleozoic era.

The glacial drift that overlies bedrock was mostly deposited during the Valders Maximum glacial event, approximately 11,500 years ago. Township lands were formed when this last glacial ice sheet retreated and the melt waters levels receded to form the existing lake shorelines, beaches, bluffs, and lake benches. Lake Algonquin shoreline dynamics (elevation 605 feet) sculpted the drift and had a major impact on the current land formation. Lake Algonquin resulted from the coalescence of glacial Lakes Saginaw and Chicago.

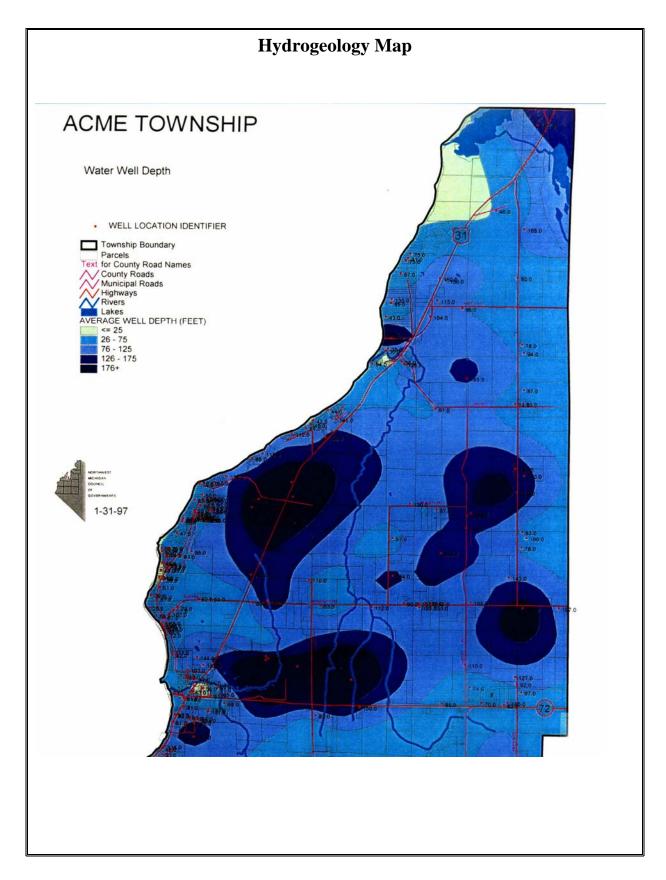


Ecological Features Soil Types

he general soil types occurring in Acme Township are shown on the accompanying "General Soil Map" of Grand Traverse County, Michigan (see page 33). Most of the soils in the township are sandy and well-drained. Those in the southern portion of the township, the Manistee Moraine area and the predominant soils of the Fife Lake State Forest areas, are of the Rubicon-Grayling association with level to steep slopes and are droughty sands. Outside the level, low wetland areas, which are Lupton-Roscommon mucks, peats, and sandy soils, the township has chiefly Aimed-Leelanau association soils which are till plains deposits on gently sloping to steep slopes and are well-drained, slightly acid or neutral sandy loams and loamy sands.

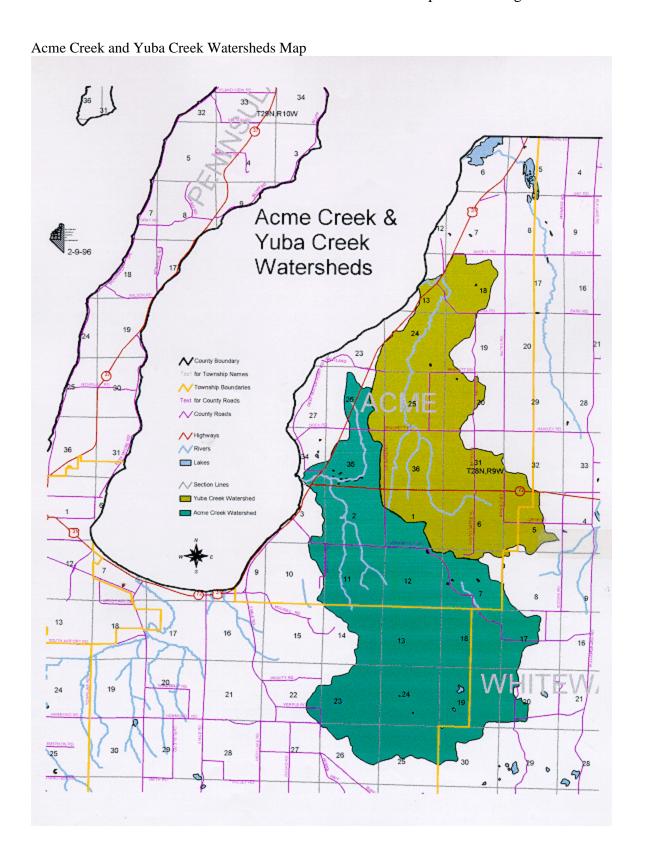
In general, as is indicated by existing farm locations, the Aimed and Leelanau/Kalkaska associations have agricultural suitability. Where the droughty Rubican soils exist, farming has failed or was never tried and state forests predominate. All of these soils can be moderately productive for forestry and are good for woodland wildlife habitat, but only good to poor for habitat when left open or unforested.

All of the soils in the township can have limitations in terms of development, either because of wetness in low soils areas or because of the steepness of the slopes or because of seepage or poor filter problems from septic systems.



Hydrogeology

An overview of the hydrogeology of the township is presented here in the form of a map showing waterbodies and well-depths (see Hydrogeology map, page 36). Since ground and surface water quality were shown to be highly valued resources by residents in the Acme Township "Community Attitude Survey", awareness of the hydrogeology and development of approaches to ensure protection of wellheads and aquifers will be more important in any areas in which development is proposed to occur.



Water Resources

Come Township borders the East Arm of the Grand Traverse Bay and is a part of the Grand Traverse Bay Watershed. About forty percent of the watershed is assumed to be non-contributing, (wetlands, and other depressions) absorbing storm water runoff and not channeling it toward the creek (see Watersheds Map, page 38).

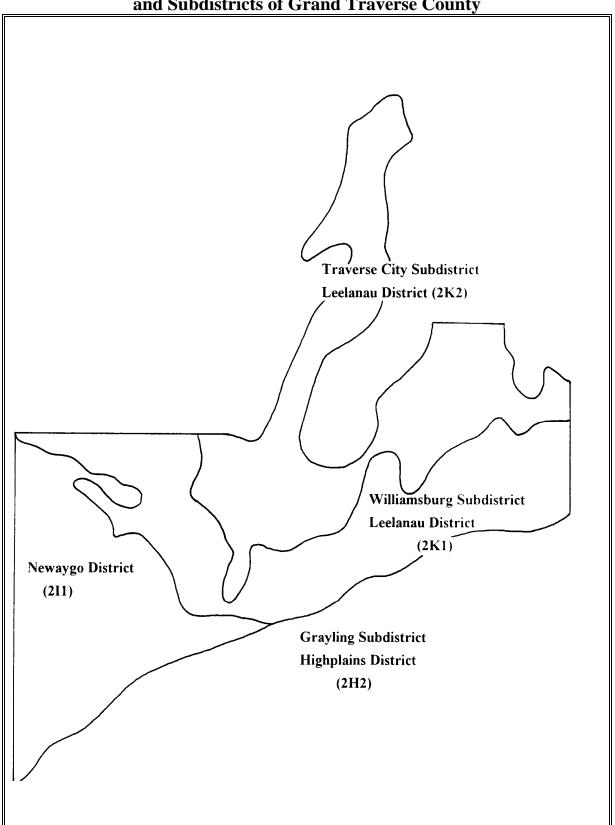
Runoff in the southwest corner of the township flows into the Mitchell Creek Watershed. North of that is the Acme Creek Watershed, the largest watershed in the township, with much of its headlands in the Pere Marquette State Forest of East Bay and Whitewater Townships The Acme creek system, which is replenished by ground water in various locations, is designated by the Michigan Department of Natural Resources as a cold water trout stream. It supports a strong diversity of plant and animal life. Dominant fish species are coho salmon, brown trout, rainbow trout and mottled sculpin. Macroinvertabrate species are strongly represented throughout the creek system except at specific sites where sand loading has blanketed stone and woody debris. Most of the southern portion of the watershed is undeveloped. This area supports a large diversity of wetland and drought tolerant plant species. Steep slopes in this area provide impressive views of East Bay. The forested area at the southern headwaters in the south central area of the township is referred to by locals as "the gorge" and is prized for its unspoiled primeval likeness. Here, at least three springs connect to establish the main branch. The creek runs through the old Acme Village area and then enters the Grand Traverse Bay. *

The Yuba Creek Watershed is north and east of the Acme Creek Watershed and drains the central portion of the township, running northward and entering the Bay just west of the Yuba village area.

The eastern and northern portions of the township are part of the Petobego Watershed which is associated with the large wetland areas of the Petobego Creek and the Petobego swamp. This system includes and ends at the Grand Traverse Bay at the Petobego Pond just south of Elk Rapids Township.

^{*}Acme Creek Watershed Planning Project Final Report (1995)

Regional Landscape Ecosystem Districts and Subdistricts of Grand Traverse County



FLORA & FAUNA

Come township lies in the Temperate Deciduous Biome of the Eastern United States. This biome encompasses many different natural communities. Communities are naturally-occurring assemblages of plants and animals on the landscape that co-exist under the influence of soil, climate, hydrology, disturbance regime, intra-species association, and other factors. A classification of natural communities seeks to group species assemblages into types that share similar characteristics. Acme township has a number of communities including dry-mesic northern forests, mesic northern forests, cobble beaches, northern wet meadows, emergent marshes, and a Great Lakes marsh.

Most of Acme Township is found within the Traverse City subdistrict of the Leelanau District natural region. The Traverse City subdistrict of the Leelanau District is characterized by drumlin fields, which distinguishes it from adjacent subdistricts. These drumlins are long narrow ridges, usually about 1/4 mile wide, a mile long, and less than 100 feet high. Slopes are gently sloping to steep, with slightly acid to acidic, sandy loams and loamy sands that are mostly well-drained. Swamps, marshes, and small lakes are found between some of the drumlins. Sand, gravel, and cobble beaches occur along the Great Lakes shoreline, with limited areas of former lakeplain. While most of the subdistrict is used for orchards and vineyards, remnants of the original northern hardwood forests remain on many of the steeply sloping drumlins. The shoreline is being increasingly developed and its formerly extensive forest cover fragmented.

There are only about 200 acres of land in the township considered by the Michigan Department of Natural Resources as high quality natural areas. These are the areas around the Petobego Pond and Marsh. Natural areas around Deepwater Point were considered too developed and fragmented and the forests of the Holiday Hills area were determined too young to qualify. But the forests just south of the township and stretching into Acme were identified as the oldest *Populus tremuloides* and *Quercus rubra* dominated forest in the county.*

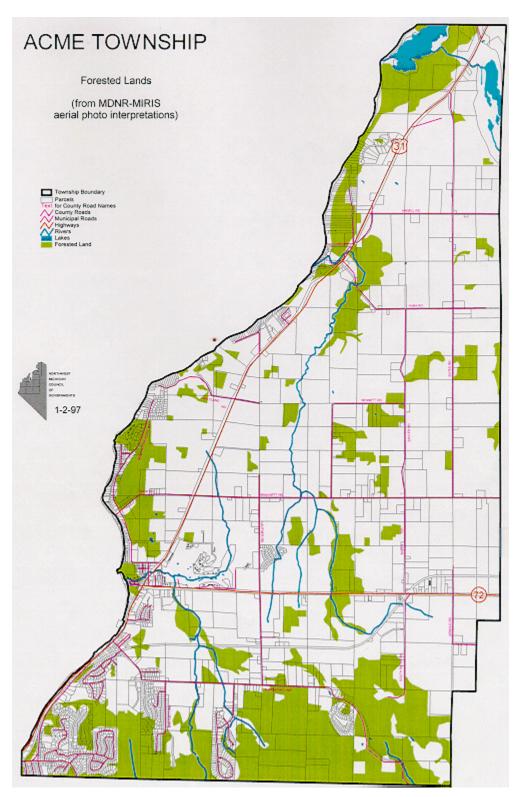
Throughout the rest of the township, human development has fragmented and isolated former natural communities into remnants of their of pre-European settlement patterns. Wetlands and wetland habitat is associated with the creeks and there is a large beaver dam on upstream Yuba Creek. Deer, raccoons, and opossum as well as many species of birds, reptiles, and other animals and plants occupy these areas and make these remnant lowland corridors an important refuge.

In the "Acme Creek Watershed Planning Project Report" (1995) the MDNR reported that:

The fish and macroinvertabrate communities of Acme Creek are typical of small coldwater, coastal steams within the Northern Central Hardwood Forest Ecoregion. The multiple brown trout age classes captured during our survey indicates that Acme Creek is providing the necessary minimum requirements of food, shelter, and spawning areas. No nuisance algae or plant growth problems were observed during our August survey. Physical habitat conditions were being adversely impacted by sedimentation from nonpoint sources such as subdivision development and streambank instability problems in the village of Acme.

But the "Final Report for the Grand Traverse Bay Initiative: Part II, Water Quality of the Bay and Tributaries" indicated that both Acme and Yuba Creeks carried relatively high concentrations and loadings of phosphorus and nitrate compared to other streams in the Grand Traverse Bay Watershed. These nutrients cause aquatic macrophyte beds to form at the mouths of the creeks and are then indicators of increased pollution in these areas.

* Much of the information in this section has been derived from A Natural Areas Inventory of Grand Traverse County, Michigan, 1990, by Gary Reese, et al.



(From MDNR-MIRIS aerial photo interpretations)

Other special plants and animals have been identified in the county and are listed here:

Known Special Plants

Dragon's Mouth - Arethusa bulbosa

Hill's Thistle - Cirsium hillii

Lake Huron Pansy - Tanacetrum huronense

Pitcher's Thistle - Cirsium pitcheri

Known Special Animals

Red Shouldered Hawk - Buteo lineatus*

Common Loon - Galvia immer

Bald Eagle - Haliaeetus leucocephalus

Laggerhead Shrike - Lanius ludovicianus

Osprey - Pandion haliaetus

Nood Turtle - Clemmys insculpta

Champion Trees

American Chestnut - Castanea dentata*

Basswood - Tilia americana

Black Willow - Salix nigra

Eastern Red Cedar - Juniperus virginiana

Ironwood - Ostrya virginiana

Rock Elm - Ulmus thomasii

White Ash - Fraxinus americana*

Potential Special Plants

Avens - Geum vernum

Beauty Sedge - Carex concinna

Brome Pampelly's Bromegrad - Bromus

pumpellianus

Dunewort - Botrychium campestre

Fairy Slipper Calypso - Calypso bulbosa

False Violet - Dalibarda repens

Fascicled Broom-rape - Orobanche

fasculata

Furrowed Flax - Linum sulcatum

Ginseng - Panax quinquefolius

Marshwillow Herb - Epilobium palustre

Michigan Monkey Flower - Mimulus

glabratus var. Michiganesis

Nodding Pegonia - Triphora trianthophora

Pine Drops - Pterospora andromedea

Sedge - Carex sychnocephala

Short-Fruited Rush - Juneus brachycarpus

Vasey's Rush - Juncus vaseyi

Some of these plants are endangered or threatened and some species may even be extinct in the area.

Two listed animals from nearby areas may be expected in the township: the Massauga rattlesnake and the spotted turtle.

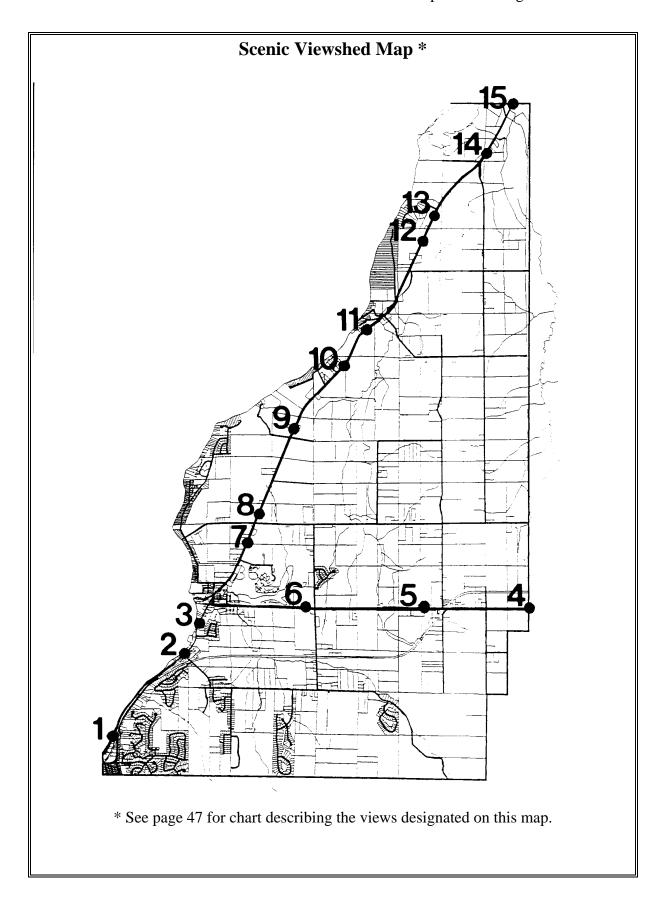
^{*} Unlikely

AIRSHED

During the last several years, the effects of urbanization and industrialization have become increasingly evident as we develop better methods to measure and portray them and as these effects continue to expand in both extent and intensity. A recent symposium in Traverse City, put on by the American Lung Association of Michigan ("Threats to Clean Air," August, 1996) illustrated the extent and some of the consequences of ozone and other toxic air plumes which originated in Gary, Chicago, Milwaukee, and southern Michigan cities. Given the right conditions, these plumes extend in dangerous concentrations to the end of the Dorr Peninsula and to the Traverse Bay area.

It is evident that despite our present relatively pristine conditions of clean air, we are not immune to these up-wind influences nor to those we create ourselves. Great strides have been made in reducing point-source air pollution, but non-point (or mobile) air pollution continues to be a severe problem due to our continued increased use of automobiles and other internal combustion engines. This pollution is injurious to the entire environment--flora, fauna, and us.

In March 1997, the Environmental Protection Agency proposed a rule that would require certain states including Michigan, to revise their emission-reduction plans in an effort to address the movement of ozone pollution, or smog, from one state to another. The new rule will be based on recommendation from the Ozone Transport Assessment Group, which includes representatives of various industry and environmental groups from the 37 easternmost states; it is likely to become final the summer of 1998. Michigan, as well as other states, may have to adopt stricter controls to help other states meet the standards.



SCENIC VIEWSHEDS

hroughout this planning process, the visible landscape has reemerged as a feature that township residents value highly and that they wish to preserve if at all possible. It has been the goal of this plan to show that what is on and done, or not done, with the land--the landscape-- is of primary consequence for the preservation of scenic views and that the patterns of development allowed or encouraged have a profound effect upon the qualities of views.

The following chart and the Scenic Viewshed Map (see page 46) accompanying this report shows the designated areas of scenic value along the major roadways of the township where construction and performance standards shall be developed to preserve these views.

Map#	Location	View of
1	US 31 N between Holiday Rd. & Five Mile Rd.	looking north and south, view of G.T. Bay
2	Bunker Hill Rd. at US 31 N	looking west, view of G.T. Bay
3	US 31 N at Marina	looking west, view of G.T. Bay
4	M 72 E at Whitewater Township line	looking west, view of Bates area and Orchards
5	M 72 E, west of Bates Rd.	looking west, view of M 72 corridor
6	M 72 E, west of Lautner Rd.	looking west, view of orchard and golf course
7	US 31 N, south of Brackett Rd.	looking west, view of G.T. Bay
		looking southeast, view of golf course
8	US 31 N, just north of Brackett Rd.	looking west, view of G.T. Bay and rolling hills
		looking east, view of orchards, golf course & hills
		beyond
9	US 31 N, just north of Kesner/Maitland Rd.	looking northwest, view of orchards and G.T. Bay
		looking southeast, view of orchards
10	US 31 N, north of Bethesda Ct.	looking south, view of Yuba Creek Valley
11	US 31 N, south of Yuba Rd.	looking east, view of Yuba Creek Valley
12	US 31 N, north of Angel Rd.	looking southwest, view of G.T. Bay
		looking east, panoramic view of orchards & hills
		beyond
13	US 31 N, south of Orchard Shores Subdivision	looking northeast, panoramic view of orchards &
		hills beyond
14	US 31 N at Bates Rd.	looking south, view of farms and distant ridge
15	US 31 N at Antrim Co. line	looking east, view of orchards &Petobego Natural
		Area

THE PLAN

THIS SECTION AMENDED JULY 30, 2007

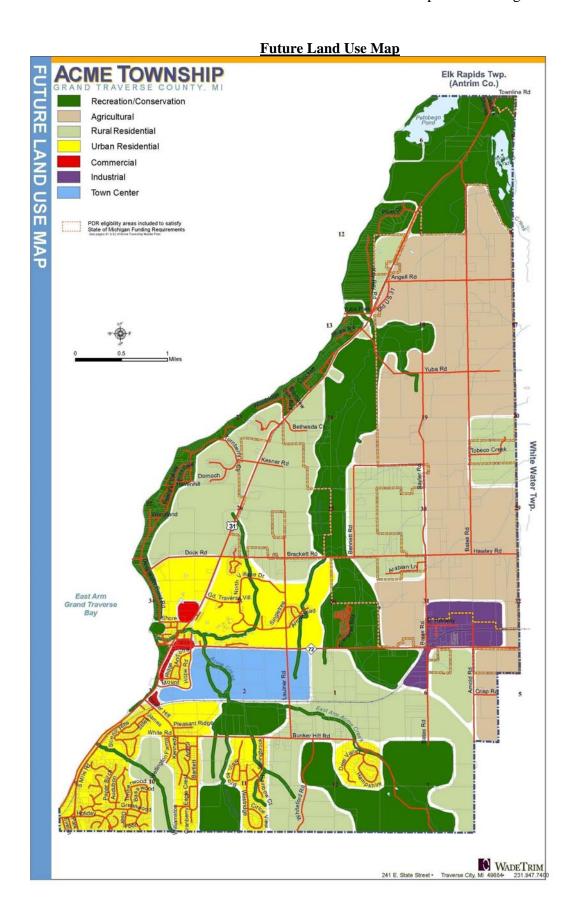
E nvironment, the contours of the landscape, the arrangement of its vegetation,

the visible marks of man's efforts in clearings and fences and farms and gardens and cities as well as in wild forests and mountain areas - environment, in one or all of its many forms,

is the pervasive source of man's true living...

Raw material and mechanical energy form the terrestrial basis of civilization as a material fact, while environment forms the terrestrial basis of civilization as a spiritual form.

Benton MacKaye



FUTURE LAND USE MAP AND TEXT ADDED 07/30/2007 Future Land-Use Map:

The Future Land Use Map is attached to and incorporated as part of the Acme Township Master Plan. The Future Land Use Map is a visual depiction of the proposed general arrangement of future land uses in Acme Township.

Conservation and Recreation

The Conservation and Recreation category encompasses land use for a large variety of recreation activities, and also land areas designated for conservation that have important natural resources and sensitive ecosystems. Some of the major existing areas with highly sensitive ecosystems in the Township include Acme Creek in the south, Yuba Creek and its extensive greenways and wetlands in the middle region and the Petobego wetlands and pond in the far north. Other areas with important natural resources are the easterly shoreline of East Grand Traverse Bay much of which is already privately owned and developed as residential, and the forested lands in the south of Acme Township with some of the oldest Red Oak and Quaking Aspen trees in Grand Traverse County. Additionally, there is an important network of greenways and wildlife corridors surrounding many of the creeks and streams that protect the stream habitat including local and itinerant fauna and many kinds of local flora. Many existing parks, campgrounds, and water-access areas are found throughout the Township for the use and enjoyment of all residents, and these are noted in detail in the Recreation Inventory of the Township's Parks and Recreation Master Plan.

The main objectives of this Conservation and Recreation category are to sustain the integrity of Acme Township's natural ecosystems and natural resources, such as its creeks, streams, wetlands, forests, and Grand Traverse Bay shoreline, and to provide good quality, safe public recreation sites, such as beaches and water access points, camping sites, hiking trails, ball fields, and other sports facilities. Given the importance placed on the lands in this category, Acme Township aims to work with other township, county, state and federal authorities to maintain and conserve natural resources, including groundwater, within and adjoining the Township's lands. In connection with conserving the Township's natural resources, this land use category also provides for the establishment of wildlife habitat corridors.

The intended uses in this category include, but are not limited to, parks; campgrounds; other recreation uses such as fishing, hunting, hiking, trails, and sports fields; and the preservation of natural resources and wildlife habitat. In addition, development that is not intended for conservation or recreation must be carefully tuned to the needs of the natural environment and Acme Township's goal of preserving open space. Residential development on conservation land is encouraged to use cluster housing, open-space development or planned-unit development. Land uses in the Conservation and Recreation areas should comport with the policies and actions of the Watersheds, Natural Resources, Open Space and the Landscape section of the Master Plan.

Agricultural

The Agricultural category comprises land that is under active agricultural use and that is resistant to demographic and economic pressures that make other agricultural land likely for future development. Agricultural land is usually not served by public sewer or water supply and is generally distant from the high-density areas of the Township. The terrain of existing agricultural lands consists of gently rolling hills and level fields interspersed occasionally with small forest areas. Land uses adjacent to the streams and wetlands of Yuba Creek should use sound environmental stewardship and ecological

practices in order to conserve natural resources and protect highly sensitive ecosystems as well as ground- and surface-water. Acme Township's farmlands contribute substantially to open space and natural resources, and so this category also encourages the establishment of linkages and corridors for wildlife habitat.

A major objective of this land use category is to create a long-term business environment for agriculture in Acme Township. This category also aims to ensure that agriculture contributes to the character of Acme Township; contributes to Acme Township's and Grand Traverse County's economies, now and in the future; and prevents the loss of agricultural lands by encouraging the use of PDR and TDR programs and other means.

The intended uses in this category include, but are not limited to, farms under active cultivation; farmsteads and accessory structures; agriculture-related industries; agriculture-based enterprises; nurseries and green houses; and other agriculture-friendly forms of development. Land uses in the Agricultural areas should comport with the policies and actions of Agriculture & Rural Preservation section of the Master Plan. Residential development should use conservation designs through cluster housing, open-space development, or planned unit development. The Township contemplates that residential developments must work around extant agricultural uses.

The PDR-eligibility map is overlain on the Future Land-Use Map in order to qualify for state funding.

Rural Residential

The rural residential category encompasses areas in Acme Township with special natural features that shall be preserved in the environmentally significant areas as identified on the Future Land Use Map; this category also encompasses those areas of rolling hills and open spaces that were formerly agricultural are or in a transitional state from agriculture to residential and complementary uses. The density is generally low to medium with single-family houses built on large-scale parcels. The land features in this category include level fields, gently rolling hills, steep slopes, thick woodlands, wetlands, creeks and streams. In all new residential construction, conservation-development designs shall be used to retain the vegetation, natural features, and open space existing on the developed sites. Land uses adjacent to the streams and wetlands of Yuba Creek should use sound environmental stewardship and ecological practices in order to conserve natural resources and protect highly sensitive ecosystems as well as ground- and surface-water.

The objectives of this category are to provide limited and low density residential development in the rural areas of the Township where sensitive ecosystems and special natural land features such as steep slopes, creeks and streams are prevalent; however, conservation-development designs will be strongly encouraged to prevent sprawling development that undermines the integrity of open space and agricultural uses, and appropriate buffers should be planned to minimize the impact on existing agricultural uses. Another important objective is to encourage responsible stewardship among landowners in the development of the land so that the natural features are preserved to the fullest extent, especially in the areas with highly sensitive ecosystems and where special natural features abound, through the use of cluster housing, open-space development, and planned-unit development.

In the areas with highly sensitive natural features and ecosystems the Township shall insist on conservation development in order to protect the most sensitive land by clustering housing on the least sensitive land. Land uses in the Rural Residential areas should comport with the policies and actions of the Master Plan.

Urban Residential

The urban-residential designation comprises high-density areas, including established residential neighborhoods in the southwest region of the Township, established and future development on land suitable for high-density single- or multiple-family development. This category contemplates small lots in order to absorb population growth and check sprawling development, and includes affordable housing. Although the Urban Residential designation does not contemplate mixed commercial and residential uses, developments in Urban Residential should otherwise comport with the policies and actions detailed in the High Density Areas of the Master Plan.

Objectives of this category include encouraging development of good quality, high-density residential living, and affordable living that will minimize the encroachment of such development on farms, forests, and environmentally sensitive areas. This category is also intended to encourage a walking community with good neighborhood sidewalk systems and promote connections within and between housing developments in general.

Primary uses within this category are single-family detached homes, attached single-family structures such as townhouses and duplexes, and multiple-family residences such as stacked ranches, apartment buildings, group living quarters, manufactured homes and mobile home parks. Other complementary uses such as churches, schools and parks would be permitted. The Urban Residential section that contemplates the existence, and continued existence, of the GT Resort and its ability to develop as a resort, with commercial uses as part of the Resort's core business, in a manner consistent with resort uses.

Commercial

The Commercial category is characterized by land use for retail stores and service-oriented businesses that provide daily shopping, convenience and comparison shopping, and professional offices that service Acme Township residents and others in the region. The existing commercial lands lie mainly along M-72 and a short strip of Highway US31 N, the major federal and state roadways running through Acme Township, with motor vehicle transportation needed to reach most business venues along these trunk lines. An existing shopping area on Highway US31 N, which is also a vehicle-oriented complex, provides a large grocery store and a large discount store; in addition, many small office complexes are also located off the two major trunk lines in the Township. This category of land use encourages new commercial development in the high density areas, and especially in future planned neighborhood centers, with well-designed buildings, streetscapes, landscapes, signage, access, and circulation for both motor & non-motor traffic and pedestrians, facilities for public transportation, storm water control, lighting, and other aspects of the development. As noted in the Master Plan, new commercial developments shall take place in high-density areas so that infrastructure installation, wherever needed, will be carried out efficiently.

The main objectives in this category are to provide for commercial development in ways that will create an economically healthy and thriving environment for the benefit of all Acme residents and visitors to the Township, and to provide for commercial establishments that not only supply goods and services but also offer employment opportunities to Acme residents. Another objective is to encourage new commercial growth in high density areas of the Township in well planned developments. Sound access management planning should be included in any new commercial developments.

The intended uses in this category include, but are not limited to, grocery stores, bakeries, garden supply stores, banks, laundries, pharmacies, hardware stores, gas stations and automotive service business including car sales, supermarkets, general merchandise stores, restaurants (fast and non-fast food types), coffee shops, professional offices of various kinds, motels, furniture stores, and personal service businesses (hair salons, spas and so on). This category also contemplates the possibility of mixed-use for residential purposes. Land uses in the Commercial areas should comport with the policies and actions of the Master Plan.

Industrial

The Industrial category encompasses land use for light industrial and warehousing enterprises in the Township. The existing uses currently are located along state highway M72 and Bates Road (an area comprising some existing development of higher density industrial and business uses). This region is seen as appropriate for the location of any future light industrial facilities that should develop with good management of signage, landscaping, utility lines, and related facilities and other possible features such as towers for cellular communication. While special areas in the Township are designated for large-scale light industrial facilities, it is compatible with the Acme Master Plan to also encourage the development of home occupations and concomitant cottage industries in or out of this area.

The main objectives of the Industrial land use category are to provide for non-intrusive industrial operations in high density areas that stimulate the economic vitality of the Township, but do not negatively impact the surrounding area, and to provide employment opportunities for residents of the Township and surrounding region. Sound access management planning should be included in any new industrial developments.

The intended uses in this category include, but are not limited to, enclosed wholesale facilities, warehouses, high technology industries, light manufacturing, telecommunications industry, and other non-intrusive industrial enterprises. This category also contemplates the possibility of mixed-use for residential purposes. Land uses in the Industrial area should comport with the policies and actions of the Master Plan.

Town Center

The objective of the mixed-use Town Center district is to build a network of shops as well as service, civic and cultural facilities and residential neighborhoods in a concentrated area that is user-friendly to the Township resident, the general consumer and the visitor alike. In addition, the concentration of retail, service and other activities is intended to help prevent commercial sprawl in the Township, and protect existing residential properties from traffic and concomitant noise and other invasive issues related to commercial activity. It is envisioned that the various parcels of land in this district would be developed in an integrated way, in effect, creating a specific district for a town center in Acme Township.

This district is intended to be accessed from the major trunk lines and county roads in ways that stress public safety and welfare, and internally the district shall have a logical, safe street network for motor and non-motor vehicles as well as a safe walkway system for pedestrians. This district encourages a walk-able and bike-able community as much as possible and use of public transportation. Generous landscaping along the perimeter of the Town Center and within the district will enhance the well-designed residential neighborhoods, which accommodate all income and age groups, and which may

include complexes for senior housing, affordable housing for young families, apartment housing above retail establishments in the core shopping area, as well as single-family detached, duplex and townhouse dwellings. The core shopping area will provide a variety of retail, general service and personal service establishments, office complexes as well as smaller convenience stores. This district intends to have a diverse mix of commercial and residential land uses within walking range of each other that will be complemented by public gathering spots and a possible arts pavilion for outdoor concerts and exhibits.

Acme Township plans for a town center with a small-town, mixed-use character. This vision is discussed extensively in the Town Center amendment of the Master Plan. Any development in the Town Center area should comport with the Town Center section of the Master Plan.

VISION

Come Township residents cherish above all the natural and scenic qualities of their community, especially those of East Grand Traverse Bay, its streams, and other wetlands, and feel a strong attachment to the farms, orchards, forests and lakes which predominate the landscape of the township. From the surveys and other planning exercises it is apparent that most residents wish to see an Acme Town Center developing where commercial, civic, and residential structures may be well combined to provide the community with an active and vital center; and most want to see a measured and ordered increase in the amount, diversity, and richness of the community as a whole, while preventing the diminishment of the countryside and not allowing the township to submit to disorganized and senseless sprawl. To these ends the citizens of Acme Township are willing to put their energies and their resources.

Goals

- To sustain or improve the integrity of Acme Township's natural ecosystems and the scenic qualities of the township, especially its creeks, streams, and other wetlands.
- To preserve the countryside and its landscape by providing for fit and measured high density development only in appropriate areas.
- To set out a vital Acme village center where the community can develop in its own unique manner.
- To provide for residential and commercial development in the township in ways that will
 enable the accomplishment of all this plan's goals and will create a healthy and wholesome
 environment for the full development and enjoyment of all its residents and guests.

Trends, Problems & Potentials

he population of Acme Township along with that of all of Northern Lower Michigan has increased substantially over the last two and a half decades and is expected to continue to do so until at least 2020. The number of households in the region has increased dramatically along with second and vacation home construction. Facilitating this migration to the area has been the construction of interstate highways and improved state trunklines.

This increasing population has brought increased wealth and economic activity into the region opening up many new job opportunities as well as increasing the availability of recreational and cultural pursuits. But these trends have also had deleterious effects. Farms and forests have been and continue to be fragmented to provide homesites and locations for new businesses. Farmers and other large land holders will continue to be under pressures from non-rural newcomers who are unaware of agricultural and other natural resource needs. Creeks, streams, and even the Grand Traverse Bay are seeing the effects of increasing habitation and other activities in their watersheds.

Along with permanent and part-time residents in the area, tourism has been increasing as well, bringing more traffic "conflicts", and crowding of existing facilities. Although the burden of continually increasing property taxes has been temporarily mitigated for homesteaders and farmers, the continued increase in property values is making affordable housing more and more difficult to find or to construct.

Probably the most disturbing element to township residents, as evinced by the participants in the visioning sessions and the community surveys, is the changing landscape. Patently obvious to the natives, Acme is no longer a farm community with a few summer vacationers. Residential subdivisions cover much of the southwest of the township and the Grand Traverse Resort covers considerable area in the middle of the township. Most of the new residents of the township come from urbanized areas and despite being unfamiliar with how and why a rural landscape can be maintained, they decry the expansion of development into any new areas. Although *open space and natural areas*, especially the Grand Traverse Bay, the creeks and streams, were the most highly valued attributes of township residents in our written and visual surveys, most of the other highly desired items were urban features: trails, sidewalks, a "downtown," a town center, and more quality shopping. In discussing these issues it was proposed that 10% of the land cover in the township should remain urban, with a mix of farmland and wild areas comprising the remaining 90% of the land cover. According to the current Zoning Map, 20% of the Township is zoned for high density

(includes the R-1, R-2, R-3, B-1S, B-1P, B-2, B-3 and B-4 districts). This plan seeks to unify these desires into a coherent vision and implementable plan. The *vision* of Acme Township residents generated through this planning process speaks to a clear pattern of development for the township:

- High density and intense uses should be congregated in specific and distinct areas where history,
 the terrain, and infrastructure indicate such uses. These areas should be sufficient to provide
 housing and commercial establishments to serve the needs of existing and predicted residents and
 tourists
- Preservation and conservation areas and wildlife corridors, especially creeks, streams, and their
 associated wetlands, should be established and plans for their protection, restoration, and
 maintenance be devised and implemented
- *Stewardship areas* of farms and forests should be identified and the means drafted to maintain the rural landscape
- Special areas should be singled out, or provided for, for large, intrusive uses, such as discount stores, factories, warehouses, and so on, and measures enacted to insure they do not deviate from the vision of Acme Township as expressed in this Plan.
- *Transportation corridors* should be identified for each appropriate mode of travel, i.e., vehicle traffic, pedestrian and non-motorized trails, and public transit, plans designed for them, and regulations put in place to effect them.

WATERSHEDS NATURAL RESOURCES OPEN SPACE AND THE LANDSCAPE

he appeal of the countryside is the appeal open space has always had for us gatherers and hunters.

The appeal of the city is that it at least faintly suggests a mixture of leisure and stimulation most of us need.

Evan Eissenberg

Watersheds, Natural Resources, Open Space and the Landscape

othing is more clear from the surveys, visioning sessions, and the opinions expressed during the meetings of this planning process than the importance of the preservation, and even restoration, of the natural terrain of the township. The condition of the Grand Traverse Bay and the creeks and streams, which as we have seen have been degraded in some areas and threatened in others, is directly dependent upon the actions that are occurring in their watersheds. In a broad sense, the preservation of the landscape entire is of paramount concern to Acme Township residents. The balance of farmland, forests, wetlands, creeks and streams, the Grand Traverse Bay, its urban areas, and even the fallow fields, is what defines the township and the area for most citizens and visitors alike and also provides the underpinnings for the township's economy.

The health then of the township's creeks and the East Grand Traverse Bay should be the first indicator of the whole community's health. The second should be the state of the landscape in regard to the balance expressed above. The township's first two goals address these issues; the policies and actions which follow are intended to achieve them.

Goals

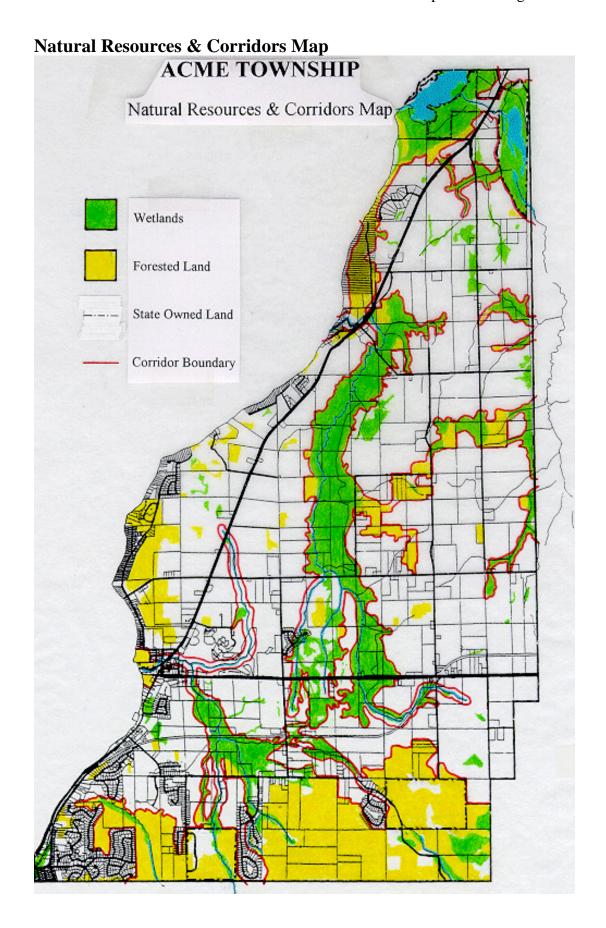
- To sustain or improve the integrity of Acme Township's natural ecosystems and the scenic qualities of the township, especially its creeks, streams, and other wetlands.
- To preserve the countryside and its landscape by providing for fit and measured high density development only in appropriate areas.

Policies and Actions

- A set of indicators depicting the state of the natural resources and the preferred balance of the landscape should be developed that would be monitored and reported regularly. This would provide the planners, citizens, and township officials with a continual and ready picture of the progress of the township in adhering to its goals and objectives.
- 2. The East Arm of the Grand Traverse Bay, the creeks, streams, forests, and undevelopable natural areas of the township are highly prized by township residents. The combined efforts of property owners and the township shall be used to ensure their health and vitality.
- a. Studies shall be completed to define the current status and resource capabilities within each watershed and to establish plans for protection and restoration of the creeks to sustain their cold water trout stream status. Current and potential detrimental impacts to all water quality, including ground water recharge areas, shall be inventoried.
- b. Regulations shall be included in the zoning ordinance to prevent erosion and to maintain the integrity of the land cover within the watersheds. The zoning ordinance shall contain standards:
 - (1) Requiring a natural resources inventory as part of site plan preparations and review;
 - (2) Limiting development densities in rural areas and at creek headwaters;
 - (3) Providing for wildlife habitat corridors within both urban and rural areas;
 - (4) Setting out requirements for sufficient natural vegetative buffers along streams and creeks;
 - (5) Describing conditions for special areas that are particularly prone to degradation;
 - (6) Preventing development within floodplain areas.
- 3. Acme Township should work with township, county, state, and federal authorities to restore and maintain natural areas within and adjoining the township. The state forests at each end of the township, the wetlands along the creeks, the shoreline along the Grand Traverse Bay, all should be monitored and efforts undertaken to improve their quality and place within the total township environment. The township should work with adjoining townships to coordinate the implementation of these goals and policies.
- 4. The township should work with farmers and other land holders to advance the goals and objectives of this Master Plan. Critical watershed and air drainage areas should be demarcated and agreed to by all sides so effective joint efforts will ensue.

- 5. The township should assist its citizens to establish an advisory committee to encourage and oversee habitat restoration and conservation and to monitor its health. This group could also be involved in developing a land trust to preserve land through easements, purchase, or other actions with the township and other government and private agencies. This group could work with agencies such as the Natural Resource Conservation Service to implement practices sponsored and funded by federal and state funds.
- 6. The natural corridors identified in this plan (see Natural Resources & Corridors Map, page 58) shall be promoted and sustained by township ordinance regulations, performance standards, and incentives. These corridors may also have trails and connect to regional trailway systems, but the integrity of the various natural habitats should be ensured.
- 7. A recreation plan should be developed that includes recreation sites, such as ballfields and other sports facilities; water access points, and the natural corridors and trails. This plan should then become part of a township capital improvements plan to provide for orderly implementation through the allocation of available monies and the application of funds from outside sources.
- 8. In designing for residential and commercial development, the minimum disturbance of the terrain for roads, storm drainage, sewerage, and building plots, especially in rural areas, should be the standard procedure and measure. These designs should include congregating or clustering buildings, allowing for independent sewer and storm drainage systems and limited paved and other impervious surfaces. To protect ground and surface waters of the township, the extension of the township sewer system, where appropriate and necessary, shall be required.
- 9. As scenic views have been identified as valuable assets of the community, the placement of built structures should be done so as not to diminish these views. The uses and total densities of structures shall not differ within any district, only the placement and pattern of development.
- 10. Home occupations that reduce commuting and add to the local economy should be encouraged.
- 11. Signage may be created and installed to designate and inform the community of watershed and stream locations.
- 12. The township should increase citizens' awareness of the community's natural resource objectives by communicating and educating in newsletters and in forums arranged for this

purpose. These newsletters should report on the results of the monitoring of community indicators.



Agriculture & Rural Preservation

THIS SECTION AMENDED NOVEMBER 28, 2005

Some cities can never be sustainable at their present levels of population because they do not have a countryside around them or near them from which they can be sustained.

Wendell Berry

Agriculture & Rural Preservation

Along with the preservation of its natural resources, maintenance of the countryside and the landscape is of paramount interest to the citizens of Acme Township. Within areas of rural preservation and stewardship only agriculture, rural businesses, and limited residential housing should occur.

Goals

• To preserve the countryside and its landscape by providing for fit and measured high density development only in appropriate areas.

Policies

- Acme Township's farmlands and agricultural operations are an economically important resource. Farmland Regions support a locally important and globally unique agricultural industry which includes: excellent fruit production and processing, food from grains and vegetables, and nursery and greenhouse crops. The climate, micro-climate, topography and accessibility of the area make Acme Township uniquely suited for the production, processing and distribution of agricultural products on a regional, national and international level.
- Acme Township's farmland has beneficial non-agricultural attributes. In addition to its economic benefits, Acme Township's farmland contributes significantly to open space and natural resources that are important to the region's tourism industries. Preserving the rural character, scenic beauty and cultural heritage of the area, as well as other recreational opportunities such as hunting, will help maintain the quality of life and continue to make Acme Township an attractive place to live, work and visit.
- Acme Township will suffer from the impact of farmland loss. When farmland is converted and fragmented, a critical community resource is permanently lost to the citizens of Acme Township. Land suitable for farming is a non-renewable natural resource with soil and topographic characteristics that have been enhanced by generations of agricultural use. Residential development in agricultural areas also makes farming more difficult by increasing conflict over farming practices, increased trespass, liability exposure and property damage. Agriculture is an invaluable economic, natural and aesthetic resource, Acme Township should make an effort to maintain agricultural land in a substantially undeveloped state to ensure the long-term viability of agriculture and to create a long-term business environment for agriculture within Acme Township
- Acme Township recognizes the value of development rights. Certain features of good farmland in Acme Township, including but not limited to well-drained soils, slope, proximity to water, elevation and open spaces, have a greater market value for future residential development than the market value for farming. Agriculture and residential development share the demand for these features. This fact encourages the speculative purchase of farmland at high prices for future residential development, regardless of the current zoning. Farmland which has a greater development potential and market value than

its agricultural value does not attract sustained agricultural investment and may eventually be sold to non-farmers and removed from agricultural use.

Actions

- 1. In order to maintain the landscape of the township, a goal of keeping as much of the land in the township in active agriculture production as possible should be encouraged. Incentives to cluster housing and other development, the purchase of development rights, and ordinances to encourage and support farming shall all be used to achieve this goal.
- 2. The township shall work with area farmers as it has with its "Acme Agricultural Study Group" and with organizations such as "Project Greenfields" to help enable farmers and farm businesses to prosper.
- 3. Areas of productive farmland, as defined by the Unique and Prime Farmland Map, the Grand Traverse County Soils Map and the Grand Traverse County Tart Cherry Site Inventory Map should be recognized as assets, demarked, and protected from intrusion by development of non-rural infrastructure including highways (other than farm-to-market roads), sewers, and water systems.
- 4. Farms and agricultural businesses should be protected from residential infringements and conflicts by limiting dwelling unit densities in rural areas and by requiring buffer areas between new residential developments and adjacent farms.
- 5. The township shall work to conform taxation policies to the uses taking place on particular properties and to protect farmers from assessments of costs for the installation of infrastructure that does not directly benefit their farms.
- 6. Landowners should participate in environmental stewardship programs and shall use appropriate and proper ecological practices in order to meet other township goals of natural resource conservation and ground and surface water protection.
- 7. Residential developments intended for stewardship areas shall take all measures possible for the preservation and maintenance of natural resources and habitats and scenic views identified in this plan.
- 8. The township shall work with farmers and other landowners to establish and maintain the linkages and corridors for wildlife habitat put forth in this plan.
- 9. The township should work with farmers to take advantage of state purchase of development rights (PA 116 recapture lien fund) and the state and federal purchase of development rights program and to investigate the possibility of a local purchase of and transfer of development rights.
- 10. A site plan or planned development application for a proposed project in a rural area in the township should include an agriculture impact statement that would outline the steps to be taken to minimize the effects of a proposed development on nearby agricultural operations.
- 11. All non-rural and non-agricultural activities should be directed to high density areas within the township.

Acme Township PDR Eligibility Map

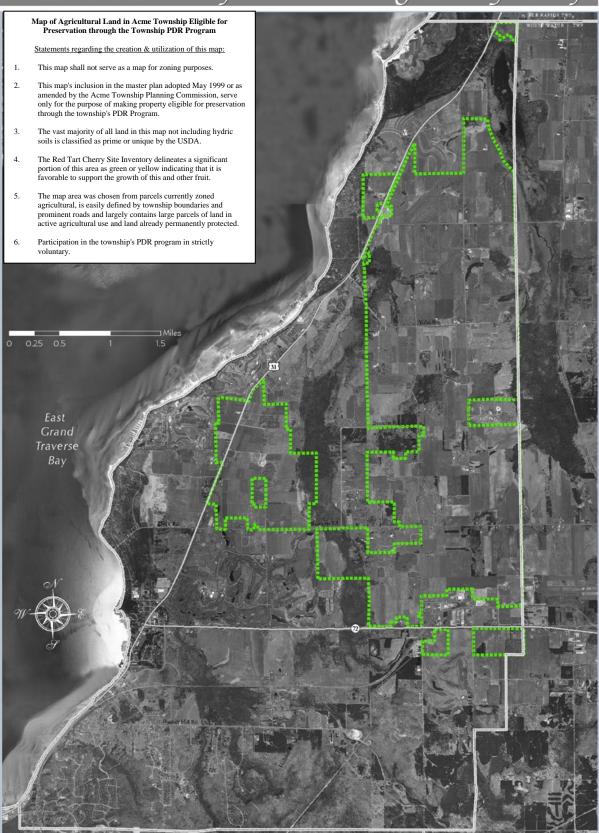
The Acme Township PDR Eligibility Map that follows was prepared by the Acme Township Farmland and Open Space Preservation Advisory Committee. This committee was created by the Acme Township Board of Trustees in early 2005 under the Chairmanship of Bob Garvey. As of December 2005 Committee members include Paul Brink, Bob Carstens, Ken Engle, Wayne Kladder, Rick Saylor and Matt McDonough (G.T. Regional Land Conservancy). They were advised by Brian Bourdages, Farmland Preservation Specialist serving Acme and Peninsula Townships and the Grand Traverse County Agricultural Board.

The boundaries of the Agricultural Preserve Zone were delineated using the Michigan Department of Agriculture's definition of "farmland" as found in MCL 324.36101(h), as it applies to land area, as follows:

- (h) "Farmland" means 1 or more of the following:
 - (i) A farm of 40 or more acres in 1 ownership, with 51% or more of the land area devoted to an agricultural use.
 - (ii) A farm of 5 acres or more in 1 ownership, but less than 40 acres, with 51% or more of the land area devoted to an agricultural use that has produced a gross annual income from agriculture of \$200.00 per year or more per acre of cleared and tillable land.

This method was used in order to be consistent with MDA's definition of farmland (which Acme Township's 2004 Purchase of Development Rights Ordinance adopted), and to have an objective way of delineation. Scoring criteria will be used to prioritize parcels within the Agricultural Preserve Zone. All areas meet the state definition of agriculture with the exception of certain parcels which committee members agree complement other agricultural uses.

Acme Township PDR Eligibility Map



High Density & Intensive Uses Commercial, Residential & Shoreline Areas

he population of a "regional city" could increase by more than forty percent without any loss of connectedness, provided that newcomers settled only in new villages within the working landscape of the area.

Tony Hiss

High Density Areas

In order to accomplish the goals of this plan, those places within the community where most people will live and most businesses will carry out their enterprises must provide the best ways and means for these activities to be pursued. During the planning process it became evident that in order to preserve the natural and scenic qualities cherished by township residents (and visitors to the area) housing and businesses had to be limited to the most appropriate areas or eventually no landscape would remain except for suburban development. Through the surveys and focus sessions of this process, it also became clear that most township residents wanted a "downtown" where civic events, commerce, and high density housing might occur.

High density areas will allow mixed uses, from business uses to single and multi-family housing, organized around the principle of sustainable neighborhoods. Public sewer and water may be required within these areas, as well as roads, alleys, sidewalks, and other urban elements and systems. Neighborhoods will by-and-large follow a neo-traditional grid pattern, with roughly a 1500' walking distance radius, centered on commercial uses, or a park or school, and bounded by parks or other natural, unbuilt areas.

A "town center" was designed during the Visual Preference SurveyTM workshop using an area one within the existing Acme Village development. This proposed "downtown areas" contained civic facilities, offices, shops, restaurants, multi-family and single-family homes, and typical of small town central areas, township facilities such as town hall and civic activity buildings.

A point continually made throughout the master plan process was that wild places and natural habitats should be maintained as much as possible, even in urbanized areas. These areas should then be connected with rural wildlife areas through corridors to ensure the vitality of the native environment as well as providing the benefits of natural places within built-up areas of the township.

Goals

- To preserve the countryside and its landscape by providing for fit and measured high density development only in appropriate areas.
- To set out a vital Acme Town Center where the community can develop in its own unique manner.
- To provide for residential and commercial development in the township in ways that will
 enable the accomplishment of all of this plan's goals and will create a healthy and
 wholesome environment for the full development and enjoyment of all its residents and
 guests.

Policies and Actions

- In order to meet the goals of this plan, all high density uses--large lot residential housing
 without clustering at a greater density than one dwelling unit per ten acres, commercial and light
 industrial uses; any use other than farming and rural businesses, estate or clustered housing-shall take place within high density areas.
- 2. New development should occur in and around existing development to utilize infrastructure installation efficiently.
- 3. The extent of urban services for high density areas shall be determined, a district or districts established, and the design and construction of infrastructure for these districts performed with the understanding that these urban service areas will not increase in size in the future.
- 4. Within high density areas, regulations should be such that neighborhoods centers can be formed, allowing commercial establishments to supply products and services and employment opportunities within these areas.
- 5. Pedestrian and bicycle use should be advanced by the provision of sidewalks and pathways.
- 6. Regulations shall be promulgated that allow for diverse housing types which furnish housing possibilities for residents at all levels of society.

- 7. Public transit should be available at least to and in the core areas.
- 8. Roads within high density districts shall follow mainly a grid system within neighborhoods. State trunklines shall be as intended: roads for through traffic; commercial development along them, except within high density commercial areas, will not be permitted. Road regulating profiles should be developed to provide specific standards for development along highways.
- Civic places should be included within neighborhoods and as part of any new Town or Neighborhood Center.
- 10. Areas designated as natural resource corridors shall remain undeveloped and should serve as boundaries or parklands within neighborhoods or other development areas. These corridors will connect with wild areas throughout the township.
- 11. Three of the most important elements of good high density design, as was evident through the Visual Preference SurveyTM, shall be followed within high density areas:
 - Street and parking area trees of appropriate size and spacing shall be required on all new or rehabilitated sites.
 - b. Effective screening of parking areas shall be provided.
 - c. Signage shall be sufficient to its purpose of notification while being appropriate and harmonious with its surroundings.
 - d. Appropriate design for site surroundings shall be required.
- 12. The shoreline areas of the township should be examined and a set of standards promulgated to ensure the highest lake water quality.
- 13. Within high density or mixed-use areas, an objective to preserve between 20% to 30% of the land should be provided as open space, permanently preserved unbuilt areas parks, commons, reserves, etc.

Transportation **Public Facilities and Services**

Our era will be remembered merely as the age of mass movement:
travel, circulation, transport, migration, commuting.

Leon Krier

Transportation, Public Facilities and Services

This Section Amended by Amendment #2, Adopted January 28, 2001

Acme Township is one of the primary gateways into Traverse City. It is also a destination for tourists frequenting the Grand Traverse Resort and the many other smaller resorts along Lake Michigan. The intersection of highways US 31 and M 72 sees on average daily traffic of over 50,000 vehicles during typical summer day.

Development in the township in recent years has mostly followed these two highways corridors, spreading strip-like from Traverse City and East Bay Township north along US 31, then concentrating with the resort development at the junction with M 72, then heading east towards Kalkaska along M 72. Use of growth boundaries may be necessary to encourage compact development in core areas of the township, as opposed to maintaining the current sprawling pattern of development along these corridors.

More recently with the construction of the gambling casino just east of the township border in Whitewater Township, development pressures appear to be spreading westward, back toward Acme Township and the Bates Road area. This area was designated by the township for higher density business uses and has been developing as such for a number of years.

As was stated in the previous section, this plan follows these historic development patterns with the exception that this plan stipulates that high density and intense growth be concentrated in particular areas and that trunklines be maintained for point-to-point transportation not for commercial or other development. Further, access to such trunklines shall be appropriately managed by regulations to ensure they remain aesthetically pleasing while providing the safest, most efficient medium for moving traffic. Future public infrastructure will be developed to service high density areas. Community surveys and various sessions have shown that the majority of Acme Township residents are against a by-pass being built in or passing through the township. The construction of any roadways in the township should be required to meet the goals and policies of the township as enunciated in this plan and other township policy documents. Such construction should take place to minimize the impact on adjacent land uses, to maintain and establish safe pedestrian and vehicular travel, to enhance efficient traffic flow and to preserve scenic corridors. Studies of the M 72 Corridor indicate the need to regulate access, ridgeline development, and general aesthetics of the corridor. Unified regulations across jurisdictional lines are needed to cooperatively manage signage, landscaping, cellular towers and utility lines along the Corridor.

The other corridors that this plan advocates are the natural resource corridors described in the "Watershed, Natural Resources, Open Spaces, and the Landscape" section. These corridors can provide not only the habitat for indigenous species development and movement but can provide places for pedestrian and other non-motorized use pathways.

Other than public water and sewers, which shall be primarily the responsibility of developers to design and install (with township oversight and direction) the township residents indicated that the development of a Town Center and the provision of parks and pathways should be the principle actions of the township government. The issues of the Town Center and the natural resource corridors have been addressed earlier in the plan. This plan supports the current township actions in acquiring parks, preserve lands, and water access sites, and its cooperation with the Traverse Area Recreational Trail Association to expand the trail to the high density centers designated in this plan and encourages the township to develop a full natural resources/recreation corridor plan.

This plan also contains a "Public Sewer District Map" that represents the areas which the Planning Commission has deemed appropriate for township sewers. This area (See map, page 74) includes locations presently served by township sewer lines and properties within approved projects requiring municipal sewers as well as adjacent areas thought appropriate for high density development. The territory outside the sewer district will be allowed to develop group (or project) systems that may, or may not, be attached to a municipal system in the future.

The plan also designates areas for study to determine the need and feasibility of developing and providing municipal sewers in various areas in the future.

Goals

- To sustain or improve the integrity of Acme Township's natural ecosystems and the scenic qualities of the township, especially East Grand Traverse Bay, streams, and wetlands.
- To preserve the countryside and its landscape by providing for fit and measured high density development only in appropriate areas.
- To set out a vital Acme Town Center where the community can develop in its own unique manner.

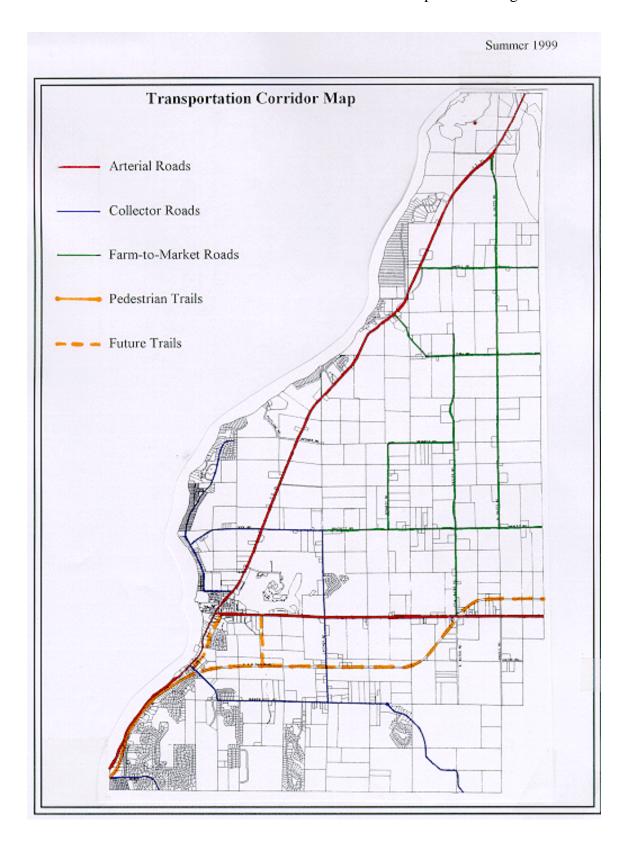
To provide for residential and commercial development in the township in ways that will
enable the accomplishment of all of this plan's goals and will create a healthy and
wholesome environment for the full development and enjoyment of all its residents and
guests.

Policies & Actions

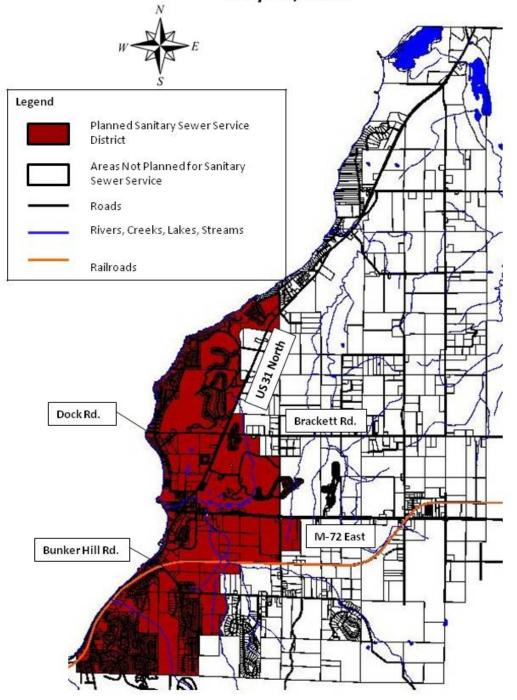
- 1. The township will develop a series of "Road Regulating Profiles" indicating design and development standards, such as those found in the Grand Traverse Region Development Guidebook, for various types of roads in the township and their particular locations.
- 2. Streets within neighborhoods should only be built as large as necessary in order to limit the amount of impervious surface.
- 3. All modes of transportation within the township should be examined to design the safest, most appropriate and efficient system possible for the uses and densities intended.
- 4. Public water and sewers or other sewage treatment facilities should be installed where deemed necessary by the township within high density areas. The responsibility for design and construction of this infrastructure shall remain the responsibility of the developer and land owner with oversight by the township.
- Sidewalks or pathways and street trees shall be installed in developments within high density areas and along major thoroughfares. Provisions for open space shall be encouraged where appropriate.
- 6. The township should develop a "Natural Resource Corridors Plan" that includes pedestrian and non-motorized use pathways, such as the T.A.R.T. (Traverse Area Recreational Trail) Trails, Inc., linking high density areas within the township to other destination points outside the township.
- 7. The township should work with the appropriate land owner(s) to develop Town Center plans that include civic buildings and spaces. Such planning will allow for developmental growth in the township while reducing the demand for strip-like development along the major through ways.
- 8. Because of the increased current pace of development in the Bates Road area, a Neighborhood Center plan should be devised by the township with area land owners to ensure that this area develops in a manner compatible with design standards set forth in this plan.
- 9. The township will work with the Grand Traverse County Department of Public Works and

others to find solutions to the current sewer problems being faced by the regional system so that there will be sufficient capacity for properties within the high density areas designated by this plan to connect to the municipal sewer system.

- 10. In order to prevent further strip-like development along M 72, that trunkline bearing the majority of current development pressure, design alternatives for future widening shall be considered based upon its impact on traffic flow, safety and adjacent land uses. Specifically, a divided highway design is encouraged, as it will maintain a safe thoroughfare, with optimal traffic flow, while protecting the visual integrity of the M 72 corridor.
- 11. Discussions should take place and regulations should be developed involving all municipalities along the M 72 Corridor between Acme and Kalkaska. The M 72 Corridor Study, completed in October 2001, indicates the need to uniformly regulate signage, landscaping, utility lines, and cellular tower construction. This study shall be referenced during site plan review to ensure the suggestions contained therein are appropriately considered. Regulations shall be developed to regulate ridgeline development to determine where clustering, conservation easements, building color and tree cutting restrictions may be combined so as to best protect the aesthetic nature of this corridor as discussed in the study.
- 12. Alternative forms of travel shall be encouraged along the major thoroughfares through the use of separated bicycle lanes, safe pedestrian crossings (use of traffic lights, underpasses, and/or raised medians may be necessary), bus stops or car-pooling areas, and the maintenance of existing railroad infrastructure for future light rail or trail development.
- 13. Due to the increasing developmental pressure along major thoroughfares, an access management program should be established along those major thoroughfares, whereby specific regulations for shared driveways, service drives and limited access are developed and implemented into the zoning ordinance. Use of the M 72 Access Management Plan, finalized in June of 2001, should be referenced to determine appropriate regulations and management strategies along the M 72 corridor through Acme Township.



Planned Sanitary Sewer Service District Acme Township, Grand Traverse County, Michigan May 18, 2009



Culture Community & Conviviality The Point of it All

e find ourselves in the shoes of our forefathers.

They were confronted by a wilderness of nature;

We are invested by a wilderness of civilization.

Benton MakKaye

As long as we are thinking only of natural values we must say that the sun looks down on nothing half so good as a household laughing together over a meal, or two friends talking over a pint of beer, or a man alone reading a book that interests him; and that all economics, politics, law, armies, and institutions, save insofar as they prolong and multiply such scenes, are a mere ploughing the sand and sowing the ocean, a meaningless vanity and vexation of spirit.

Collective activities are, of course, necessary, but this is the end to which they are necessary.

C.S. Lewis,

An Address to the Society of St. Alban and St. Sergius

Culture, Community & Conviviality

hroughout this planning process there has been an underlying concern on the part of most participants, expressing itself as a desire somehow to regain control over the rapidly changing environment of the Township and the entire region.

It is necessary that municipalities and regions have a set of values that can unify and guide them. Terms such as "quality of life," "family values," and "open space" used during the process indicate a longing for a place of character and a culture that provides more than a landscape abandoned only to economic designs. This plan has attempted to set down these values through the designation of land uses and the areas within which they might be undertaken.

Both the "Township Planning Act" and the "Township Rural Zoning Act" make it clear that the deliberations regarding the allocation of land for various uses within a township involve inquiries into the "character" of these areas and that the "proper uses of land and natural resources" are the intended purview of township planning and zoning.

This plan, and the studies performed in association with it, have delved into the nature of the relationships between the wild, the landscape, and urbanized high density areas. It has set out goals and policies to retain certain attributes of the township and to attain others, and to allow for development that will provide for a balance of uses, and non-uses that Township citizens, landowners, the steering committee, and the planning commission have deemed essential for the proper evolution of the township character and culture.

We hope that this document will become the foundation for thoughtful and insightful land use decisions throughout the community.

Goals

To provide for residential and commercial development in the township in ways that will
enable the accomplishment of all of this plan's goals and will create a healthy and
wholesome environment for the full development and enjoyment of all its residents and
guests.

Policies and Actions

- The values discovered during this planning process and espoused by this plan must be put forth
 clearly and forthrightly for all concerned. Development of a newsletter and the continuing
 forums suggested in earlier sections would be good ways to ensure continued development and
 dissemination of these positions.
- 2. The Township should continue to engage its citizens in the planning and political activities of the township and in regional matters that affect the values of our community.
- 3. Where there is a need for new development and there is an entity willing to invest in providing for this need, the township should facilitate the development in a manner appropriate to the standards and values of the township. Conversely, where any development contrary to the values of the township is proposed, the township should vigorously defend its position opposing the project.
- 4. The Township should keep apprised of other like-minded communities and their activities in order to learn from each other and join with them to promote common interests.
- 5. In thinking of and planning for the community, the most important idea we can maintain, one that should incorporate scale, harmony, rhythm, appropriateness and wholeness, is that everything should fit with forms before it and anticipate and fit with forms after it. Unless the whole community is addressed in this way, some elements tend at various times to be overemphasized, and others underemphasized. Some particular goals may dominate and others disappear, allowing an unbalanced system of decision-making where essential considerations may be left out entirely.

Each act by a developer, landowner, resident, or township official should be based upon a consideration of what has occurred before and what will be the consequences of a proposed action. Such actions should meet and promote the values of the community.

Regional Relations

You may have spoken, but did they hear.

They may have heard, but did they understand.

They may have understood, but did they agree.

They may have agreed, but will they act on it.

To live together, we must communicate on all levels.

Old Chinese Proverb

Acme Township: One Piece of the Picture

Residents of Acme Township are part of a greater region than may be evident from its boundaries of those of any other unit of government in the area. People from the area enjoy many of the same places to shop, exercise, relax, eat and have fun. Men and women may travel from different sides of the region to work for the same company. Common desires and values should unify and guide them. This can best be achieved by acting more in unison, as a region, with the region.

Goals

- To create and promote common images, ideas and values to direct the policies and actions of all jurisdictions within the region.
- To aid the township and other jurisdictions to consider trans-jurisdictional commutative environmental, social and economic effects when making planning and development decisions.
- To have it understood by everyone that natural systems do not follow property lines or governmental boundaries.
- To promote development that corresponds to the common goals and values of the region's citizens and leads to long term well being of the entire region.

Policies & Actions

- 1. Actively support a reconstituted County Planning Advisory Council (PAC).
- Promote and become involved in the activities of the Northwest Michigan Council of Governments.
- 3. Join and support groups such as the 3,000 Friends of the Conservation Resource Alliance (an 18 county northwest Michigan resource conservation and development council).
- 4. Foster community understanding and acceptance of "growth management" as public policy. Establish a paradigm that represents regional citizens' goals and values upon which to measure proposed development.
- 5. Work with 'New Designs for Growth' and the Traverse City Area Chamber of Commerce to provide support for planning and zoning reforms and educational programs.
- Support county, region, and state Purchase and Transfer of Development Rights programs.
 Encourage and promote better state enabling legislation for regional planning and farmland and open space preservation.

ACME TOWN CENTER REPORT AND AMENDMENT TO THE ACME TOWNSHIP MASTER PLAN

Amendment #1 Adopted January 10, 2001

INTRODUCTION

The purpose of this Master Plan update is to formulate a plan for a town center by presenting conceptual plan principles and zoning ordinance amendments to create a new town center for Acme Township. As determined through opinion surveys and public workshops, and as described in the recently adopted Master Plan, the people of Acme desire to focus mixed-use development in a limited area that will have a "hometown" feel to it.

This report examines the prospects of developing such a town center in the portion of Acme Township lying along the south side of M-72 between Lautner Road and U.S. 31, concentrating on three large properties. The Johnson, Rollert, and Meijer parcels (described below) are the focus because they either present significant opportunities to "start from scratch" to create a new town center or are already zoned for significant new commercial development which must be appropriately woven into the fabric of the Township.

This report first describes more precisely the elements that comprise the kind of town center the people of Acme desire for their community. It then discusses areas of agreement and disagreement about development and assesses the suitability of different parts of the study area for a town center. A discussion of key implementation issues follows and the report concludes by recommending specific next steps needed to bring the town center vision to fruition. An Appendix contains a first draft of specific zoning amendments that, if adopted, would make it possible to create this type of town center.

TOWN CENTER DEVELOPMENT

Characteristics of a Traditional Town Center

Creating a town center that looks and feels like a traditional village was once something that happened almost automatically. It was part of the culture of the Midwest and the United States, as well as most of the rest of the world, to build a center that simultaneously serves multiple functions: marketplace, religious and educational center, seat of government, community meeting place, and dwelling place for people of different ages and incomes. In this center there is a shared "public realm" of streets, public spaces, and buildings. This is the kind of place that people can care about and call "home." It does not have to look like a nineteenth-century town architecturally, but it has many more characteristics in common with such a town than with the "automobile suburb" that has replaced traditional village centers across the American landscape.

Three key characteristics of such a town center are described below.

1. Street Network

The basic structure of a town center consists of small blocks (less than 400 feet on a side) and interconnected, relatively narrow streets, most of which are divided into small lots with small buildings on them. An example of such a block and street pattern is found in the Village of Elk Rapids. Because the streets are interconnected, they form a "grid" pattern. Gentle curves and varying angles add variety to the grid, while responding to topographic conditions and other natural features. These curves and angles make the view down each street more interesting by focusing the eye on

important buildings or trees rather than on a continuous band of pavement.

A few areas, generally less than 25% of the developed area of the village, may be set aside for larger-scale uses such as large stores, office buildings, educational institutions, or light industrial uses. These must be carefully designed and connected to the core area and other neighborhoods by good street design augmented by pedestrian and bicycle connections.

2. Core Area

The heart of a town center is a downtown core area that feels and functions like a Main Street. The buildings form a continuous edge along sidewalks, making the sidewalk a comfortable and interesting public space for walking. Within this core area streets may be somewhat wider to accommodate a more intense and fine-grained variety of uses, with businesses that cater to a walk-in clientele on the first floor and offices and apartments on the upper stories of the buildings. Both Elk Rapids and Traverse City have this type of core area, at different scales.

Streets are designed with the pedestrian in mind and strike a balance between the movement of cars and the safety and comfort of pedestrians. Traffic moves slowly with parallel or diagonal parking buffering pedestrians from the street. Public lots provide parking behind a continuous row of buildings, rather than in individual parking lots in front of separated buildings. Street trees visually soften the hard edges of pavement and building and create a canopy of curved branches and green leaves overhanging the sidewalk and street. The trees make the street look narrower and frame the sidewalk space.

Civic buildings are set at prominent locations and highlight the public realm of the core area. These are important and distinctive structures that are used by large numbers of people. Examples of civic buildings include town hall, library, school, meeting hall, theater, church, social club, and post office. A village green and/or a system of squares, plazas, and playgrounds offer pleasant civic gathering places framed by commercial and civic buildings. The activities in these buildings give life to these "outdoor rooms." Indeed, the entire core area, and the town center itself, can be seen as a series of outdoor rooms, composed of linear street spaces interspersed with a variety of pedestrian-only civic spaces of different shapes and sizes.

The core area gives the community a sense of place. It is the "there" that is missing from most modern developments, imbued with a kind of magnetism that attracts pedestrians from surrounding neighborhoods. The combination of a wide range of different activities and enjoyable public spaces brings people together and reinforces the sense of community. However, a core area will not become a lively community center unless it has a critical mass of both businesses and people living in and immediately around it. If it is vibrant, it will attract people from surrounding areas to visit and patronize the businesses.

3. Neighborhoods

The third key component of a town center is a system of walkable neighborhoods generally located within a comfortable walking distance from the core. These are primarily residential with block and street systems similar to those found in the core, although the blocks may be larger. Neighborhoods contain a variety of housing types in different price ranges, all in close proximity to one another. Within each neighborhood, or at its edge, there may be some small commercial uses such as corner stores.

Houses and street trees frame a public street and sidewalk space that is comfortable for walking. Street frontages are short, lots are narrow, and access to homes is provided primarily through rear alleys. Visitors park on the street and residents generally park in the back of the lot, accessed through

the alley. Single-family houses, rowhouses, and small apartment buildings, are set close to the street with small frontyards and large backyards. Sidewalks and planting strips with street trees round out the public realm of the neighborhood street. Neighborhood parks provide public gathering places. The most desirable neighborhoods in Traverse City have many, if not most, of these characteristics.

Why a Traditional Town Center?

Thus far, this report has described what makes a town center a distinctive and memorable place. A town center is not just a place with higher density and a mixture of commercial uses. It must be recognizable as a "town" by following the principles outlined above or variations of them. This approach to planning is sometimes referred to by the terms "new urbanism" or "neo-traditional" planning. Note that architecture is secondary. Front porches and picket fences may add character, but they are not as important as a pleasant and inviting public realm shaped by well-placed buildings and pedestrian-friendly streets.

Critics have called this approach romantic, nostalgic, or a form of "social engineering." It is none of these; rather, it embodies time-honored development practices that were temporarily discarded during the second half of the twentieth century when maximizing convenience for the automobile became the primary force shaping development patterns. The traditional town form has been rediscovered as we enter the twenty-first century, and many communities have begun to adapt this classic pattern to accommodate the automobile without letting it dominate. Properly implemented, this approach can produce more efficient use of land, less traffic, and more protected open space than conventional suburban development.

Traditional town development is not a panacea for social problems, nor does it satisfy all the needs that communities have for different kinds of development. However, Americans are finding increasingly that the traditional town is a highly desirable place. While there are many more old examples than new ones, both the new and the old are thriving. Homes in new urbanist communities often sell at a substantial premium over comparable houses in conventional suburban housing subdivisions.

Americans invented and perfected the automobile-oriented suburban subdivision, office park, strip mall, and superstore. Virtually all of Acme Township is zoned for this kind of development, and much of the Township's southwest quadrant is already developing under this conventional zoning. But such zoning does not create memorable places that evoke a sense of connection to a common history or future. Acme's leaders have recognized this fact of modern life, and have consciously sought to find a better way-a way to organize a town center that will make it a place they and their constituents will feel is truly theirs.

AREAS OF AGREEMENT AND DISAGREEMENT ABOUT DEVELOPMENT IN ACME TOWNSHIP

Interviews with public officials and landowners lead to the following tentative conclusions concerning attitudes toward development:

• There is general agreement that growth pressures in Acme will continue to intensify and that concentration of growth in a confined area is preferable to having it occur in a haphazard, scattered pattern throughout the Township.

- There is general agreement favoring preservation of the Township's open space and environmental resources, consistent with dealing fairly with property owners. (There is disagreement about what "dealing fairly" may mean with respect to specific parcels of land.)
- There is general agreement that a traditional town center that is hospitable to walking and community activities is desirable, but there is disagreement as to whether this is economically practical, i.e. whether it will "sell" and whether it can be produced at an affordable price.
- There is disagreement about the how much growth is desirable, and about where to draw the line separating the area of growth from the areas where the Township's rural qualities should be maintained. Some would prefer to see the growth confined to areas that have already been developed or approved for development (i.e. the Johnson property). Others think this area is too limited and will not be sufficient to absorb future demand.
- There is also disagreement about the extent to which Acme should become a place that serves the commercial needs of the region as a whole as opposed to just local needs. This relates to the previous concern, since the extent to which Acme serves as a regional center affects how much commercial development will occur.
- There is disagreement about the need for additional sewer capacity and its location, as increased sewer capacity is necessary to support intensive development.

A few observations follow from these perceived areas of agreement and disagreement:

- 1. Regardless of residents' desires, development pressures on Acme will intensify in the coming years. If zoning is not changed, the Township will build out according to its currently mandated sprawl zoning pattern, with little open space protected. This result will adversely affect many of Acme's assets, including water quality and the Township's rural beauty.
- 2. Most of the undeveloped land in Acme is zoned residential. That means that the Township could see substantial population increases in the coming years without significant non-residential development to help carry the tax burden.
- 3. Because of the tax implications of significant residential development as well as the increasing value of the M-72 corridor as a commercial location, pressure will increase to rezone land commercial. Unless the zoning districts are radically changed, this will produce more commercial strip types of development.
- 4. The amount of development an area will ultimately receive is a function of market forces, infrastructure, and regulation, in that order of importance. Market forces are shaped by major road infrastructure decisions made elsewhere. These decisions will increase traffic in the M-72 corridor. As M-72 becomes the primary entry into Traverse City, the center of gravity for regional development is likely to shift from Garfield Township to Acme. This effect will be intensified if M-72 is widened to four lanes from Acme to Grayling, as currently planned by the Michigan Department of Transportation (MDOT).
- 5. Acme will thus become a prime target for regional development, increasing the risk that the Township will actually build out according to its current zoning, or some other zoning that landowners and developers will extract on an ad hoc, unplanned basis.

- 6. Without the zoning or water and sewer infrastructure for concentrating growth in a town center, Acme will see development sprawl all over the countryside and spill over or leapfrog into other Townships.
- 7. In its approval of the Grand Traverse Resort, with its cluster design and high-rise tower, Acme has recognized that concentrating development can effectively protect large amounts of land as open space.
- 8. Acme has clear choices:
 - A. To leave its current zoning framework in place, with the likely outcome of residential sprawl and piecemeal commercial rezonings along M-72 and U.S. 31.
 - B. To try to limit growth through restrictive zoning (and/or expensive purchases of land threatened by development), risking litigation, with the result that regional growth will go to other Townships-but the traffic will still flow through Acme.
 - C. To enact a system for shaping and absorbing some of the growth that will occur regionally, in order to maximize benefits for the Township and preserve significant amounts of open space in the surrounding area.

THE STUDY AREA

Overview

While this report focuses on three parcels, these must *be* viewed in the larger context of the surrounding area and the region. (See Figure 1, AREA MAP.) To the north and west of the study area is the original location of the village of Acme, near the mouth of the Acme Creek. This historical village was laid out in a traditional grid pattern, elements of which are still discernible. Much of what historically existed is no longer there, some of it wiped out by the modernization of U.S. 31 and M-72. Strip commercial development has taken hold along Route 31 and on M-72 near the main intersection. This is a pattern the Township would like to discourage in the future.

The study area itself spans a distance of some 9,000 feet (or about 1.7 miles) from east to west, and about 3,000 feet, or a little over half a mile, north to south. The combined area of the three large landholdings under study is 444 acres. The ideal size for a town center is about 120 to 150 acres, which allows most homes to be within a five-minute walk (a quarter mile) of the center. The Acme Creek and its wooded stream valley bisect the western half of the study area, which is also characterized by steep slopes. The eastern half of the study area is more level, occupying a plateau that separates the Acme and Yuba Creek watersheds. This land is mostly open or in orchard use.

South of the study area is a single-track railroad line which currently carries very little freight traffic. It is being considered for an extension of the TART trail, part of a regional bikepath network that currently terminates south of the site at Bunker Hill Road. It has also been used for the tourist-oriented "dinner train," and might conceivably provide more regular rail service for both tourists and commuters sometime in the future. South of the railroad and east of the study area is mostly abandoned farmland, forestland and wetlands. North of the study area, across M-72, is the Grand Traverse Resort, the largest vacation destination in the region.

M-72 borders the study area on the north and is a major gateway into Traverse City, one of the

premier vacation destinations in the Midwest. Already the primary access route from Detroit and southeast Michigan, M-72 will eventually become the principal route into Traverse City from all the large population centers to the south, including Chicago, as significant road improvements are made east and south of Acme. The study area will see greatly increased traffic even if nothing is built within it. Regional development pressures, which have focused mostly on high-growth areas south of Traverse City, are bound to move northeast into Acme in the near future.

This means that Acme is going to change. Not growing or changing is not an option. The challenge is to manage that growth in a way that enhances the community rather than damages it. If Acme were to develop under its current zoning, a sprawl pattern would result, devouring the open landscape and leaving the Township devoid of a meaningful center. The Master Plan's goal of concentrating development in a town center and trying to preserve as much as possible of the outlying open land is the Township's best hope for making development a positive experience.

Acme's residents are concerned about maintaining the high quality environment of their community, especially the protection of water quality, farmland, and open space. Acme Creek flows through the study area, roughly along the boundary between the Johnson and Rollert properties. Its excellent water quality is a key resource that must be maintained if development occurs, both for the sake of the Creek itself and for East Grand Traverse Bay into which it flows. Its stream valley also offers a beautiful potential trail corridor that could be used for a branch of the regional TART trail system leading to the Grand Traverse Resort. Many citizens would like to see as much as possible of the study area (as well as the surrounding area) preserved as open space. For reasons described above, this desire to preserve most of the study area may not be entirely realistic.

The three individual properties are discussed below (refer to Figure 2, BASE MAP).

Johnson Property

In 1992, the Acme Township Board approved a Special Use Permit for a Mixed Use Planned Development on the 142-acre property owned by Dr. Lanny Johnson. This development was approved under Section 8.22 of the current zoning ordinance. Section 8.22 provides flexible regulations for self-contained developments that mix uses within a designated area of the Township. The Johnson property has access to both M-72 and U.S. 31 and meets the criteria in Section 8.22. At this time, part of the road system has been constructed, along with an office building on the M-72 frontage and a hotel on the U.S. 31 frontage. Although the landowner has worked diligently to address planning concerns of the Township and attract interest from potential purchasers, the progress of the development has been disappointing to all concerned.

The Johnson property is characterized by steep topography and areas of wet soils. Much of it is abandoned orchard land and meadows that are gradually reverting to forest. Its development poses substantial physical challenges. In order to build Mount Hope Road, a through road that meets County highway specifications, a large part of the property had to be substantially regraded. The result is a wide road with steep banks along its sides. This road design is not conducive to building a recognizable Main Street. It is designed to function as "spine" road providing access to separated "pods" of development.

The project as approved, although called "Acme Town Center" on its site plan (its entry signs read "Acme Village"), is not a town center in the sense described in the first part of this report. Although it includes a variety of uses, they will be located in stand-alone pods that each gain access from the spine road. The road network will not be interconnected, and the project has none of the other

features identified above as essential to a town center. It will be a town center in name only.

The development's layout stems, in part, from Section 8.22, which does not call for design measures that would create a true town center. Indeed, Section 8.22 requires that different uses be buffered from one another rather than integrated. Section 8.22 is intended to be used for sites with unusual topography and important natural features. This site qualifies because it has difficult topography and the plan preserves many of its natural features, including the Acme Creek stream valley and some knolls and stands of evergreens. Most of the land that is wooded is characterized by wet soils and has limited usefulness for development. It is valuable as buffer to the Creek and as wildlife habitat.

The approved plan will not create the kind of memorable place that Acme seems to want. Its layout resembles that of a suburban office park. The sluggish market response may reflect the fact that this concept is not particularly appealing in a region that has a distinctive historic character and is a resort destination. Because most of the site is not visible from the state highways, it is not attractive for retail development. It might be a good location for residential or office development that is convenient to state roads but not visible from them.

It is doubtful that the Johnson plan could be redesigned to serve as a true town center. The roads that have already been built (at great expense) are not the kind of street that forms the skeleton of an interconnected town center road system. Even without the new roads, the site would have posed significant challenges because of its topographic and soil constraints and the lack of visibility of the interior from main routes.

The Johnson property received the most attention initially as a potential location for a town center, because several Township officials expressed the desire to keep intensive development as close as possible to the intersection of Routes 31 and 72. However, upon a closer analysis, this parcel turns out not to be well-suited to the development of a traditional town center.

Rollert Property

The Rollert property consists of approximately 240 acres controlled by David Rollert, including land in related partnerships or under option. It abuts the Johnson property and a vacant movie theater on the west, the railroad tracks on the south, Lautner Road on the east, and M-72 on the north. Its scenic, rolling farmland offers beautiful views from M-72 and the Grand Traverse Resort. Much of the land is still an active apple orchard. This adds to its attractiveness, but may pose some hazards for development due to chemicals in the soil. The Acme Creek stream valley runs through the western end of the property. A ridge on the western half of the property offers views of East Bay, sloping steeply down toward the Creek.

The northeastern portion of the property, where the orchard is located, is a gently rolling plateau which is topographically well-suited for a town center. Its accessibility from M-72 and Lautner Road makes this end of the property the most appropriate for such development. Looking at the entire study area, the 70 to 100 acres of land on this part of the Rollert property stand out as the most suitable for developing a town center. The potential close linkage with the Meijer site offers the potential for jump-starting retail development and other non-residential uses that would not otherwise be feasible in a stand-alone town center at this location.

The Rollert property is currently zoned R-3, which would permit considerable residential development (two or three units per acre depending upon availability of public sewer). This amount of residential development, even without sewer, would drastically change the character of the

Township, especially if it is laid out in a conventional sprawl configuration. The owner would like to have the property rezoned commercial to take advantage of the M-72 frontage with its high traffic volume. If the existing commercial zoning categories in the zoning ordinance were applied to the Rollert property, the result would be strip commercial configurations which the Township does not want.

The town center concept offers an ideal opportunity for a win-win solution. If commercial development is woven carefully into the fabric of a mixed-use town center, then the landowner can have the benefit of some commercial rezoning, while the Township can benefit from the fulfillment of its vision of a real town center. The result will be a more attractive place, a more balanced tax base, and the achievement of an important Master Plan goal.

Meijer Property

Meijer, Inc., has proposed a 157,000 square foot superstore on a 62-acre former airfield it owns abutting Lautner Road and M-72, across Lautner Road from the Rollert parcel. The proposal also includes a 32,400 square foot garden center and 2,400 square foot convenience store. The property is already zoned commercial (B-3), but Meijer has agreed to suspend its application pending completion of this report. The land is flat and contains a system of drainage channels that form the westernmost branch of the Yuba Creek. Some question exists regarding the wetland status, if any, of this parcel. There exists some hydric soils on the property, and some wetland plants are evident near the northern end of the property. No official wetland delineation or study exists to clarify the issue; however, if future study indicates the presence of wetlands on the property, it could pose additional developmental constraints.

Many view the Meijer proposal as antithetical to everything Acme's Planning Commission has tried to do to control growth and maintain rural character. At first blush, this would appear to be true. If Acme Township wants to confine future commercial growth to the area west of Acme Creek and maximize protection of Yuba Creek, this proposal directly contradicts those goals. However, as discussed above, regional commercial development pressures now target Acme Township. And the only large undeveloped property in the study area west of Acme Creek (the Johnson parcel) is not well-suited to either a traditional town center development or retail commercial development.

Despite what the Master Plan may suggest, the Meijer parcel is already zoned commercial. While the Township could rezone it, such an action would most likely be politically divisive and invite legal challenges. The Township has the choice of trying to fight it or to find a way to live with it and have it complement the town center planning concept. With proper layout and design, the Meijer development could serve as the commercial "anchor" for the town center (see below).

TOWARD A TOWN CENTER PLAN

Proposed Town Center Conceptual Plan

As a result of the foregoing analysis, the best location for a new town center with a traditional layout is on the portion of the Rollert property closest to Lautner Road and M-72. The scope of this study did not include preparation of a detailed plan. However, a developer and/or the Township could create such a plan with the services of a design firm experienced in applying the traditional town design principles described in the beginning of this report.

A key issue in this conceptual plan is the relationship between the Meijer store and the rest of the town center. While superstores like WalMart have killed off many traditional downtowns, they have usually been located well outside of those downtowns, pulling traffic and shoppers away from the town center. If a superstore is designed into a downtown, within a short walking distance of an easily accessible Main Street, it can help bring customers into the downtown. Such a store performs the critical function of retail anchor for the town center. Without such an anchor, it will be difficult to attract other businesses into the town center.

The businesses that would locate in the core area shown in this plan would be those that do not directly compete with Meijer, such as higher-end specialty shops, antique and used merchandise stores, bicycle shops, restaurants, coffee and ice cream shops, personal service establishments such as cleaners and hairdressers, art galleries, inns and hotels, video stores, movie theaters, and other types of entertainment venues. Civic buildings, such as the Township Hall, library, and post office, would also attract people into the core area. There would be a synergy between Meijer and these commercial and civic places. Where else in the region could one walk from a store like Meijer directly into a place like downtown Traverse City or Elk Rapids?

The core area would be centered on the three or four blocks on both sides of the "Main Street" lying west of Lautner Road. This would be a traditional Main Street with storefronts at the sidewalk and apartments and offices on upper stories. There would be a wide sidewalk with room for benches, trees, outdoor cafés, and other civic amenities found in popular downtowns. When people think of Acme, they'd think of this area in the same way that "Elk Rapids" evokes the charming main street of that village. Parking would be located on the street and behind the buildings in small public parking lots.

A re-design of Lautner Road could make it an inviting entryway into the town center rather than a high-speed access road. Most of it would be lined with shopfronts, sidewalks, and street trees in the same manner as Main Street. This can be done with appropriate street design and traffic signals.

M-72 itself would remain a relatively high speed road, although the traffic would be slowed down by a light at Lautner Road and at least two other entrances into the town center from M-72. A green corridor of trees and shrubs would be planted along M-72 that would show just enough of the town center to be intriguing from M-72, but not enough to make M-72 a visual presence in the town center. Slowing the traffic between Lautner Road and Route 31 will result in less noise impact from M-72 than if the traffic went speeding through unimpeded. Additional calming of the impacts created by a high traffic volume could be accomplished through the re-design of M-72 into a boulevard style street. This would allow for safe ingress and egress to and from the Town Center, and allow for a safer pedestrian crossing of M-72.

Although the primary access into the site would be from M-72 and Lautner Road, the plan should include a winding road coming in from the Johnson property. The road would be designed as a narrow country road for cars only (no trucks), winding through the woods, across the Creek, and up the hill into the new town center. A circle with a monument in the center will announce arrival from "the country" into "town." This road will be too indirect and slow to become a cut-through road, but it will divert automobile traffic going to the new town center that might otherwise congest the M-72/U.S. 31 intersection. If combined with good walking and bicycle path linkages, this road will effectively link the Johnson property with the town center and bring more people through the Johnson parcel, enhancing its marketability.

The neighborhoods extending west and south from the core area on the Rollert property will contain lots increasing in size farther away from Main Street. The southern part of the town center will

connect via a bikepath to the railroad line which is likely to become an extension of the TART trail system. Small retail or service uses catering to bicycle traffic as well as to the neighborhood might eventually locate here if use of the TART trail can support them. This would be the bicycle gateway into the town center.

The western edge of the platted lots would be the beginning of an extensive public open space system leading down to the Creek, across it, and through the woods into the Johnson property. This open space would be permanently restricted from development and used for a combination of passive and active recreational purposes, to be elaborated in subsequent phases of the planning process. A branch of the TART trail could leave the railroad line, wind north through the Acme Creek valley, and lead to the Grand Traverse Resort through a tunnel under M-72. Some unplatted areas may become part of this permanent open space system and some may eventually be developed, depending upon their topography and environmental sensitivity.

There would be a wide range of home prices in this town center. Those lots that back up to the permanently preserved open space would likely have the highest value. Residential buildings near M-72 and Meijer would likely have lower values. Throughout the town center there would be a broad range of prices as well as of housing types, from large single-family to two- and three-family homes, to rowhouses, to small apartment buildings. Some of the apartments and houses would be for rental use. They would all fit into the traditional pattern of small buildings set close to the street with off-street parking in the rear.

If a town center is built on the Rollert property, the resulting increase in activity there will benefit the Johnson property and might help promote its development. The Johnson parcel might be redesigned to accommodate some housing that is buffered from the main highways yet convenient to them and also accessible to the town center. This, in turn, might spur some small-scale development of professional offices, health clinics, or similar uses that would serve residents and offer more parking than could be easily accommodated in the town center.

Alternative Concepts

In preparing this report, some alternative locations and concepts were considered. Some of these may be feasible, but they all presented greater practical difficulties than the recommended location.

1. Johnson Parcel

The problems with this parcel have been discussed earlier. Originally, the Johnson parcel was to become the Town Center of Acme Township. As discussed earlier, and for the reasons presented, this parcel is not the best suited property to act as the Town Center. However, as a parcel that will be directly affected by the development of a Town Center on the Rollert property, changes to the original plan will most likely occur. The focus of this property may shift from the once designated Town Center to a development more oriented toward professional and technological offices. The location and nature of this development has the potential to become a much needed source of high-paying jobs for the residents within the Town Center and the Johnson parcel.

2. Along both sides of M-72 between Lautner Road and U.S. 31:

Under this scenario, M-72 would be "calmed" into a Main Street, complete with sidewalks and shopfronts. Since all the traffic stops at the intersection with U.S. 31 anyway, it would make little difference to slow it down a half-mile up the road. M-72 could be reconfigured as a tree-lined boulevard passing by a town square that overlooks East Bay. This concept would put some of the development on the Rollert property and some on the Grand Traverse Resort, which was not

previously considered as part of the study area. (The Grand Traverse Resort entrance gateway could be an attractive design feature of the town center in this scenario.) Locating the Main Street retail on M-72, instead of a new interior Main Street, would greatly enhance its viability. While there are a few examples around the country of the transformation of a high-speed arterial highway into a village Main Street, they are rare and are resisted by state Departments of Transportation. This is an idea well worth considering, but it would involve a substantial redefinition of the project. Because of the difficulties involved, as well as the cost and political implications of this alternative, it is not one being actively considered. However, as study continues on this issue, if more information were provided by developers, it could be re-considered as a viable option.

KEY ISSUES: TOWNSHIP BUILD-OUT, OPEN SPACE, AND INFRASTRUCTURE

This Section of the report discusses the most important issues that must be addressed in order to implement a town center.

Limiting Township Build-out While Saving Open Space Resources

A major issue that must be addressed at the outset is how the proposed town center would affect the total population growth and "build-out" of the Township. This report assumes that the Township does not want to see more total building as a result of implementing a town center plan. Rather, the goal is a rearrangement of the development that might otherwise occur, so that it is concentrated in one area of the Township rather than scattered all over it. (This is similar to the Grand Traverse Resort concept, in which all of the permitted building on a large property was concentrated into a few small areas, leaving large amounts of land as recreational open space.) Any implementation scheme for this plan should be "build-out neutral" for the Township as a whole, i.e. it should only rearrange, not increase, total building. This means that some development may have to be "transferred" from other areas into the town center.

Under current zoning, the 240 acres of the Rollert property alone would likely accommodate approximately 600 units of housing. That may appear to be a large scale of development. However, these numbers do not mean much without more information on the size, design, and uses of the buildings that would be built. The idea is to manage the density of the town center by allowing a mix of uses by combining residential density to incorporate and create commercial density. For example, ten residential lots in the town center might instead be built as one large store and parking area or might be made into a large lot for a civic building with a park around it. In the core area, any given lot might be developed with a house, a business, a business on the first floor with apartments and/or offices above, or a two- or three-family house on it. Until the detailed design is done and the lot is sold and developed, one cannot know for sure what would be built. Even at that point, there is no way to predict exactly how buildings will be used in the future. A well-designed town center adapts to changing times. Its buildings are designed to be useful for multiple purposes. This is why traditional village centers age so well. Their buildings are suitable for different uses and these uses change over time.

Conventional measures of the amount of development, such as minimum lot size or housing units per acre (i.e. density) are not very helpful. Three small apartments might have less impact than one very large house in terms of traffic, noise, water use, and stormwater runoff. Yet by the conventional measure of density, the three-unit apartment building is three times as dense as a single house on the same plot of land.

In order to achieve the goal of not increasing overall Township build-out, it is important to devise a

workable way to measure and control the total amount of building that will occur in a town center. One approach is through restrictions on building height and impervious surface coverage. Height controls are a normal part of town center design regulations to ensure that buildings are built to a human scale and in proper portion to the public realm of the street.

Impervious surface coverage controls serve two important purposes. In conjunction with height limits, they cap the total amount of floor space that can be built, limiting the amount of total building that can occur. Environmentally, controlling impervious surface also plays a key role. Numerous watershed studies, including those done for the Acme and Yuba Creek watersheds (see Mapping Impervious Surface Coverage for Watershed Monitoring and Land Use Planning, a publication of the Grand Traverse County GIS Department and the Drain Commissioner's Office), indicate that water quality in a watershed declines dramatically when the amount of impervious surface coverage reaches between 10 and 20 percent. This is because at higher percentages, stormwater runs off-site in greater quantities and at faster rates, picking up pollutants and sediment and carrying them into streams.

In order to maintain impervious surface coverage within the 10-20% range, a developer in the town center would have to set aside enough open space on the site to maintain these limits or else purchase conservation easements on other land within the watershed, so that when the protected land is added to the developed land, the percentage of impervious surface coverage remains within acceptable limits.

Take the Rollert property as an example. Assume that the Township sets a standard of 15% maximum impervious surface coverage. If the developed area resulted in 100% impervious surface, then only 36 acres could be developed. Within the core area of this plan, development might involve 80% impervious surface coverage (including buildings, streets, alleys, sidewalks, and parking areas), which would allow 45 acres to be developed without exceeding the 15% limit. Therefore the first 45 acres of the Rollert property could be developed as a Phase I "as-of-right" development, including both commercial and residential uses. To develop the remaining portions of the property, the developer would have to buy conservation easements on other land in the same watershed, in order to offset the additional impervious surface coverage.

The problem with the above example is that current zoning allows 30% impervious surface coverage, counting only structures and parking on each lot as impervious surfaces. Streets, sidewalks, and other impervious surfaces would substantially increase this percentage, perhaps to 40%. (In reality, however, not every lot in a development would maximize coverage.) To be fair to the landowner and encourage this town center development, therefore, the percentage of coverage should probably be set higher, perhaps at 30%. The provision of a large natural buffer between the high ground of the town center and the Acme Creek would justify allowing more impervious surface, especially if drainage is handled in a way that minimizes impacts on the Creek.

This adjustment would increase the amount of as-of-right development to 90 acres, or about 80% of the area shown as developed on the Rollert property in the conceptual plan. To go beyond that level of development, a developer would have to arrange for land within the Acme Creek watershed to be protected by conservation easements at an overall rate of, say, 10% impervious surface coverage. That is, for each house, driveway, and parking area that covers 4,000 square feet, the developer would have to ensure the preservation of 36,000 square feet of land elsewhere in the watershed.

The foregoing illustration is an example of how such a system might be set up. Its advantage is that it maintains build-out at approximately what would be permitted under current zoning on-site. It allows incremental development above that amount, as long as compensating land preservation occurs elsewhere. It uses a relatively simple measure of development intensity that can be applied to almost

any kind of use. And it keeps build-out throughout the Township relatively constant. (Note that if the Township wants to actually reduce overall build-out, it has an additional challenge, which can be met by purchasing land or development rights and/or downzoning.)

This type of system for controlling build-out would ensure that approving the town center plan will not increase the total amount of building in the Township. The exact amount of development shown in Figure 3 has not been calculated-and cannot be until a more detailed plan exists. Zoning Ordinance amendments will provide the tools to enable the Township to protect open space elsewhere in exchange for more intensive development in the town center.

Conservation easements on otherwise developable land will have the effect of transferring development from more rural portions of the Township to the new town center. These conservation easements will also enable the Township to fulfill its goals of protecting agricultural land, environmentally sensitive land, and the expanses of scenic open space that give the Township its distinctive character.

Roads

The kinds of streets and alleys found in a traditional town center often do not comply with County street specifications, which are typically oriented toward suburban types of development. No traditional town center can work effectively unless its street system follows the norms of traditional town design, including low design speeds for cars (typically 20 mph), narrow streets and alleys (all in public ownership), wide sidewalks, street trees, on-street parking, pedestrian crosswalks, a variety of additional "traffic-calming" measures, and small curb radii at intersections. These design practices are generally not encouraged or permitted by existing street specifications.

A large development anywhere in this area will have significant impacts on M-72, U.S. 31, and the local road system. However, traditional town centers, especially larger ones, tend to generate fewer and shorter car trips per household or workplace than the same amount of development scattered in a sprawl pattern. The addition of a connecting road through the Johnson property should reduce the traffic impact of the development on the main intersection between U.S. 31 and M-72.

The alternative of locating the new Main Street on M-72 has more significant ramifications which would need further study if that option were to be pursued.

Sewer Service

Sewer service is critical to the feasibility of a town center plan. The study area currently suffers from a deficiency of sewer capacity. The existing sewer district includes the Johnson and Rollert properties but not the Meijer property. The existing sewer collection system runs along M-72 only as far east as the ridge on the western portion of the Rollert property. Additional sewer capacity and extension of sewer lines are all necessary to make a town center plan feasible.

A group of landowners in the area commissioned a sewer study for an expanded sewer district and collection and treatment system (Wastewater Facility Plan Study). This proposal would enlarge the current sewer district along both sides of M-72 almost to the Whitewater Township line. An expansion on this scale is unnecessary and would encourage sprawl development all along the M-72 corridor.

The town center should be serviced by an expansion of the existing sewer system, pursuant to the

Grand Traverse County Board of Public Works plan for the expansion of the existing sewage treatment system. The current plan for the Regional Sewage Treatment Plant expansion includes consideration of the development of two new treatment plants; one would be located east of the existing plant, and another west of the existing plant. It is anticipated that the development of a new treatment plant would allow for the routing of existing sewage flow to the new plant, thus freeing up capacity at the existing plant. That additional capacity could be used to service the town center as well as other existing and proposed developments within the existing sewer district, not currently serviced by sewer.

The Township should not approve an expansion of sewer capacity or enlargement of the sewer district until it has put appropriate zoning in place to shape development. The biggest mistake most communities make in their planning is to build sewer, water, and road infrastructure without first revising their zoning ordinance so that the development attracted by new infrastructure promotes, rather than defeats, the township's planning goals. If the infrastructure development process is driven by the desires of landowners or the mission of infrastructure development agencies, the results are not likely to reflect community desires.

Conversely, residents who oppose development often target sewer expansion proposals as an evil to be avoided at all costs. They equate sewers with growth, which they seek to discourage. While it is true that sewers promote development, it is also true that without sewers a township can never achieve concentrated town center development. This makes sprawl the only alternative. Sewers are not a threat if they are accompanied by a plan and zoning ordinance that are buildout-neutral, and that effectively concentrate development and preserve open space.

It is therefore critical that the Township decide on a general plan for the town center and, more importantly, rezone the area to be served by sewers before approving any changes in its sewer system.

IMPLEMENTATION ACTIONS

The implementation of the type of plan recommended in this report will require a series of well-coordinated actions by the Township in cooperation with landowners, the County Road Commission, and other local, regional, and state agencies involved in permitting for roads, sewers, water, drainage, wetlands, stream crossing, and other environmental and development-related matters. The most important actions include:

1. Zoning

The Acme Zoning Ordinance should be revised to allow this type of project to go forward as proposed in this report. Additional commercial zoning should only be allowed in furtherance of a commercially viable traditional town center. A possible starting point for such an ordinance revision is included in the Appendix to this report.

2. Sewer and Water

Construction and expansion of sewer and water services should be permitted and encouraged only to the extent necessary for the implementation of a town center development plan. The extension of the sewer system to serve this development should be in accordance with the Grand Traverse County Board of Public Works plan for sewer expansion.

3. Road Standards

The Township should work with the County Road Commission, Planning Department, and providers of emergency services to develop road standards that are appropriate to a traditional town center

setting.

A cooperative planning process involving landowners, Township officials, County and State officials, and interested citizens offers exciting possibilities. Through such a process, focusing on these three implementation measures, Acme may be able to attract a top quality developer who will work cooperatively with the community to build it has thoughtfully asked for through good planning. Acme's town center would then become a place residents could care about, the "there" that they want for their hometown.