SECTION 1:
INTRODUCTION

1.1 STATE PROFILE

INTRODUCTION

Ohio was the 17th territory to become part of the United State of America with its induction on March 1, 1803. Ohio is an Iroquoian word (Senecan dialect) meaning, 'beautiful river.' Located in the north central region of the United States, Ohio was home to eight of the forty-three people whom have held the office President of the nation including William Henry Harrison, Ulysses Simpson Grant, Rutherford Birchard Hayes, James Abram Garfield, Benjamin Harrison, William McKinley, William Howard Taft, Warren Gamaliel Harding

GEOGRAPHY

The state is divided into two broad regions loosely following a diagonal line running from the south-western corner to the north-eastern corner. The portion of the state above the line was repeatedly inundated by glaciers. The result is a generally flat or gently rolling topography with layers of glacial sediments conducive to agriculture and large population centers. One notable exception is a region in west central Ohio where an outcropping of large hill exists. The portion south of the line consists of the foothills to the Appalachian Mountains, a weathering range located south and east of Ohio.

Water distribution across the state is also regional. The glaciers which altered the land also impacted Ohio's water system. Lake Erie, which encompasses the majority of Ohio's northern boarder, was created by and subsequently filled with water from glaciers. Rivers systems in approximately the northern third of Ohio flow north into Lake Erie. Major rivers from west to east include the Maumee, Middle Branch, Sandusky, Huron, Black, Cuyahoga and Grand. The remainder of the waterways in the state flow south into the Ohio River. Significant rivers include the Great & Little Miami, Scioto, Hocking and Muskingum along with the Ohio itself.

Ohio borders the states of Pennsylvania, Kentucky, West Virginia, Indiana and Michigan while sharing an international border with the Canadian province of Ontario. A large portion of the state's border is associated with bodies of water including West Virginia and Kentucky along the Ohio River and Ontario near the center of Lake Erie.

Ohio covers 40,952 square miles of land. Land use percentages range from a high of 43.53 for cropland to a low of 1.30 for wetlands (See Table 1.1.a)

Table 1.1.a

Land Use/Land Cover	
Type	**Percentage**
Urban	9.17
Cropland	43.53
Pasture	7..81
Forest	37.12
Open Water	0.92
Wetlands	1.30
Bare/Mines	0.16

From the perspective of taxable land value, the distribution varies significantly from land use. Ohio has over 161 billion dollars of residential inventory and agriculture has nearly 9 billion (See Table 1.1.b)

Table 1.1.b

Taxable Value Inventory	
Type	**Value (in Billions)**
Residential	161.27
Agriculture	8.80
Industrial	9.46
Commercial	38.96
Mineral	0.13

DEMOGRAPHY

The last decennial US census placed Ohio's population at 11,353,140 with a projected population in 2030 of 12,317,610. The Ohio Department of Development, Office of Strategic Research has developed fact sheets for the state and each of Ohio's 88 counties. Based on statewide data, the largest racial group in Ohio is White followed by African-American (See Table 1.1.c)

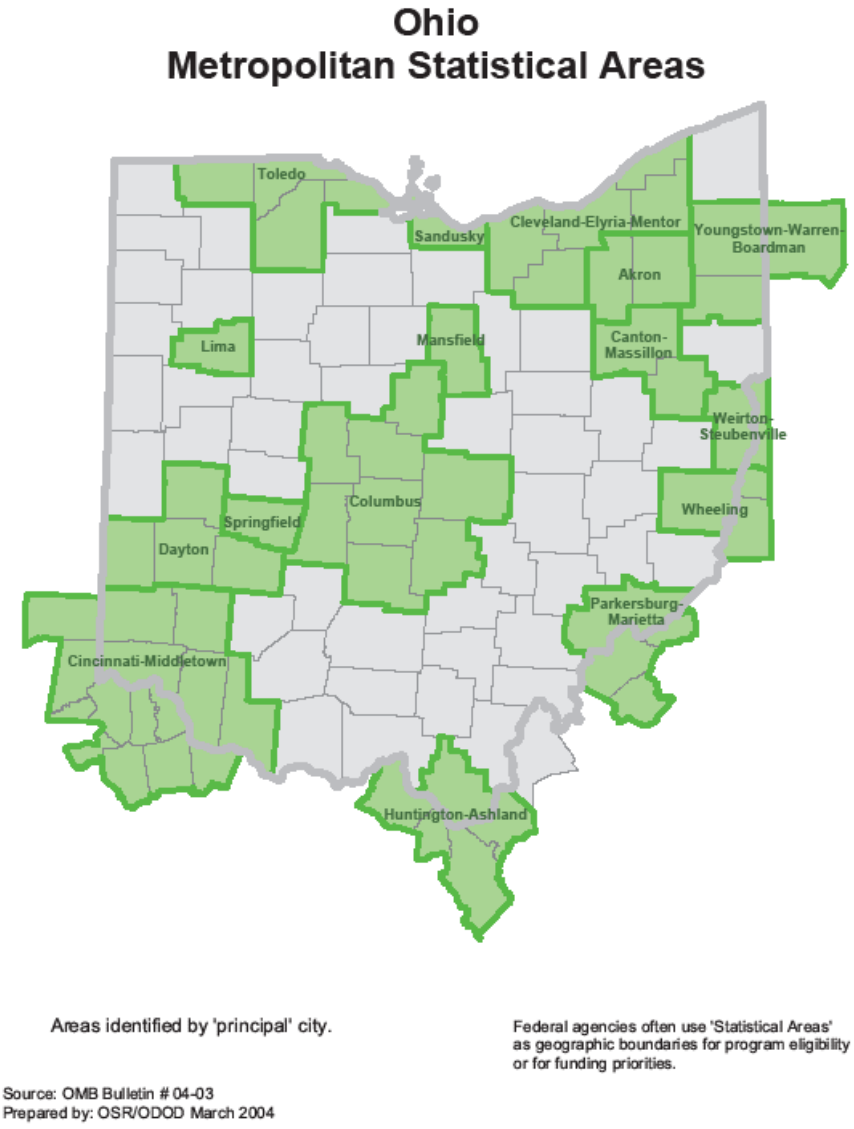
Table 1.1.c

Population		
Race	**Count**	**Percentage**
White	9,640,523	84.9
African-American	1,288,359	11.3
Native American	26,999	0.2
Asian	132,131	1.2
Pacific Islander	2,641	0.0
Other	89,149	0.8
Two or More Races	173,338	1.5
Hispanic (any race)	213,889	1.9

There are a total of 1,816,058 persons falling into minority categories making up 16 percent of the population. The median age of Ohioans is 36.2 years.

Ohio is home to three large metropolitan statistical areas (MSAs) located around the cities of Cleveland (2,148,143), Columbus (1,612,694) and Cincinnati (2,009,632) based on the 2000 census. There are an additional four notable moderate sized MSAs located around the cities of Akron (694,960), Dayton (843,835), Toledo (659,188) and Youngstown (602,964), see Map 1.1. a. Combined, these MSAs account for 8,571,416 people or 75 percent of the state's population. The central counties for these MSAs account for 1,065,355 African-Americans or 83 percent of the state population. Individual county populations range from a low of 12,806 in Vinton County located in south-east Ohio to a high of 1,393,978 in Cuyahoga County which is the center of the Cleveland MSA.

Map 1.1.a



Source: http://www.odod.state.oh.us/research/files/g115.pdf

Ohio contains a federally and state recognized demographic region knows as Appalachia. In 1965, the U.S. Congress identified counties in thirteen states along the Appalachian Mountain Range as part of the Appalachian Regional Commission. The Governor's Office of Appalachia represents the interests of the 29 counties comprising East Central, Southeast and Southern Ohio (See Map 1.1.b).

Map 1.1.b



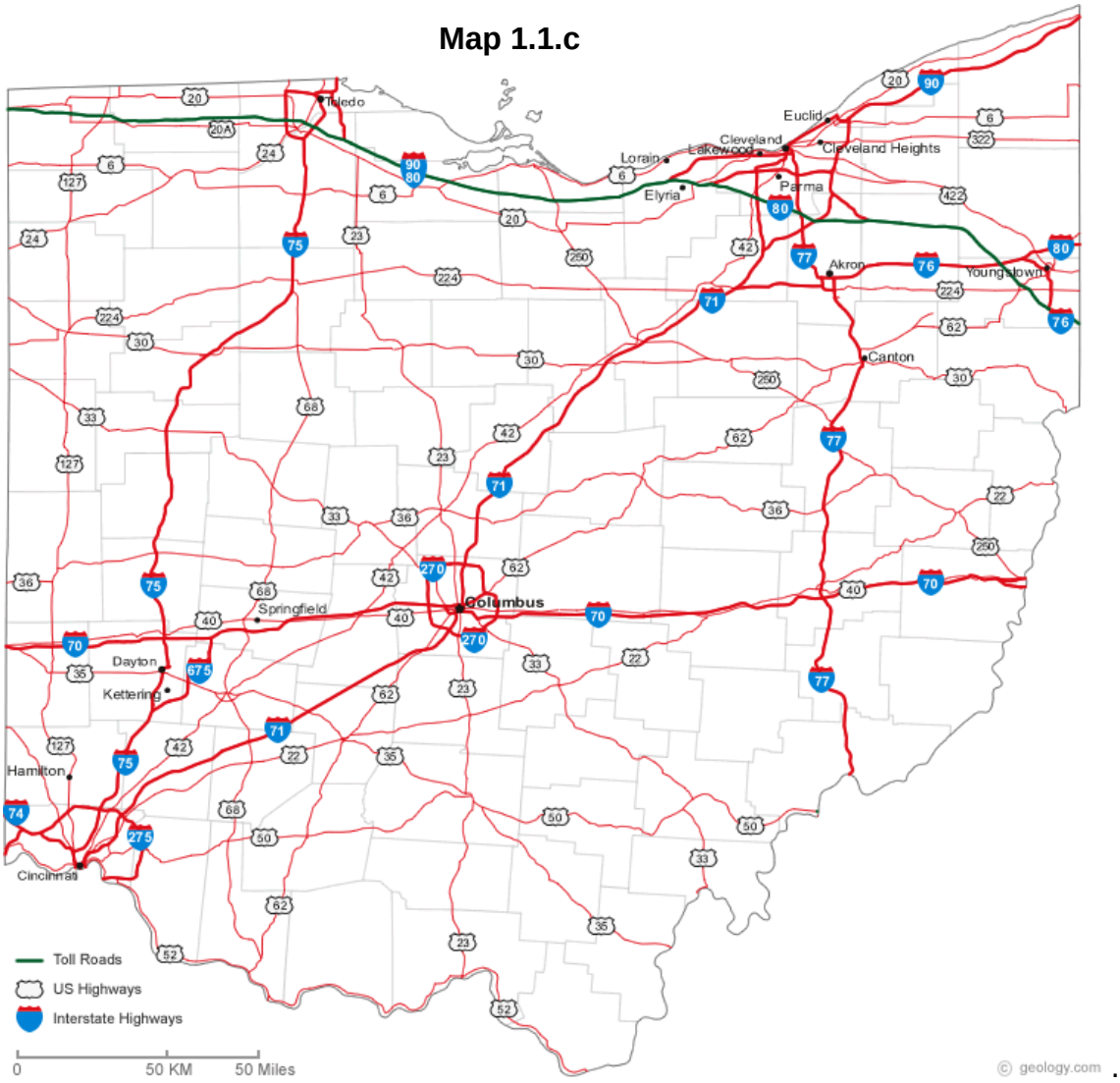
Source: http://www.odod.state.oh.us/research/files/s0/appalachia.pdf

Appalachia's population in 2000 was 1,455,313 of which 95.9 percent is white. In recent history, Appalachia has faced significant economic and developmental challenges.

TRANSPORTATION

Ohio has been dubbed the crossroads connecting the northeastern US with the Midwest (See Map 1.1.c). The map only represents federal highways and interstates. Three major east-west interstates (I-70, I-80 and I-90) traverse the state. Two north-south interstate (I-75 and I-77) run the full length of the state.

Map 1.1.c



Source: http://geology.com/state-map/ohio.shtml

LAND USE

REGIONAL LEVEL ANALYSIS

Ohio has elected to address hazard mitigation planning on three regions which have similar geographic, socio-economic and land-use characteristics. Still, there are a few anomalies, which do not reflect these general trends for the host region. For example, the region as a whole may be experiencing population growth, but some of the counties within that region may be experiencing significant population decline due to out-migration. Analyses of these types of differences are a necessary process in the development of the risk and vulnerability assessments for each hazard as well as for the development of the hazard mitigation strategies.

REGION 1

Region 1 is characterized by largely rural, largely agricultural counties with flat to gently rolling topography. It is the northwest portion of the state.

General Population

Region 1 experienced modest population increases between 1980 and 2000, but the average population increase between these two dates (1.18%) was less than half that of the state as a whole (4.7%). Regional growth is expected to continue at a rate of about 0.8% (see Table 1.1.d).

All communities did not share same increase in growth even though the region as a whole has experienced an increase in population (see Table 1.1.e). Six of the ten largest communities experienced population decreases between 1990 and 2000 with Lima (Allen County) having the largest decrease at –13.64%. The final four largest communities saw an increase. The most significant, with an increase of 11.45%, was in Troy (Miami County).

Table 1.1.d

Region 1 Population Trends 1950-2030		
YEAR	**POPULATION**	**% CHANGE 1980-2030**
1980	2,108,373	
1990	2,109,289	(+) 0.04%
2000	2,159,494	(+) 2.32%
2010 (projected)	2,185,992	(+) 1.21%
2020 (projected)	2,199,559	(+) 0.61%
2030 (projected)	2,214,691	(+) 0.68%
Source: Ohio Department of Development		

Table 1.1.e

Region 1: Percent Growth in Large Citys			
LARGEST AREAS	**1990**	**2000**	**% CHANGE**
Toledo	332,943	313,619	(-) 6.16%
Springfield	70,487	65,358	(-) 7.84%
Lima	45,549	40,081	(-) 13.64%
Findlay	35,703	38,967	(+) 8.37%
Marion	34,075	35,318	(+) 3.51%
Bowling Green	28,176	29,636	(+) 4.92%
Sandusky	29,764	27,844	(-) 6.89%
Troy	19,478	21,999	(+) 11.45
Sidney	18,710	18,135	(-) 3.17%
Tiffin	18,604	18,135	(-) 2.58%
Source: Ohio Department of Development			

Special Populations

The number of people within the special populations category generally increase with the size of the county or community. These special population groups include: infant children, elderly, non-English speaking populations, convalescing populations, assisted living populations, as well as inmates. The number of people with disabilities in the region's two largest counties, Lucas and Clark, is higher than most counties in the region.

Convalescing and Assisted Living Populations

There are a number of facilities in Region 1 that house special or disabled populations. They include 206 nursing homes and 54 hospitals with a total of 27,999 beds. There are also two mental hospitals within the region. Although these facilities have their own contingency plans, they coordinate with state, county and city hazard mitigation planning efforts.

Inmate Populations

There are 7 correctional facilities in Region 1 including 2 prisons in Allen County, 2 in Madison County, 2 in Marion County, and 1 in Lucas County. The combined inmate population in these facilities totals 9,316.

Ethnic / Poverty Level Considerations

Ethnicity, poverty levels, and the ability to comprehend the English language vary throughout the region. Caucasians comprise approximately 94% of the region's ethnic mix compared to the state's average of 85%. The region's largest minority (African-American) exceeds the state average of 11.5% in Allen (12.2%) and Lucas (17%) counties. African-Americans across the region as a whole comprise about 2.97% of the population (see Table 1.1.f).

Table 1.1.f

REGION 1 ETHNIC PROFILE		
POPULATION BY RACE	**NUMBER**	**PERCENT**
Total Population	**2,159,494**	**100%**
Total Minority	**114,179**	**5.30%**
Caucasian	2,029,924	93.9
African-American	38,708	1.80%
Hispanic	25,913	1.20%
Native American	4,319	0.20%
Asian	10,797	0.40%
Pacific Islander	388	0.01%
Other	24,739	1.10%
Two or More Races	31,615	1.40%
Source: Ohio Department of Development		

The Hispanic population encompasses the region's third largest ethnic group at 2.3% of the population. The main cores of Hispanic inhabitants are located in Defiance (7.2%) and Sandusky (7%) counties, which also have the largest number of foreign language speakers. Other ethnic groups in the region total less than 1% of the population. Poverty rates were highest in Lucas (13.9%), Allen (12.1%), Clark (10.7%) and Fayette (10.1%) counties. Three of these counties (Allen, Clark and Lucas) also have the largest ethnic minority populations.

Age Profiles

The median age group in Region 1 is 35.7. The age population categories, which require the most care after a disaster event are the "under 5 years of age" and over "65 years of age" and are distributed consistently throughout the region. The percentage of children under the age of 5 is about the same throughout Region 1 counties but range from a high of 7.6% of the population in Shelby County to a low of 5.2% in Ottawa County. The percentage of people 65 years of age and older is also consistent with percentages ranging from a low of 10.9% in Madison County to a high of 15.4% in Wyandot County (see Table 1.1.g).

Regional Economy

The economy in Region 1 is firmly based in manufacturing both in terms of work force and wages. Other economic sectors ranked in terms of workforce and wages include (2) State and Local Government, a (3) Health Care and Social Assistance, (4) Retail Trade and (5) Accommodations and food services. An economic downturn in manufacturing from 2000 to 2001 caused concern, but it still remains the region's principal economic sector.

Regional unemployment rates were 4.1% in 2000 and 5.7% in 2002. The highest median incomes were in Defiance ($44,938), Shelby ($44,507), Wood ($44,442), and Madison ($44,212) counties. Several other counties were slightly lower (see Table 1.1.i).

Table 1.1.g

Region 1 Population by Age						
COUNTY	Population (2000)	Under 5 Years Old	21 yrs. +	65 yrs. +	85 yrs. +	Median Age
Allen	108,473	7,258	75,005	15,366	1,293	36
Auglaize	46,611	3,164	31,970	6,692	947	36
Champaign	38,890	2,544	27,227	4,906	612	37
Clark	144,742	9,480	101,922	21,262	2,593	38
Clinton	40,543	2,878	27,787	4,932	573	35
Crawford	46,966	3,095	33,507	7,139	834	38
Defiance	39,500	2,787	27,222	2,083	606	36
Darke	53,309	3,570	37,416	8,132	1,156	37
Erie	79,551	4,809	57,129	12,383	1,400	40
Fayette	28,433	1,906	20,207	1,705	468	38
Fulton	42,084	3,019	28,637	5,353	717	36
Hancock	71,295	4,827	49,662	3,740	1,274	36
Hardin	31,945	2,042	21,623	4,124	525	33
Henry	29,210	1,946	19,971	1,655	552	36
Huron	59,487	4,452	40,409	7,354	819	35
Logan	46,005	3,169	32,029	6,395	687	37
Lucas	455,054	31,180	315,838	59,441	7,307	35
Madison	40,213	2,510	28,632	4,383	490	36
Marion	66,217	4,001	47,598	8,857	983	37
Morrow	31,628	2,061	21,824	3,624	402	36
Mercer	40,924	2,975	27,251	5,935	665	36
Miami	98,868	6,325	69,643	13,096	1,486	38
Ottawa	40,985	2,150	30,077	6,710	729	41
Paulding	20,293	1,334	14,022	2,555	287	36
Preble	42,337	2,682	29,774	5,573	541	38
Putnam	34,726	2,541	22,966	4,621	626	35
Sandusky	61,792	4,016	43,315	8,942	1,160	37
Seneca	58,683	3,664	40,430	8,251	903	36
Shelby	47,910	3,639	32,420	5,849	800	35
Van Wert	29,659	1,887	20,754	4,592	611	38
Williams	39,188	2,515	27,381	5,438	732	37
Wood	121,065	7,065	81,362	13,334	1,650	33
Wyandot	22,908	1,483	16,132	3,537	501	37
Region Median						37.6

Source: OSU Extension Data Center

The median annual income for Region 1 households is $41,204, which exceeds that of the State of Ohio ($40,204). The regional median income is greater, but 19 of its 33 counties are below the state mean (see Table 1.1.j). There are 8% of the people residing in Region 1 that live below the Ohio poverty level, which is not a high percentage, considering that the state average is about 10.6%. The Region 1 counties that have comparatively high numbers of people living below the poverty level include: Lucas (13.9%), Hardin (13.2%), Allen (12.1%), Crawford (10.4%) and Fayette (10.1%). These counties may warrant special consideration in pre- and post-disaster planning.

Table 1.1.h

REGION 1 EMPLOYMENT AND WAGES BY SECTOR				
Average Annual Employment			Total Wages (Thousands of Dollars)	
Sector	2000	2001	2000	2001
Manufacturing	260,633	245,059	$10,634,018	$9,986,163
State / Local Government Services	122,949	125,526	$3,764,211	$4,022,845
Health Care / Social Assistance	98,862	101,658	$2,841,026	$3,041,465
Retail Trade	117,691	115,028	$2,155,001	$2,194,993
Accommodations / Food Service	74,568	74,148	$722,296	$726,965
Source: Ohio Department of Development				

Table 1.1.i

Region 1 Unemployment Rate					
Labor Force	1998	1999	2000	2001	2002
Employed	1,013,300	1,070,000	1,053,900	1,070,100	993,400
Unemployed	51,900	50,800	47,600	52,800	67,400
Unemployment Rate	4.6	4.7	4.1	4.6	5.7
Source: Ohio Dept. of Development					

Housing

Year 2000 statistics indicate that there are approximately 898,925 housing units in Region 1, about 68,451 (7.6%) are vacant (see Table 1.1.k). Ottawa County has a surprisingly high number of vacant units (9,058) considering that its total number of units is about 25,532. The reasons for such a rate are unknown.

More than half of the houses in Region 1 were constructed before the implementation of the National Flood Insurance Program was implemented, which has important mitigation implications. It is likely that a majority of homes built in the region's floodplains do not provide adequate flood protection.

Table 1.1.j

REGION 1 HOUSEHOLD INCOME IN 1999		
	Number	Percent
Total Households	831,976	100%
Less than $10,000	68,836	8.3
$10,000 - $19,999	107,492	12.9
$20,000 - $29,999	118,720	14.3
$30,000 - $39,999	112,606	13.5
$40,000 - $49,999	99,910	12
$50,000 - $59,999	85,423	10.3
$60,000 - $74,999	94,263	11.3
$75,000 - $99,999	81,395	9.8
$100,000 - $149,999	44,473	5.3
$150,000 - $199,999	9,217	1.1
$200,000 or more	9,641	1.2
Source: Ohio Dept. of Development		

Table 1.1.k

Region 1 Housing by Type		
Housing Units	Number	Percent
Total Units	899,951	100%
Occupied Units	831,500	92%
Owner Occupied	603,356	67%
Renter Occupied	228,144	25%
Vacant Housing Units	68,451	8%
Source: Ohio Dept. of Development		

Transportation

Region 1 has a well-developed transportation system, despite the fact that 14 of its 33 counties do not have interstate highways. State and US Highway systems coupled with extensive rail networks meets ground transportation needs for residents in Region 1. Every county in Region 1 has at least 1 commercial airport. Four lake-oriented counties have ports (see Table 1.1.l).

Table 1.1.l

REGION 1 TRANSPORTATION SYSTEMS						
Counties	**Interstate Highways**	**US Highways**	**Rail Line (Number)**	**Principal Airport (Number)**	**Local Airport (Number)**	**Lakeports (Number)**
Allen	X	X	4		1	
Auglaize	X	X	6		1	
Champaign	X	X	3		2	
Clark	X	X	4		2	
Clinton	X	X	2		3	
Crawford	0	X	4		1	
Darke	0	X	2		1	
Defiance	0	X	2		1	
Erie	X	X	2		2	3
Fayette	X	X	4		1	
Fulton	X	X	2	1	1	
Hancock	X	X	3		2	
Hardin	0	X	4		2	
Henry	0	X	3		1	
Huron	0	X	4		2	
Logan	0	X	3		1	
Lucas	X	X	7	1		1
Madison	X	X	2		1	
Marion	0	X	4		1	
Mercer	0	X	1		1	
Miami	X	X	1		2	
Morrow	X	X	2		1	
Ottawa	X	X	2		6	
Paulding	0	X	2			
Preble	X	X	1			
Putnam	0	X	3		3	
Sandusky	X	X	3		2	
Seneca	0	X	5		4	
Shelby	X	0	3		1	
Van Wert	0	X	3		1	
Williams	X	X	3		1	
Wood	X	X	4		4	
Wyandot	0	X	3		1	

Source: Ohio Department of Development

REGION 2

Region 2 is defined by the I-71 corridor and contains all of Ohio's largest cities: Cleveland, Columbus, and Cincinnati. Geographically, it is also, in many respects, the boundary between the previously glaciated portion of the state, and the unglaciated Appalachian foothills.

General Population

The population in Region 2, according to the Ohio Department of Development, was 7,697,425 in 2000. The Region has experienced modest, but steady, population growth since 1980. The regional growth rate between 1990 and 2000 was about 4.9%, which is similar to the State of Ohio's rate of 4.7% for the same period. Regional growth rates are expected to increase until 2020, when the projected rate declines to (-) 95%. The projection differs from the projected growth rate for the State of Ohio by approximately 2.9%.

The counties in Region 2 do not share regional growth trends. Seven of the region's 10 largest communities registered a population decline in 1990 and 2000. The minus (-) 9% decline in Cincinnati (Hamilton Co.) contrasts with that of Columbus (Franklin Co.), which gained 11% during the same period (see Table 1.4.4.1.b). Rapid population gains or declines can have an effect on hazard mitigation strategies, but due to the relatively recent history of mitigation projects and the impact of Region 2 population changes, the effect it has on mitigation activities is unknown.

Special Populations

Region 2 shares the same special population concerns as Regions 1 and 3. The large number of people warranting special consideration coincides with the region's most populous areas. Nine of Ohio's ten most-populated counties are in Region 2.

Emergency managers and mitigation planners must pay particular attention to counties having large numbers of disabled people (e.g., Cuyahoga, Hamilton, and Montgomery counties), large numbers of people living below the state's poverty level (e.g., Cuyahoga, Mahoning, Ashtabula, and Montgomery counties), and those with limited English capabilities (e.g., Cuyahoga, Geauga, and Wayne counties). The age of the population is also an important factor. Each county is unique and must be treated accordingly.

Convalescing and Assisted Living Populations

There are a large number of hospitals and nursing homes in Region 2. They account for over 92,000 beds. The average availability of these beds is yet to be determined, but they figure prominently in pre- and post- disaster considerations. There also are 6 mental hospitals within the region. Although these facilities have their own contingency plans, they must be coordinated with state, county and city hazard mitigation planning efforts.

Table 1.1.m

Region 2: Population Trends 1980-2030		
YEAR	POPULATION	%CHANGE 1980 2030
1980	7,283,925	
1990	7,332,975	(+)0.67
2000	7,697,425	(+)4.9
2010 (projected)	9,043,250	(+)17.4
2020 (projected)	8,959,300	(-)0.95
2030 (projected)	9,275,575	(+)3.5
Source: Ohio Department of Development		

Table 1.1.n

Region 2: Largest Areas			
LARGEST AREAS	1990	2000	%CHANGE
Columbus	632,270	702,132	(+)11.0
Cleveland	505,616	478,403	(-)5.4
Cincinnati	364,040	331,285	(-)9.0
Akron	223,019	217,019	(-)2.7
Montgomery	182,044	166,179	(-)8.7
Youngstown	95,706	82,076	(+)4.0
Canton	84,161	80,806	(-)4.0
Lorain	71,245	68,652	(-)3.6
Hamilton	61,368	60,960	(-)0.7
Mentor	47,358	50,278	(+)6.2
Source: Ohio Department of Development			

Inmate Populations

There are 12 prisons within Region 2 with a total inmate population of about 16,000. Each prison doubtlessly has an operational plan that addresses a variety of circumstances. The challenge then is coordination with prison officials. The large inmate population and associated special considerations cannot be ignored.

Ethnic / Poverty Level Considerations

The minority population in Region 2 is about 10.7% of the regional total (7,697,425) (Table 1.1.o). African-Americans are the largest minority (7.7%) followed by Hispanic (1.5%), Asians (1%) and Native Americans (0.2%). Their concentrations are within the largest communities may be linked to the availability of jobs in the area. The greatest concentration of people with limited English skills is in those counties with the greatest Hispanic populations (Lorain, Cuyahoga, and Warren). There also appears to be a correlation with counties having the greatest number of people living below the state's poverty level and those counties having the greatest minority populations.

Table 1.1.o

Region 2 Ethnic Profile		
Population by Race	**Number**	**Percent**
Total Population	**7,697,425**	**100.0%**
Caucasian	6,873,800	89.3%
African-Amercian	592,701	7.7%
Hispanic	115,461	1.5%
Asian	76,974	1.0%
Native American	15,394	0.2%
Other	23,095	0.3%
Source: Ohio Department of Development		

Age Profiles

Region 2 age profiles are similar to those of the other two regions, i.e., median ages are about the same. The largest number of elderly people (65+) and children under 6 years of age coincides with the region's largest communities (see Table 1.1.p). These two populations warrant special considerations in pre- and post-disaster planning.

Table 1.1.p

Region 2 Population by Age								
COUNTY	Population (2000)	Under 6 Years Old	6 to 17 yrs.	18 to 24 yrs.	25 to 44 yrs.	45 to 64 yrs.	65 yrs and more	Median Age
Ashland	52,523	4,174	9,386	5,624	13,865	12,144	7,330	36.3
Ashtabula	102,728	7,831	18,986	7,917	28,714	24,231	15,049	37.6
Butler	332,807	27,809	58,435	39,350	99,695	72,050	35,468	34.2
Cuyahoga	1,393,978	109,351	238,028	110,451	410,675	308,296	217,177	37.3
Delaware	109,989	10,669	20,366	8,337	35,965	25,781	8,871	35.3
Fairfield	122,759	10,415	22,494	9,902	36,992	29,227	13,729	36.2
Franklin	1,068,978	91,743	176,113	124,804	357,916	214,118	104,284	32.5
Geauga	90,895	7,390	18,323	5,966	24,051	24,307	10,858	38.7
Green	147,886	10,495	24,773	20,204	40,256	34,797	17,361	35.6
Hamilton	845,303	68,237	149,904	81,114	251,146	180,887	114,015	35.5
Knox	54,500	4,145	9,390	6,480	14,639	12,332	7,514	36.5
Lake	227,511	16,677	38,301	16,356	68,088	55,996	32,093	38.6
Licking	145,491	12,113	25,737	12,632	42,889	34,805	17,315	36.6
Lorain	284,664	24,179	50,438	24,556	83,636	66,140	35,715	36.5
Mahoning	257,555	18,628	42,263	21,861	68,328	60,719	45,756	39.7
Medina	151,095	12,963	28,516	10,611	46,210	36,900	15,895	36.6
Montgomery	559,062	44,533	93,185	54,245	162,977	127,336	76,786	36.4
Pickaway	52,727	3,763	8,921	4,785	17,260	12,301	5,697	36.0
Portage	152,061	11,214	24,795	21,979	43,651	33,717	16,705	34.4
Richland	128,852	10,010	22,003	10,655	36,862	31,131	18,191	37.7
Stark	378,098	28,668	65,080	31,379	105,259	90,512	57,200	38.2
Summit	542,899	43,099	92,902	44,253	161,502	124,398	76,745	37.2
Trumbull	225,116	16,889	37,849	17,334	61,865	55,860	35,319	39.0
Warren	158,383	14,681	29,218	11,178	54,016	34,357	14,933	35.2
Wayne	111,564	9,467	21,159	10,985	31,135	25,184	13,634	35.4
Totals	7,697,424	619,143	1,326,565	712,958	2,297,592	1,727,526	1,013,640	

Source: Ohio Department of Development

Regional Economy

Manufacturing is the region's principal economic sector. Other sectors, in order of economic importance, include (2) state and local government services, (3) health care / social assistance (4) retail trade, and (5) accommodations and food service (see Table 1.1.q).

Region 2 unemployment rates fluctuated between a high of 5.4% in 2002 to a low of 3.7 % in 1998 (see Table 1.1.r). There is a correlation between unemployment rates and the fortunes of the manufacturing sector. Government and health care services have generated a large number of jobs in Region 2, after the manufacturing sector. The median household income in Region 2 is between $40,000 and $50,000 a year (see Table 1.1.s).

Table 1.1.q

REGION 2 EMPLOYMENT AND WAGES BY SECTOR				
	Average Annual Employment		Total Wages	
Sector	2000	2001	2000	2001
Manufacturing	652,221	606,989	$28,996,458	$26,871,639
State / Local Govt. Services	447,267	459,445	$15,406,840	$16,291,398
Health Care / Social Assistance	428,338	442,757	$13,557,070	$14,505,024
Retail Trade	478,173	468,025	$10,150,100	$10,303,520
Accommodations / Food Service	293,794	294,624	$3,333,391	$3,437,240
Source: Ohio Department of Development				

Table 1.1.r

Region 2 Unemployment Rate					
Labor Force	1998	1999	2000	2001	2002
Employed	3,746,700	3,786,800	3,809,400	3,857,200	3,786,500
Unemployed	253,600	257,200	250,800	261,500	317,800
Unemployment Rate	3.7	4.0	3.8	4.1	5.4
Source: Ohio Department of Development					

Table 1.1.s

HOUSEHOLD INCOME IN 1999		
	Number	Percent
Total Households	3,044,182	100%
Less than $10,000	271,392	8.9
$10,000 - $19,999	372,913	12.3
$20,000 - $29,999	401,931	13.2
$30,000 - $39,999	385,905	12.7
$40,000 - $49,999	329,588	10.8
$50,000 - $59,999	288,736	9.5
$60,000 - $74,999	332,233	10.9
$75,000 - $99,999	320,546	10.5
$100,000 - $149,999	222,733	7.3
$150,000 - $199,999	56,999	0.9
$200,000 or more	61,236	2
Source: Ohio Department of Development		

Housing

About one half of Region 2's housing stock was constructed prior to 1969, when the National Flood Insurance Program was created. This implies that a large number of houses constructed in the region's floodplains do not have adequate flood protection. Most of the homes in Region 2 are owner occupied (62.8%), as opposed to those occupied by renters (30.7%). The number of vacant homes is relatively low (6.5%), but livability of these vacant homes is unknown.

Table 1.1.t

Region 2 Housing By Type		
Housing Units	**Number**	**Percent**
Total Units	3,255,251	100.0%
Occupied Units	3,043,664	93.5%
Owner Occupied	2,043,508	62.8%
Renter Occupied	1,000,156	30.7%
Vacant Housing Units	211,587	6.5%
Source: Ohio Department of Development		

Transportation

Region 2 has a well-developed transportation system, which includes 6 principal airports and 65 local airports. Geauga and Knox Counties are the only Region 2 counties that do not have interstate highways. All are served by the US Highway system and a variety of rail lines. The region possesses both lake and river port facilities (see Table 1.1.u).

Table 1.1.u

REGION 2 TRANSPORTATION SYSTEMS						
County	**Interstate Highways (X)**	**US Hwys (X)**	**Rail Lines (number)**	**Principal Airport (number)**	**Local Airport (number)**	**Lake/River Ports (number)**
Ashland	X	X	3	0	1	0
Ashtabula	X	X	4	0	3	2
Butler	X	X	6	0	3	0
Cuyahoga	X	X	6	1	2	1
Delaware	X	X	3	0	1	0
Fairfield	X	X	0	0	2	0
Franklin	X	X	4	1	5	0
Geauga	0	X	1	0	2	0
Green	X	X	1	0	2	0
Hamilton	X	X	7	1	3	2
Knox	0	X	1	0	2	0
Lake	X	X	2	0	2	1
Licking	X	X	3	0	1	0
Lorain	X	X	4	0	5	1
Mahoning	X	X	4	0	4	0
Medina	X	X	4	0	3	0
Montgomery	X	X	3	1	5	0
Pickaway	X	X	3	0	2	0
Portage	X	X	6	0	5	0
Richland	X	X	3	0	3	0
Stark	X	X	5	1	1	0
Summit	X	X	6	0	3	0
Trumbull	X	X	4	1	2	0
Warren	X	X	1	0	2	0
Wayne	X	X	5	0	1	0
Sources: Ohio Department of Transporation - Ohio Department of Development						

REGION 3

Region 3 is defined largely as the Appalachian region of Ohio. This region consists largely of the Appalachian foothills, and also is the area of the state that has the most exposure to the Ohio River.

General Population

The population in Region 3 of 1,455,313, according to the Ohio Department of Development, demonstrated an increase of 82,620 people over a 10-year period (1990-2000). The 6% growth rate exceeds that of Ohio (4%) for the same period. Since 1950 the regional growth has increased steadily (see Table 1.1.v).

The region as a whole has seen an increase in population but some of the region's largest areas have experienced losses in population between 1990 and 2000 (see Table 1.1.w). These areas include Chillicothe (Ross County), Portsmouth (Scioto County), New Philadelphia (Tuscarawas County), Marietta (Washington County), and most notably Steubenville (Jefferson County), which experienced a 16% decrease.

Table 1.1.v

Region 3 Populations Trends 1980-2030		
YEAR	**POPULATION**	**% CHANGE 1950-2030**
1980	1,376,130	(+) 10.06 %
1990	1,372,893	(-) 0.23%
2000	1,455,313	(+) 5.66 %
2010 (projected)	1,515,136	(+) 3.94 %
2020 (projected)	1,571.19	(+) 3.56 %
2030 (projected)	1,610,301	(+) 2.42 %
Source: Ohio Department of Development		

Table 1.1.w

Region 3: Percent Growth in Large Citys			
LARGEST AREAS	**1990**	**2000**	**% Change**
Union twp., Clermont County	33,368	42,332	21%
Miami twp., Clermont County	28,199	36,632	23%
Zanesville, Muskingum County	26,778	25,586	5%
Chillicothe, Ross County	21,923	21,796	-1%
Athens, Athens County	21,265	21,342	0.03%
Portsmouth, Scioto County	22,676	20,909	-8%
Steubenville, Jefferson County	22,125	19,015	-16%
New Philadelphia, Tuscarawas County	15,698	15,039	-4%
Batavia twp., Clermont County	11,254	15,039	25%
Marietta, Washington County	15,026	14,515	-3%
Source: Ohio Department of Development			

Special Populations

There is a significant part of the population in Region 3 that could require higher levels of assistance before and after a disaster occurs. These special population groups include: infant children, elderly, non-English speaking populations, convalescing populations, assisted living populations, as well as inmates.

Convalescing and Assisted Living Populations

The convalescing and assisted living populations include hospitals, nursing homes, and mental institutions. The combined number of nursing homes and hospitals in Region 3 is 169 with a total 16,704 beds. There also are two mental institutions in the region. Although these facilities have their own contingency plans, they coordinate with state, county and city hazard mitigation planning efforts.

Inmate Populations

Region 3 also contains 6 prisons, which are divided among Belmont, Hocking, Noble, Ross, and Scioto counties. The inmate population at any point and time could be as high as 10,000. Most notably is Ross County, which contains 2 of the 6 prisons but approximately 48% of the population.

Ethnic / Poverty Level Considerations

Approximately 95.9% of the region's 1,455,313 people are Caucasian. This leaves a total minority population of 64,883; many who may not be fluent in the English language (see Tables 1.1.x). Athens and Coshocton counties have significantly large populations that speak languages other than English in the home (5.4 and 6.7% respectively). By comparison, the average for the State of Ohio is about 6.1 %.

Table 1.1.x

REGION 3 ETHNIC PROFILE		
POPULATION BY RACE	**NUMBER**	**PERCENT**
Total Population	**1,455,313**	**100%**
Total Minority	**64,883**	**0.6**
Caucasian	1,396,320	95.9
African-American	29,877	2.1
Hispanic	9,385	0.6
Native American	4,314	0.3
Asian	5,829	0.4
Pacific Islander	276	0
Other	2,955	0.2
Two of More Races	15,745	0.6
Source: Ohio Department of Development		

The African-American (2.1%) and Hispanic (0.6%) populations in Region 3 are comparatively small. The largest percentages of African Americans reside in Noble

and Ross counties (6.7% and 6.2%). The majority of Hispanics reside in Athens (1.0%) and Columbiana (6.2%) counties.

Approximately 10.6% of Ohio's populations live below the poverty level. Twenty-six counties within the region are above the state average. In comparison, three of the Region 3 counties have poverty levels less than that of the state average: Clermont: 7.1%, Coshocton: 9.1%, and Tuscarawas: 9.4%. Counties listed as below poverty level face potentially severe implications of ensuring mitigation actions are implemented and often must depend on outside resources.

Age Profiles

The median age in Region 3 is 35.7 years, which does not vary significantly from that in Region 1 (35.4) or Region 2 (36.4). However, the highest median age for any of Ohio's counties occurs in Region 3 (42 in Jefferson County).

The two populations, which often require special attention during disaster times, are children under 5 and those over 65. At present approximately 7.7% of the region's population is less than 5 years of age (112,477) and 13.7% of the population is 65 or more (198,859). Within the region Columbiana and Clermont counties contain the largest population above 65 years of age. Additionally Clermont County also contains the highest number of minor population under the age of 5.

Table 1.1.y

Region 3 Population by Age						
COUNTY	Population (2000)	Under 5 Years Old	21 yrs. +	65 yrs. +	85 yrs. +	Median Age
Adams	27,330	1,756	19,067	3,643	412	36
Athens	62,223	2,972	40,721	5,793	702	26
Belmont	70,226	3,531	52,526	12,758	1,503	41
Brown	42,285	2,979	29,024	4,914	540	35
Carroll	28,836	1,731	20,578	1,809	398	39
Columbiana	112,075	6,618	80,752	16,843	1,755	38
Clermont	177,977	13,550	121,525	16,747	1,692	35
Coshocton	36,655	2,351	25,608	5,375	579	38
Gallia	31,069	1,963	21,811	4,211	493	37
Guernsey	40,792	2,748	28,569	5,896	678	38
Harrison	15,856	914	11,713	2,804	383	41
Highland	40,875	2,906	28,241	5,649	666	36
Holmes	38,943	4,003	23,233	4,092	546	28
Hocking	28,241	1,879	20,023	3,708	410	38
Jackson	32,641	2,139	22,867	4,439	520	36
Jefferson	73,894	3,860	55,001	13,752	1,516	42
Lawerence	62,319	3,839	44,559	8,966	891	38
Meigs	23,072	1,312	16,625	3,406	386	39
Monroe	15,108	804	11,060	2,467	290	41
Morgan	14,897	903	10,548	2,327	256	39
Muskingham	84,585	5,637	58,767	12,092	1,536	36
Noble	14,058	703	10,229	1,836	227	36
Perry	34,078	2,505	23,095	4,093	434	35
Pike	27,695	1,905	19,054	3,756	467	35
Ross	73,345	4,544	53,040	8,928	984	37
Scioto	79,195	5,025	56,391	11,826	1,409	37
Tuscarawas	90,914	6,002	64,447	13,599	1,686	38
Vinton	12,806	921	8,807	1,551	148	36
Washington	63,251	3,691	45,586	3,925	1,094	39
Region Median						35.7

Source: Ohio Department of Development

Regional Economy

Region 3 is Ohio's most forested region containing 5,284,888 acres of woodland. The remaining acreage, 9,197,677 acres are committed to urban development. The economic base of Region 3 is deeply rooted in its land use.

Manufacturing was the primary source of regional income in 2000 and 2001, followed by (2) State / Local Government services, (3) Health Care, and (4) Retail Trade, and (5) Accommodations and Food Services. Despite a small down trend in 2001, manufacturing continues to be the principal source of regional employment and income. Of the five economic sectors, Retail Trade has experienced the greatest loss both in terms of work force and income. Approximately half of the jobs lost in manufacturing and retail trade in 2001 were offset by new jobs in State / Local Government, Health Care, and Accommodations / Food Services.

Regional unemployment rates fluctuated between 1998 and 2002, but the rates differed only by a percentage point or less. In 2002, unemployment rates reached a high of 6.3% leaving 42,900 workers in Region 3 without jobs (see Table 1.1.aa).

The state median income for that year was $40,459 and for the U.S., $41,994 (see Table 1.1.bb). In 1999, the median household income in Region 3 was $34, 452 that is considerably lower than the state or national median income.

Table 1.1.z

REGION 3 EMPLOYMENT AND WAGES BY SECTOR				
Average Annual Employment			Total Wages	
Sector	2000	2001	2000	2001
Manufacturing	96,437	90,446	$3,319,399	$3,163,486
State / Local Govt. Services	77,660	78,424	$2,209,606	$2,314,425
Healh Care / Social Assistance	56,320	58,217	$1,371,890	$1,495,107
Retail Trade	67,541	66,372	$1,158,953	$1,184,874
Accommodations / Food Services	37,944	37,944	$350,399	$357,216
Source: Ohio Department of Development				

Table 1.1.aa

Region 3 Unemployment Rate					
Labor Force	1998	1999	2000	2001	2002
Employed	628,600	623,100	631,700	640,600	636,200
Unemployed	39,500	41,400	38,200	35,500	42,900
Unemployemnt Rate	5.9	6.1	5.7	5.2	6.3
Source: Ohio Department of Development					

Table 1.1.bb

HOUSEHOLD INCOME IN 1999		
	Number	Percent
Total Households	556,353	100%
Less than $10,000	65,740	11.80%
$10,000 - $19,999	90,146	16.2
$20,000 - $29,999	87,653	15.8
$30,000 - $39,999	77,786	14
$40,000 - $49,999	63,165	11.4
$50,000 - $59,999	50,682	9.1
$60,000 - $74,999	50,147	9
$75,000 - $99,999	40,477	7.3
$100,000 - $149,999	20,641	3.7
$150,000 - $199,999	4,627	0.8
$200,000 or more	5,289	1
Source: Ohio Department of Development		

Housing

There were over 612,000 housing units in Region 3 (see Table 1.1.cc). The majority of the homes (68%) are owner-occupied and about 23% are rentals. There were 9% of the region's stocks that were vacant.

According to the Ohio Department of Development, approximately 71% of the region's housing stock was built before 1970, which indicates most construction, occurred prior to the federal floodplain mapping initiative. The structural integrity of the region's housing stock improved with the implementation of the National Flood Insurance Program (NFIP). Communities participating in the NFIP are routinely visited to ensure compliance with building and floodplain management standards, which ensures reduction in the vulnerability to flood related damage.

Table 1.1.cc

Region 3 Housing by Type		
Housing Units	**Number**	**Percent**
Total Units	612,632	100.00%
Occupied Units	556,263	90.80%
Owner Occupied	414,532	67.70%
Renter Occupied	141,731	23.10%
Vacant Housing Units	56,369	9.20%
Source: Ohio Department of Development		

Transportation

Table 1.1.dd provides a general overview of Region 3 transportation systems, which include interstate highways, US highways, rail lines, local airports, and river ports. There are no large (i.e., principal) airports in the Region.

Only six of twenty-nine counties are served by the interstate system, but most counties have at least one US highway. A major rail line serves all counties except Noble and eight counties have Ports along the Ohio River. Knowledge of transportation systems provides a basis for regional hazard mitigation and emergency response strategies.

Table 1.1.dd

REGION 3 TRANSPORTATION SYSTEMS						
County	**Interstate Highways**	**US Hwys**	**Rail Line (Number)**	**Principal Airport (Number)**	**Local Airport (Number)**	**Riverports (Number)**
Adams		X	1		1	
Athens		X	1		1	
Belmont	I -70	X	1		2	3
Brown		X	1		1	
Carroll		0	2		3	
Columbiana		X	2		2	2
Clermont		X	2		1	
Coshocton		X	1		2	
Gallia		X	2		1	2
Guernsey	I -70; I-77	X	1		1	
Harrison		X	2		1	
Highland		X	1		1	
Holmes		X	1		1	
Hocking		X	1		0	
Jackson		X	1		1	
Jefferson		X	3		2	3
Lawerence		X	2		1	2
Meigs		X	1		0	
Monroe		0	2		1	2
Morgan		0	1		1	
Muskingum	I - 70	X	4		2	
Noble	I - 70	0	0		1	
Perry		X	2		2	
Pike		X	2		1	
Ross		X	3		1	
Scioto		X	2		1	3
Tuscarawas	I - 77	X	3		1	
Vinton		X	1		1	
Washington	I - 77	X	1		0	2
Source: Ohio Department of Development						

1.2 PLANNING PROCESS

According to 44CRF 201.4(c)(1) Ohio's SHMP must provide a, 'Description of the planning process used to develop the plan, including how it was prepared, who was involved in the process, and how other agencies participated.'

STATE MITIGATION PLANNING ADVISORY TEAMS

State Hazard Mitigation Team (SHMT)

Prior to DMA 2000, Ohio had created a mitigation team, the SHMT, which served two primary functions: To provide input / score applications for FEMA mitigation programs and to provide general input on the State of Ohio's hazard mitigation policies. Today the SHMT continues to exist and is the lead advisory group involving mitigation project scoring and mitigation policy – which includes mitigation planning issues.

Currently, the SHMT includes the following entities:

- Ohio EMA Recovery Branch
- Ohio DNR – Division of Water – Floodplain Management Program
- Ohio Department of Development
- U.S. Army Corps of Engineers (Buffalo and Huntington Districts)
- FEMA (NFIP and Mitigation Branches)
- Emergency Management Association of Ohio
- Ohio EMA Mitigation Branch (non-voting)

Ohio Mitigation Plan Advisory Team (OMPAT)

For the initial creation of the SHMP, a larger advisory group called the OMPAT was created. This was to ensure that the initial development of the plan was comprehensive and inclusive. After the initial plan was completed, the OMPAT became defunct. From that point on, the SHMT, coordinating with various entities involved in different aspects of the SHMP, will provide overall plan guidance.

INITIAL STATE MITIGATION PLAN DEVELOPMENT & ADOPTION PROCESS (2005)

In early 2004, the SHMT outlined a draft of the plan and determined additional input from members of OMPAT was necessary to enhance the plan. The SHMT scheduled an initial meeting with potential members of the OMPAT in May 2004. The selection of state agencies invited was determined by the DAS comprehensive agency listing. Key criteria for receiving a POC request included agencies already involved with mitigation, agencies dealing with financial issues, and any agency that could be impacted during project development and implementation. Fifty-three State agencies received request for points of contact from Ohio EMA. Of those, 46 responded favorably and agreed to participate as needed in the State's mitigation planning process and provided points of contact for Ohio EMA (see Table 1.2.a). Eight of the 46 agencies attended the kick-off meeting and agreed to become members of the active OMPAT (see Table 1.2.d).

Invitations were also forwarded to the FEMA Region V Regional Director and Director of the Mitigation and Flood Insurance Directorate, the emergency management agencies of the five states contiguous to Ohio and the directors of the seven Ohio regional planning commissions (see Table 1.2.c). The only representatives from this category that were able to attend the meeting were from the West Virginia Office of Emergency Management and Pennsylvania Emergency Management Agency.

The meeting included a general introduction by the Ohio EMA Executive Director, which provided attendees with an overview of emergency management and natural hazard mitigation. The SHMO outlined the significance of and benefits received from mitigation planning and showed the state has received over $35M in mitigation funding from federal programs. The state mitigation planner discussed the detailed requirements of the two types of state plans (Standard and Enhanced) and a question and answer session provided an opportunity for attendees to query anyone present regarding the subject at hand. The attendees were then encouraged to become a part of the OMPAT. All attendees agreed to assist with the planning initiative by:

- Developing narrative;
- Conducting analyses;
- Reviewing and commenting on draft planning documents;
- Identifying new and existing goals and actions;
- Reviewing and commenting on final planning documents; and/or
- Promoting participation from fellow colleagues.

Table 1.2.a

Agencies That Have Received Invitations to Participate in the Planning Process			
Agency	**First Name**	**Last Name**	**Title**
Auditor of State	Betty	Montgomery	Auditor of State
Air Quality Development Authority	Mark R.	Shanahan	Executive Director
Ambulance Licensing Board	Robert F.	Featheringham	Executive Director
Architects & Landscape Board	William N.	Wilcox	Executive Director
Arts & Sports Facilities Commission	Kathleen M.	Fox	Executive Director
Attorney General	Jim	Petro	Attorney General
Board of Engineers & Surveyors	Mark T.	Jones	Executive Secretary
Board of Regents	Roderick	Chu	Chancellor
Board of Tax Appeals	Julia	Snow	Executive Director
Civil Rights Commission	G. Michael	Payon	Executive Director
Commission on Minority Health	Cheryl A.	Boyce	Executive Director
Counselor & Social Worker Board	Beth	Farnsworth	Executive Director
Dept. of Administrative Services	C. Scott	Johnson	Director
Dept. of Aging	Joan	Lawrence	Director
Dept. of Agriculture	Fred L.	Dailey	Director
Dept. of Commerce	Jeanette	Bradley	Lt. Governor/Director
Dept. of Development	Bruce E.	Johnson	Director
Dept. of Education	Susan T.	Zelman	Sup. of Public Instruction
Dept. of Health	James	Baird Jr.	Director
Dept. of Insurance	Ann Womer	Benjamin	Director
Dept. of Job & Family Services	Tom	Hayes	Director
Dept. of Mental Health	Michael F.	Hogan	Director
Dept. of Mental Retardation	Kenneth W.	Ritchey	Director
Dept. of Taxation	Pat	McAndrew	Interim Tax Comm.
Dept. of Transportation	Gordon	Proctor	Director
Dept. of Youth Services	Geno	Natalucci-Persichetti	Director
Dept. of Natural Resources	Samuel W.	Speck	Director
Dept. of Rehabilitation and Correction	Reginald A.	Wilkinson	Director
Employment Relations Board	Carol Nolan	Drake	Chairman
Environmental Protection Agency	Christopher	Jones	Director
Ethics Commission	David E.	Freel	Executive Director
Industrial Commission	William E.	Thompson	Chairman
Legal Rights Service	Carolyn S.	Knight	Executive Director
Legislative Information Services	George	Yeager	Director
Office of Budget and Management	R. Thomas W.	Johnson	Director
Office of the Adjutant General	Major General John H.	Smith	Adjutant General
Ohio Arts Council	Wayne P.	Lawson	Executive Director
Ohio Historical Society	Gary C.	Ness	Director
Ohio Library Board	Michael	Lucas	State Librarian
Public Utilities Commission	Alan R.	Schriber	Chairman
Public Works Commission	W. Laurance	Bicking	Director
Rail Development Commission	James E.	Seney	Executive Director
School Facilities Commission	Mary Lynn	Readey	Executive Director
Secretary of State	J. Kenneth	Blackwell	Secretary of State
Treasurer of State	Joseph	Deters	Treasurer of State
Veterinary Medical Board	Heather	Hissom	Executive Director

Table 1.2.b

Regional Planning Agency Invitation List			
Name	**Title**	**Department**	**City**
Theken	Section Director	Medina County Planning Department	Magadore
Efland	Section Director	Senior City, Planner City of Cincinnati	Cincinnati
Reddy	Section Director	City of Cleveland Heights Planning and Development	Cleveland
Gad	Section Director	ODOT Office of Urban and Corridor Planning	Columbus
Anderson	Section Director	City Planner, City of Kettering	Kettering
Etchie	Section Director	Transportation Planner, Mannik & Smith Group	Maumee

Table 1.2.c

List of Initial Kick off Meeting Attendees	
Name	**Agency**
Sharon Gbur	Ohio Environmental Protection Agency
Shawn Smith	Public Utilities Commission
Ron Grout	Ohio Department of Transportation
Scott Roberts	Ohio Department of Administrative Services
Chuck Kirschner	Ohio Department of Agriculture
Carol Shkolnik	Ohio Department of Aging
Karen Ernes	Ohio Department of Job and Family Services
Deborah LoSchiano	Board of Tax Appeals

Drafting the Plan

The development of the 2005 SHMP required the participation of many state and federal agencies. Their cooperation and assistance in the development of the mitigation plan made the completion of the plan possible.

The Ohio EMA Mitigation Branch initially worked with ODNR – Division of Water in the fall of 2003 to develop the flood and dam/levee failure sections of the HIRA. A FEMA DAE assisted the state in its planning efforts as it was handling multiple disasters at the time. The enhanced section of the original plan (formerly Section 7) was initially developed by the SHMO.

The development of the risk and vulnerability assessment portion of the State plan was partially completed through a contract FEMA assigned to URS; however, only portions of it were used for tornadoes, landslides, and winter storms. Other data was not used for a variety of reasons.

The initial SHMP provided a comprehensive inventory of local and state capabilities. The local capability assessments information was also identified in local plans. Ohio EMA Mitigation staff reviewed the plans, collected the information and created a database utilizing the 17 state certified local plans. The database included information on the types of plans for each jurisdiction and any future-planning activities. The information from the database was used to develop a narrative discussing the capabilities identified and the need for additional information.

The Ohio EMA Mitigation Branch sent surveys via e-mail to the participating state agencies to identify their capabilities. The survey requested the title of the agency, a contact name and telephone information. However, information on any agency policies, procedures, funding sources or programs that could impact mitigation activities was the main focus of the survey. The agencies were asked to determine if the program would support, hinder or facilitate mitigation actions. Ohio EMA received 21 responses to the surveys after follow-up phone calls and meetings with several agencies explained the significance of the survey process. The information received was incorporated in the Section 4.2 State Capability Assessment.

The state mitigation planner reviewed the existing goals, objectives and action items in the latest 409 SHMP. Any goal, objective or action item, which supports the current mitigation strategy and remained applicable to the hazards affecting Ohio for tornado, landslide, and severe winter storms were incorporated into the new mitigation plan.

The existing hazard mitigation goals and actions were evaluated and additional information was requested from various agencies. Each agency was asked to review, comment and identify any additional existing goals, related objectives and pending action items not currently documented. The state mitigation planners reviewed each response and incorporated any newly identified mitigation goals, related objectives or pending action items into the appropriate sections of the mitigation plan. The state mitigation planner reviewed the current hazard analysis and loss estimate to develop new mitigation goals, objectives and actions for the tornado, dam failure and severe winter storm sections. The newly identified mitigation goals, related objectives or pending action items were incorporated into the appropriate section of the mitigation plan. Plan update procedures were drafted by the Ohio EMA Mitigation Branch.

Reviewing the Plan

An electronic copy of a draft of the mitigation plan was posted on the Ohio EMA web page, hard copies were supplied to the state library of Ohio for distribution to the public, and notification was made through the Alert Newsletter to all county directors. A public survey regarding the draft plan was available on the Ohio EMA web page and included in all hard copies of the draft plan.

All surveys returned to the Ohio EMA were forwarded to the members of the OMPAT and SHMT for their review. The results of the surveys were discussed at regularly scheduled meetings of the OMPAT and SHMT. Recommendations made by the OMPAT and SHMT, from their assessment of the information from the public surveys, were incorporated into the mitigation plan.

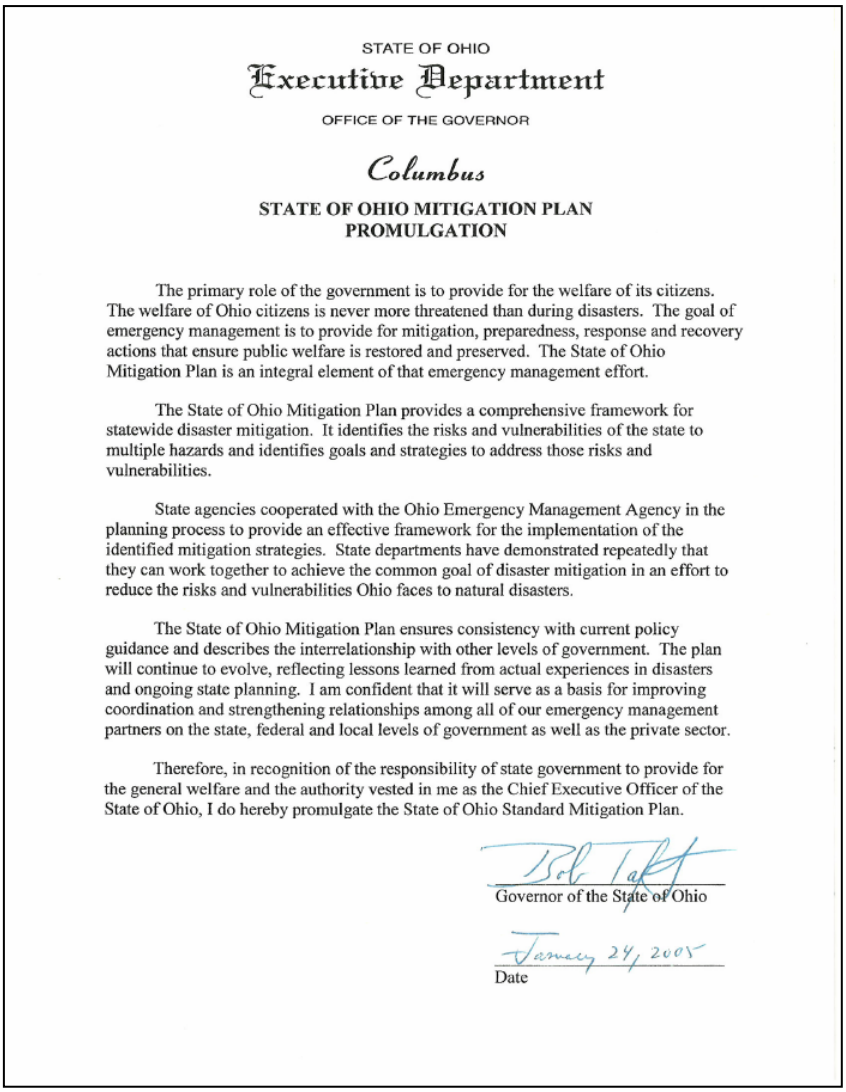
Approving the Plan

Members of the OMPAT worked cooperatively in the mitigation planning effort. The agencies developed narratives, conducted analyses, reviewed draft-planning documents and provided comments. All the information received from their plan development efforts were incorporated into the final plan.

The document was submitted to FEMA Region V for a courtesy compliance review of the plan with the CFR. Once FEMA completed the courtesy review and states the plan meets the requirements of the 44 CFR 201.4 the plan was returned to the state for promulgation by the Governor.

The final step after the approval of the plan by the OMPAT, SHMT, and FEMA (preliminary approval), was the Governor's Authorized Representative signature of the plan and promulgation by the Governor on January 24, 2005. FEMA gave Standard Plan approval on January 26, 2005. Some additional revisions were made to the plan, including a FEMA review of the state's management performance over the previous four quarters and FEMA gave Enhanced Plan approval on May 17, 2005.

After the plan received FEMA approval, copies were made available to the public on the Ohio EMA webpage.



STATE OF OHIO

Executive Department

OFFICE OF THE GOVERNOR

Columbus

STATE OF OHIO MITIGATION PLAN PROMULGATION

The primary role of the government is to provide for the welfare of its citizens. The welfare of Ohio citizens is never more threatened than during disasters. The goal of emergency management is to provide for mitigation, preparedness, response and recovery actions that ensure public welfare is restored and preserved. The State of Ohio Mitigation Plan is an integral element of that emergency management effort.

The State of Ohio Mitigation Plan provides a comprehensive framework for statewide disaster mitigation. It identifies the risks and vulnerabilities of the state to multiple hazards and identifies goals and strategies to address those risks and vulnerabilities.

State agencies cooperated with the Ohio Emergency Management Agency in the planning process to provide an effective framework for the implementation of the identified mitigation strategies. State departments have demonstrated repeatedly that they can work together to achieve the common goal of disaster mitigation in an effort to reduce the risks and vulnerabilities Ohio faces to natural disasters.

The State of Ohio Mitigation Plan ensures consistency with current policy guidance and describes the interrelationship with other levels of government. The plan will continue to evolve, reflecting lessons learned from actual experiences in disasters and ongoing state planning. I am confident that it will serve as a basis for improving coordination and strengthening relationships among all of our emergency management partners on the state, federal and local levels of government as well as the private sector.

Therefore, in recognition of the responsibility of state government to provide for the general welfare and the authority vested in me as the Chief Executive Officer of the State of Ohio, I do hereby promulgate the State of Ohio Standard Mitigation Plan.

Bob Taft

Governor of the State of Ohio

January 24, 2005

Date

2008 PLAN UPDATE AND ADOPTION PROCESS

Conceptually, it was realized that the 2008 Mitigation Plan Update would be much different than the original plan creation. As discussed earlier, it was determined that for the plan update, the OMPAT was not necessary and the overall coordination / advisory body could be the SHMT. Also, other agencies would need to be identified who could provide technical data for the HIRA development/review. The steps involved in updating the 2008 plan are identified below.

Step 1: Review the Existing State Mitigation Plan, Other Plans, Agency Goals and Objectives, Trends, Etc.

The initial 2005 SHMP identified several mitigation actions that were related to the update of the SHMP. Specifically, those were:

- Develop risk assessments and vulnerability analyses for remaining hazards of which Ohio was vulnerable.
- Update the SHMP with new information provided in approved local mitigation plans.
- Update the inventory of state assets worth more than $1 million (identify, geocode, and obtain better building specific information).
- Update goals, objectives, action.

The Ohio EMA Mitigation Branch SHMO and planner reviewed each section identifying where updates were either promised or needed.

The Ohio EMA Mitigation Branch also reviewed the following plans:

- State of Ohio Emergency Operations Plan
- State of Ohio Preparedness Plan
- State of Ohio Homeland Security Strategic Plan
- Ohio EMA Strategic Plan, and Ohio EMA Mitigation Branch Strategic Plan
- Mitigation Strategies and Administrative Plan updates after Federal disaster declarations
- Ohio Water Resource Council Strategic Plan
- National level plans for specific hazards (e.g., National Landslide Hazards Mitigation Strategy by the United States Geological Survey, NEHRP Strategic Plan Update)

As of April 2008, 82 of 88 Ohio counties have FEMA approved multi-jurisdictional plans for one or more jurisdictions. All Ohio counties are in the process of developing local mitigation plans. Each of these plans have been reviewed by the state and data in those plans were used to verify HIRA information, and “ground truth” state mitigation strategies, goals, objectives, and action items.

In 2006, the SHMT was asked to review the SHMP and identify specific areas of deficiency or those that needed improvement. Team members provided comments directly to Ohio EMA Mitigation Branch.

Step 2: Coordinate with SHMT – Obtain Input on Overall Plan Update Method

The SHMT meets several times per year (2-4) and discusses and is briefed on the SHMP update. SHMT members have been solicited for input, and several team members have contributed to the update. For example, the SHMT, during a meeting on 10/19/06, discussed the need for a state goal of better integrating Section 406 mitigation projects with Section 404 mitigation projects.

Step 3: Apply for PDM Funding for Plan Update Project

In mid-2006, The Ohio EMA Mitigation Branch began to prepare its framework for updating the SHMP. One project idea was developed that would assist with the enhanced plan update criteria- the creation of a portal / information management system that would 1) Store, catalog, and provide easy access to local mitigation plans, supported by a database which would capture key local plan data (e.g., highest ranking hazards, mitigation actions); 2) Provide planning and other mitigation program data such as information on past and active projects in an easily accessible public web portal that could be updated by local mitigation plan “keepers” and Ohio EMA Mitigation Branch and 3) Identify and catalog mitigation successes (included quantifying losses avoided) and cataloging/tracking acquired properties (which is even more important with the new Part 80 regulations for managing acquired properties).

The Ohio EMA Mitigation Branch developed and submitted a project application for the 2007 FEMA Pre-Disaster Mitigation Program (PDM). This project was selected for further review, and on April 15, 2008, the project was approved by FEMA. This project will begin in the summer of 2008 and is projected to finish in the fall of 2008. After completion, the state will submit for enhanced mitigation plan approval.

Step 4: Draft the HIRA

This step began in early 2007. Agencies with either the assigned statutory authority related to a particular hazard or those with expertise in dealing with the hazard were contacted and information was requested. For some hazards, such as tornado and winter storm, the Ohio EMA Mitigation Branch planner was the primary author. A table of the hazards and lead agency developing / updating the data is below:

Table 1.2.d

HAZARD	LEAD AGENCY
Flood	ODNR – Division of Water, Floodplain Management Program
Tornado	Ohio EMA Mitigation Branch; National Climate Data Center
Winter Storm	Ohio EMA Mitigation Branch; National Climate Data Center
Landslide	Ohio EMA Mitigation Branch; ODNR – Division of Geological Survey
Dam / Levee Failure	ODNR – Division of Water, Dam Safety Program
Wildfire	ODNR – Division of Wildlife
Seiche / Coastal Flooding	Ohio EMA Mitigation Branch; ODNR – Office of Coastal Management
Earthquake	ODNR – Division of Geology; Ohio EMA Mitigation Branch
Coastal Erosion	ODNR – Office of Coastal Management
Drought	Ohio EMA Planning Branch
Severe Summer Storms	Ohio EMA Mitigation Branch; National Climate Data Center
Invasive Species	Ohio EMA Mitigation Branch; ODNR – Division of Natural Areas & Preserves; Nature Conservancy
Land Subsidence	ODNR – Division of Geology; ODNR – Division of Mineral Resource Management; ODOT

In the 2008 update, HAZUS was used for three different hazards: flood, seiche/coastal flood, and earthquake. HAZUS work on the seiche/coastal flood and earthquake portion of the HIRA was performed in-house by the Mitigation Branch planner. HAZUS work on the flood portion of the HIRA was accomplished through two avenues – as a work activity identified in the Mitigation Strategy developed for the event DR-1720-OH, which was a flood disaster declared by the President on August 28, 2007; and as a deliverable under a Planning Assistance to States (PAS) cooperative agreement between Ohio EMA Mitigation Branch, Ohio DNR – Division of Water, and the USACE – Huntington District. The PAS project leveraged $40,000 in USACE funds, matched by $40,000 in state funds and resulted in Level 1 HAZUS runs for 41 of 88 Ohio counties for the 25-year and 100-year scenario floods.

Step 5: Draft/Update State Mitigation Strategy, Goals, Objectives, and Action Items

Since 2005, the goals, objectives and action items have been reviewed on an annual basis. The 2008 update contains a significant reformatting of this section, and identifies progress made, or not made on the 2005 goals. Also, input from the SHMT, local mitigation plans, and other state plans (such as that of the Ohio Water Resource Council) were reviewed. The Ohio EMA Mitigation Branch is the primary author of this section.

One element of the 2005 plan that was updated included the creation of a Severe Repetitive Loss (SRL) Addendum. The SRL Addendum was created to identify specific state mitigation goals and actions to address severe repetitive loss

properties and to receive a more favorable 90%/10% cost-share for FEMA's SRL program. This addendum was approved by FEMA on April 22, 2008.

Step 6: Draft other Elements of the Plan

The 2008 update reflects a restructuring of the plan from the 2005 version, including the incorporation of the enhanced plan criteria into the state plan. Due to the timing of the approval of the 2007 PDMC planning grant to update the SHMP, the enhanced plan elements will not be updated until the plan is being submitted for enhanced plan approval, likely in fall 2008.

Step 7: Review Draft

The 2008 update had several levels of review. First, elements of the HIRA where another agency was identified as the lead, either authored or co-authored the section. Second, the draft plan, after it was completed, was reviewed by the SHMT, and the Ohio EMA executive group. An action item that is identified in the State Mitigation Strategy of this plan is to have a comment form on the website for the public and any other interested party to provide input at any time.

Step 8: Approve Plan

The 2008 update was approved by the Ohio EMA Executive Director on May 16, 2008.

Step 9: Implement PDM Plan Update Project

Because the 2008 update is being done in two steps – standard plan approval in May and enhanced plan approval in fall – the PDM update project is key to the enhanced plan approval. This project will begin in summer, 2008.

Step 10: Draft Enhanced Plan Element Updates

These elements will be drafted after the standard plan review and approval in May 2008 and after the PDM plan update project is completed. It is anticipated that this will occur in fall 2008.

Step 11: Review Draft Enhanced Plan Element Updates

The enhanced plan review will follow a similar procedure that was used in the standard plan review.

Step 12: Approve Enhanced Plan Element Updates

The enhanced plan review will follow a similar procedure that was used in the standard plan review.

1.3 PLANNING PROCESS COORDINATION AMONG AGENCIES & ENTITIES

44 CFR 201.4 (b) recommends the solicitation of other state and appropriate federal agencies, and other entities participate in the development of the SHMP.

Agency coordination was significantly different in the 2008 update. First, there was not a need to solicit feedback from every agency, as the universe of agencies that desired to be involved was reduced significantly in 2005. Many of these agencies coordinate regularly with the Ohio EMA Mitigation Branch day-to-day, and others are part of the SHMT. Agency coordination in the 2008 update primarily dealt with updating the HIRA. It is anticipated that the web and a portal will further change the coordination for the 2011 update.

INITIAL STATE HAZARD MITIGATION PLAN (2005)

The Ohio EMA Mitigation Branch developed and distributed a participation letter to all state agencies. The letter explained the federal requirements for development of the SHMP and the importance of the plan for all State agencies. The agencies were encouraged to participate and the letter requested they identify a liaison to represent their agency in the development of the SHMP. In January of 2004, the participation letter was sent directly from the Director of the Department of Public Safety to all other cabinet level Directors.

In May of 2004 the Ohio EMA Mitigation Branch hosted a SHMP kick-off meeting and invited the forty-seven state agencies that received and responded to the participation letter. The State requested the agencies support the planning process as a member of the OMPAT, which guided the mitigations plan's development and future implementation. Membership in the OMPAT requires: review and comments of the draft plan, adoption of the final plan, attendance at an annual meeting to review and direct plan update and revision, and assistance in soliciting additional state agencies for OMPAT membership. The activities required of the OMPAT are minimal compared to those of SHMT.

The FEMA Region V RD and Region V Chief of the Mitigation and Flood Insurance DM received participation letters and an invitation to the mitigation plan kick-off meeting, but were unable to attend. However, R-V and R-IV staffs were active participants in the mitigation planning process.

There were other Federal agencies that actively participated in the development of the plan. These agencies included:

- NWS - assisted in the development of goals, actions, and provided data regarding natural weather events,
- USACE - assisted in project development
- USFW - provided environmental data and outlined steps for historical reviews
- HUD - provided information and data relevant to housing and development

- Census Bureau - provided data for the development of the socio-economic assessment and the vulnerability assessment.

The plan development also incorporated non-governmental groups. Ohio's Regional Planning Commissions and the Ohio VOAD contributed information for several sections of the plan. VOAD represents all the non-profit groups with interests in assisting disaster victims and is responsible for coordination of all volunteer activities associated with disaster events in Ohio. The Regional Planning and Development Organizations, established as not-for-profit corporations, receive financial support from a combination of federal and state grants and local service contracts. The Regional Commissions help counties plan and secure funding for development with projects such as construction, repair of upgrade of roads, bridges and water and sewer lines, industrial park development as well as projects related to community services, education and workforce development.

Ohio EMA Mitigation staff solicited assistance from The Ohio State University Department of Geology who works in cooperation with the ODNR Division of Geological Survey to study Ohio's earthquake risk. The OSU departments involved in goecoding, long-tem weather forecasting, hydrological analysis and urban development were also consulted during plan development. Potential updates for the plan could include information from The University of Akron's Emergency Management Program, which provides a network to other academic institutions including: the Ohio University Geology Department, OSU Agricultural Extension Office and University of Cincinnati Law Enforcement Program.

Pennsylvania and West Virginia State EMA's, which are contiguous to Ohio and have similar risks and vulnerabilities and were able to provide insight, which assisted Ohio in its state mitigation planning efforts.

2008 UPDATE

As was indicated in Section 1.2, several agencies who either had the statutory programmatic responsibility for various hazards or those that had data/expertise in those hazards were coordinated with closely (*see table 1.2.d*). Also, the Ohio Department of Administrative Services and Ohio Department of Insurance were consulted. Additionally, the agencies / entities that are members of the SHMT were consulted, often leading to extensive coordination (*see Section 1.2*) on the plan update.

1.4 PLAN INTEGRATION WITH OTHER INITIATIVES

The 44 CFR 201.4(b)(1) indicates the state's mitigation plan must be integrated to the extent possible with 1) ongoing state and/or regional planning efforts, 2) FEMA mitigation programs, and 3) other initiatives that provide guidance to state and regional agencies. This is optional for a standard SHMP and is required in an enhanced SHMP.

Plan/program integration is both vertical and horizontal. Vertical integration are actions to integrate at the local level and the national level. Horizontal integration are actions to integrate among different entities at the state level. The list below identifies the many ways the State of Ohio's mitigation plan and programs are integrated.

PROJECT / PROGRAM / AGENCY	INTEGRATED HOW?
STATE / REGIONAL / LOCAL PLANNING EFFORTS	
Local Hazard Mitigation Planning	Local entities are encouraged to review SHMP; state mitigation planner reviews all local plans for consistency with state plan and federal planning requirements. Local plan data reviewed and integrated into state plan. Ongoing.
Silver Jackets / USACE	Utilizing USACE Planning Assistance to States program, Silver Jackets is a pilot project/program that began in 2006. USACE provides expertise and resources to develop comprehensive local flood mitigation strategy. Data can be formulated into structural USACE plan, non-structural mitigation alternatives, or put into local mitigation plan. Various members of the SHMT participate in this project. 2006-ongoing.
Local Flood Plain Management Plans / USACE	Local FPM plan required whenever a community requests a USACE Feasibility Study for a flood control project. State and local mitigation officials work to ensure state and local plan goals are followed. Also, state and local mitigation plan is good source for data.
Southern Ohio Watershed Study / Appalachian Regional Commission (ARC)	ARC is doing a study to provide coordination assistance to five Appalachian counties and develop watershed plans to address a variety of challenges such as flooding, storm water, ecosystem degradation, etc. Ohio EMA Mitigation Branch and Ohio DNR – Floodplain Management Program providing local and state data including data from LHMP and SHMP. 2007-ongoing.
Strategic Plan Update / Ohio Water Resource Council	Ohio EMA Mitigation Branch participated in strategic plan update in 2006-07. Plan includes water hazards section that is consistent with SHMP, goals, and objectives. See website: http://www.dnr.state.oh.us/owrc/hazards/tabid/15359/Default.aspx. Complete.
Strategic Plan Update / Ohio Water Science Center	The USGS's Ohio Water Science Center has requested Ohio EMA Mitigation Branch to participate in the update of its strategic plan to ensure consistency with SHMP goals. Beginning May 2008.
Strategic Plan Update / Ohio Homeland Security	Ohio EMA Mitigation Branch participated in development of Ohio Homeland Security strategic plan – ensured that plan was consistent with State of Ohio Hazard Mitigation Plan. Complete March 2008.

PROJECT / PROGRAM / AGENCY	INTEGRATED HOW?
Strategic Plan Update / Ohio EMA	The Ohio EMA updates its strategic plan on an annual basis. Different branches, including the Mitigation Branch, formulate branch strategic goals and objectives. Ohio EMA Mitigation Branch strategic plan partially based on actions in SHMP.
STATE / FEDERAL MITIGATION PROGRAMS	
CDBG & HUD Supplemental Funds / ODOD	The Ohio Department of Development, ODOD works both independently and with Ohio's mitigation programs to provide funding for non-structural mitigation projects in communities with populations of low and moderate income individuals. Such funds may match FEMA mitigation programs or may be independent of them. Program staff are members of the SHMT.
NFIP & State Floodplain Management Program / ODNR–DOW Floodplain Management Program	State coordinating entity for the National Flood Insurance Program as well as state floodplain management office. Coordinates closely with Ohio EMA Mitigation Branch, and participates on the SHMT. Participates extensively on SHMP updates. Works with Ohio EMA during events and post-flood issues – coordinates education and outreach for community floodplain administrators. Staff from ODNR and OHIO EMA collaborated to create the Ohio Natural Hazard Mitigation Planning Guidebook. This document was developed to provide mitigation planning guidance to communities participating in the Appalachian Flood Risk Reduction Initiative (AFRRI) – which preceded large scale mitigation planning projects available through FEMA. As a result of AFRRI, 41 jurisdictions are covered by natural hazard mitigation plans. Information from the plans was utilized in the SHMP and will continually be updated as more plans are approved The Floodplain Management Program is also the administrator of the FEMA Map Modernization Program.
Ohio Dam Safety Program / ODNR–DOW, Dam Safety Program	The Dam Safety Program has statutory authority for permitting monitoring dams, levees in Ohio. The DSP provides data for the state plan HIRA.
Ohio Building Code / ODC, OBOA	The Ohio Department of Commerce and the Ohio Building Officials Association work on state building codes and issues related to hazards in Ohio. The Ohio Building Code includes provisions for flood hazards and the ODNR – Floodplain Management Program coordinates closely with them to ensure the OBC meets federal requirements. The state has utilized information provided in the "Flood Resistant Construction" section of the OBBC to outline expectations of the local jurisdictions, post-disaster, to help them achieve the flood reduction goals.
Ohio Mine Subsidence Insurance / OMSIUA	Underground mines, some of which have been abandoned for years, can be found in many parts of the state, particularly eastern Ohio. When buildings are constructed above mines, major damage to walls and foundations can occur if the mine collapses. The Ohio Legislature authorized the establishment of the Ohio Mine Subsidence Insurance Underwriting Association (OMSIUA), the Mine Subsidence Governing Board and the Mine Subsidence Insurance Fund in 1985. Ohio Mine Subsidence Insurance is a regional mitigation tool.

PROJECT / PROGRAM / AGENCY	INTEGRATED HOW?
Firewise / ODNR – Div. of Forestry	The ODNR – Division of Forestry administers the Firewise program which is a multi-organizational initiative designed to include not only fire safety professionals, but also homeowners, community leaders, planners, developers, and others in localized efforts to lessen the risk of interface wildfires. The ultimate goal of this program is to reduce the susceptibility of homes, communities, and structures to wildfire through cooperative education and mitigation techniques. The Division of Forestry contributed to the wildfire portion of the HIRA.
Unified Hazard Mitigation Programs (HMGP, FMA, RFC, SRL, PDM) / FEMA	FEMA's hazard mitigation program closely coordinated with and consistent with SHMP. FEMA sits on the SHMT. Ohio EMA utilizes FEMA repetitive loss lists to identify projects for funding under the FMA, RFC and SRL programs. The Ohio EMA Mitigation Branch manages these five programs. These programs provide a significant portion of the mitigation funding resources to implement mitigation activities. Funding from the PDM and HMGP programs are used as funds to assist the State of Ohio and local governments in developing and updating their hazard mitigation plans.
Disaster Resistant University / FEMA	The University of Akron was one of the few recipients of the DRU grant provided by FEMA. The DRU project was coordinated by Ohio EMA.
Structural Flood Control and Non-Structural Authorities / USACE	USACE sits on the SHMT which is the primary vehicle for program/plan coordination. Also, USACE participates in state plan update and FEMA's competitive PDM review panels.
Flood Gauging & Warning / USGS	The USGS's Ohio Water Science Center assists local entities by entering into cooperative agreements for stream gauging and warning system development. These mitigation activities are identified in numerous local mitigation plans and factor into the state mitigation strategy. The USGS also attends the SHMT meetings and assist the Ohio EMA Mitigation Branch with data development for benefit cost analyses. Finally the USGS also produces reports on significant flood events in cooperation with Ohio DNR and Ohio EMA.
OTHER INITIATIVES	
EMAP Accreditation	Emergency Management Accreditation Program (EMAP) is a standard-based voluntary assessment and accreditation process for state and local government. In 2008, Ohio EMA is seeking EMAP Accreditation and for requirements pertaining to a state mitigation program, the SHMP will be the basis for much of the information.

1.5 PLAN MAINTENANCE

Section 201.4(c) requires that the state plan to be reviewed, revised, and submitted for approval to the Regional Director of the FEMA every three years. The regulations require a plan maintenance process that includes an established method and schedule for monitoring, evaluating and updating the plan; a system for monitoring implementation of mitigation measures and project closeouts; and a system for reviewing goal and objective progress. The OHIO EMA Mitigation Branch staff is the primary group responsible for the plan maintenance but will utilize other entities review and comments as part of the maintenance process.

The State of Ohio Hazard Mitigation Plan is a living document and will be reviewed, and potentially updated constantly. The plan will be revised if conditions, under which the plan was developed, change such as new or revised Ohio policies, a major disaster, or availability of funding. This section describes how the plan will be monitored, evaluated and updated.

INITIAL STATE HAZARD MITIGATION PLAN MAINTENANCE, MONITORING, AND EVALUATION PROCESS (2003)

The initial SHMP described a process whereby the state would:

- Review the SHMP by SHMO and OMPAT every 12 months to include a review summary
- Review the SHMP after every disaster event
- Update the plan, primarily focusing on the HIRA and updating progress on goals/objectives/actions
- Monitor mitigation projects funded under FEMA's mitigation programs

Since the 2005 plan approval, these items were largely followed; however, the annual review was cursory and a review summary was not prepared due to the ongoing disaster workload. The state plan was reviewed after every disaster event, primarily to ensure that the required Mitigation Strategy was consistent with the state plan and to implement any recommended actions. The HIRA was updated and mitigation projects are subject to an extensive monitoring program. Updates to the state plan action items are discussed in Section 3 of this plan.

2008 STATE MITIGATION PLAN MONITORING, EVALUATION & UPDATE

The Ohio EMA Mitigation Branch will ensure that the SOHMP is monitored and make any adjustments necessary after Presidential disaster declarations. Also, the Mitigation Branch will monitor the plan on the annual basis with a written report to the SHMT and FEMA by the quarterly reporting deadline after the first of the year (April 30th).

Three types of evaluations will occur, annual evaluation of progress on the mitigation actions identified in Section 3, an interim update to achieve "enhanced plan" status, and a comprehensive evaluation in November 2009 which is approximately 1.5 years from the next update. This extensive evaluation will result in the framework for

the comprehensive plan update. The evaluation of mitigation actions will be included in the annual written report.

Before the comprehensive update that will be required in 2011, there will be an update of the SOHMP so an enhanced plan status can be achieved. This is anticipated to occur in the fall of 2008 (also discussed in Section 1.2, pg. 37). The enhanced plan update will occur after the implementation of the web portal project that was awarded to the State of Ohio as part of the 2007 PDMC program. The state web portal will allow for better organization, integration and tracking of local plans. As part of the 2008 enhanced plan update, hazard information will be updated as necessary and if any disasters are declared prior to that time, information will be incorporated as well. In fact, the entire plan will be reviewed and updated to include current information where necessary.

The comprehensive update of the SOHMP will begin roughly in November 2009. The method for updating will include consulting with the SHMT, posting the update process on the website and inviting general public feedback on the plan and the update by the Ohio EMA Mitigation Branch to be completed three months before the updated plan is due to FEMA.

MONITORING PROJECT IMPLEMENTATION

Section 201.4(c) requires that the standard state plan maintenance process must include a system for monitoring implementation of mitigation measures and project closeouts. The Ohio EMA Mitigation Branch is responsible for monitoring implementation of FEMA funded mitigation projects under HMGP, PDM, FMA RFC, and SRL. Review of implementation progress occurs quarterly with the submission of quarterly reports. These reports are verified by monitoring visits. Details of the extensive monitoring program can be found in the Administrative Plan attached in the Appendix. Ohio EMA Mitigation Branch will also coordinate the monitoring of the actions identified in Section 4 of this plan.

Likewise, project closeout procedures can be found in the Administrative Plan. Because project closeouts are a priority for FEMA Region V, they have been included as a strategic goal for the Ohio EMA Mitigation Branch.

1.6 COMPLIANCE WITH FEDERAL LAWS AND REGULATIONS

The 44 CFR 201.4(c)(7) indicates that the SHMP must include assurances that the state will comply with all applicable Federal statutes and regulations in effect with respect to the periods for which it receives grant funding, in compliance with CFR 13.11(c). The state will amend its plan whenever necessary to reflect change in state or Federal laws and statutes as required in CFR 13.11(d).

Through the development and enforcement of this plan, the State of Ohio will comply with all provisions in 44 Code of Federal Regulations, Part 13, as well as Subchapter B-Insurance and Mitigation, Subchapter D- Disaster Assistance and Subchapter F-Preparedness. Additionally, the assurances listed below are provided as documentation that the state or any subsequent sub-grantee (recipients) that receive federal grant funds will comply with all applicable Federal statutes and regulations. The state will amend the plan whenever necessary to reflect changes in federal statutes and regulations or material changes in state law, organization, policy or state agency operations.

To the extent the following provisions apply to the award of assistance:

a) Recipient possesses legal authority to enter into agreements and to execute the proposed programs;

b) Recipient's governing body has duly adopted or passed as an official act a resolution, motion or similar action authorizing the execution of hazard mitigation agreements, including all understandings and assurances contained therein, and directing and authorizing the Recipient's chief administrative officer or designee to act in connection with any application and to provide such additional information as may be required;

c) No member of or delegate to the Congress of the United States, and no Resident Commissioner, shall be admitted to any share or part of any agreement or to any benefit to arise from the same. No member, officer, or employee of the Recipient or its designees or agents, no member of the governing body of the locality in which the program is situated, and no other public official of such locality or localities who exercises any functions or responsibilities with respect to the program during his tenure or for one year thereafter, shall have any interest direct or indirect, in any contract or subcontract, or the proceeds thereof, for work to be performed in connection with the program assisted under this plan. The Recipient shall incorporate or cause to be incorporated, in all such contracts or subcontracts, a provision prohibiting such interest pursuant to the purpose state above;

d) All Recipient contracts for which the State Legislature is in any part a funding source, shall contain language to provide for termination with reasonable costs to be paid by the Recipient for eligible contract work completed prior to the date the notice of suspension of funding was received by the Recipient. Any cost incurred after the Recipient receives a notice of suspension or termination may not be funded with funds provided under a grant agreement unless previously approved in writing by the Department. All Recipient

contracts shall contain provisions for termination for cause or convenience and shall provide for the method of payment in such event;

e) Recipient will comply with:

1) Contract Work Hours and Safety Standards Act of 1962, 40 U.S.C. 327 et seq., requiring that mechanics and laborers (including watchmen and guards) employed on federally assisted contracts be paid wages of not less than one and one-half times their basic wage rates for all hours worked in excess of forty hours in a work week; and

2) Federal Fair Labor Standards Act, 29 U.S.C. Section 201 et seq., requiring that covered employees be paid at least the minimum prescribed wage, and also that they be paid one and one-half times their basic wage rates for all hours worked in excess of the prescribed work-week.

f) Recipient will comply with:

1) Title VI of the Civil Rights Act of 1964 (P.L. 88-352), and the regulations issued pursuant thereto, which provides that no person in the United States shall on the grounds of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity for which the Recipient receives Federal financial assistance and will immediately take any measures necessary to effectuate this assurance. If any real property or structure thereon is provided or improved with the aid of Federal financial assistance extended to the Recipient, this assurance shall obligate the Recipient, or in the case of any transfer of such property, any transferee, for the period during which the real property or structure is used for a purpose for which the Federal financial assistance is extended, or for another purpose involving the provision of similar services or benefits;

2) Any prohibition against discrimination on the basis of age under the Age Discrimination Act of 1975, as amended (42 U.S.C.: 6101-6107), which prohibits discrimination on the basis of age or with respect to otherwise qualified handicapped individuals as provided in Section 504 of the Rehabilitation Act of 1973;

3) Executive Order 11246 as amended by Executive Orders 11375 and 12086, and the regulations issued pursuant thereto, which provide that no person shall be discriminated against on the basis of race, color, religion, sex or national origin in all phases of employment during the performance of federal or federally assisted construction contracts; affirmative action to insure fair treatment in employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff/termination, rates of pay or other forms of compensation; and election for training and apprenticeship;

g) The Recipient agrees to comply with the Americans With Disabilities Act (Public aw 101-336, 42 U.S.C. Section 12101 et seq.), where applicable, which prohibits discrimination by public and private entities on the basis of

disability in the areas of employment, public accommodations, transportation, state and local government services, and in telecommunications;

h) Recipient will comply with Title IX of the Education Amendments of 1972, as amended (20 U.S.C.: 1681-1683 and 1685 - 1686), which prohibits discrimination on the basis of sex;

i) Recipient will comply with the Comprehensive Alcohol Abuse and Alcoholism Prevention, Treatment and Rehabilitation Act of 1970, (42 U.S.C. 4521-45-94) relating to nondiscrimination on the basis of alcohol abuse or alcoholism;

j) Recipient will comply with 523 and 527 of the Public Health Service Act of 1912 (42 U.S.C. 290 dd-3 and 290 ee-3), as amended, relating to confidentiality of alcohol and drug abuse patient records;

k) Recipient will comply with Title VIII of the Civil Rights Act of 1968, 42 U.S.C. 2000c and 42 3601-3619, as amended, relating to non-discrimination in the sale, rental, or financing of housing, and Title VI of the Civil Rights Act of 1964 (P.L. 88-352), which prohibits discrimination on the basis of race, color or nation origin;

l) Recipient will comply with the Intergovernmental Personnel Act of 1970, 42 U.S.C. 4728-4763;

m) Recipient will comply with the Rehabilitation Act of 1973, Section 504, 29 U.S.C. 794, regarding non-discrimination;

n) Recipient will establish safeguards to prohibit employees from using positions for a purpose that is, or gives the appearance of, being motivated by a desire for private gain for themselves or others, particularly those with whom they have family, business, or other ties pursuant to Section 112.313 and Section 112.3135, FS;

o) Recipient will comply with the Anti-Kickback Act of 1986, 41 U.S.C. Section 51 which outlaws and prescribes penalties for "kickbacks" of wages in federally financed or assisted construction activities;

p) Recipient will comply with the Hatch Act (18 USC 594, 598, 600-605), which limits the political activities of employees;

q) Recipient will comply with the flood insurance purchase and other requirements of the Flood Disaster Protection Act of 1973 as amended, 42 USC 4002-4107, including requirements regarding the purchase of flood insurance in communities where such insurance is available as a condition for the receipt of any Federal financial assistance for construction or acquisition purposes for use in any area having special flood hazards. The phrase "Federal financial assistance" includes any form of loan, grant, guaranty, insurance payment, rebate, subsidy, disaster assistance loan or grant, or any other form of direct or indirect Federal assistance;

r) Recipient will require every building or facility (other than a privately owned residential structure) designed, constructed, or altered with funds provided under a grant agreement to comply with the "Uniform Federal Accessibility

Standards," (AS) which is Appendix A to 41 CFR Section 101-19.6 for general type buildings and Appendix A to 24 CFR Part 40 for residential structures. The Recipient will be responsible for conducting inspections to ensure compliance with these specifications by the contractor;

s) Recipient will, in connection with its performance of environmental assessments under the National Environmental Policy Act of 1969, comply with Section 106 of the National Historic Preservation Act of 1966 (U.S.C. 470), Executive Order 11593, 24 CFR Part 800, and the Preservation of Archaeological and Historical Data Act of 1966 (16 U.S.C. 469a-1, et seq.) by:

   1) Consulting with SHPO to identify properties listed in or eligible for inclusion in the National Register of Historic Places that are subject to adverse effects (see 36 CFR Section 800.8) by the proposed activity; and

   2) Complying with all requirements established by the State to avoid or mitigate adverse effects upon such properties.

   3) Notifying FEMA and the state if any project may affect a historic property. When any of Recipient's projects funded under a grant agreement may affect a historic property, as defined in 36 CFR 800. (2)(e), FEMA may require Recipient to review the eligible scope of work in consultation with SHPO and suggest methods of repair or construction that will conform with the recommended approaches set out in the Secretary of Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings 1992 (Standards), the Secretary of the Interior's Guidelines for Archeological Documentation (Guidelines) (48 Federal Register 44734-37), or any other applicable Secretary of Interior standards. If FEMA determines that the eligible scope of work will not conform with the Standards, Recipient agrees to participate in consultations to develop, and, after execution by all parties, to abide by, a written agreement that establishes mitigation and recondition measures, including but not limited to, impacts to archeological sites, and the salvage, storage, and reuse of any significant architectural features that may otherwise be demolished.

   4) Notifying FEMA and the state if any project funded under a grant agreement will involve ground disturbing activities, including, but not limited to: subsurface disturbance; removal of trees; excavation for footings and foundations; and installation of utilities (such as water, sewer, storm drains, electrical, gas, leach lines and septic tanks) except where these activities are restricted solely to areas previously disturbed by the installation, replacement or maintenance of such utilities. FEMA will request the SHPO's opinion on the potential that archeological properties may be present and be affected by such activities. The SHPO will advise Recipient on any feasible steps to be accomplished to avoid any National Register eligible archeological property or will make recommendations for the development of a treatment plan for the recovery of archeological data from the property.

If Recipient is unable to avoid the archeological property, it will develop, in consultation with the SHPO, a treatment plan consistent with the Guidelines and take into account the Advisory Council on Historic Preservation (Council) publication "Treatment of Archeological Properties". Recipient shall forward information regarding the treatment plan to FEMA, the SHPO and the Council for review. If the SHPO and the Council do not object within 15 calendar days of receipt of the treatment plan, FEMA may direct Recipient to implement the treatment plan. If either the Council or the SHPO object, Recipient shall not proceed with the project until the objection is resolved.

5) Notifying the state and FEMA as soon as practicable: (a) of any changes in the approved scope of work for a National Register eligible or listed property; (b) of all changes to a project that may result in a supplemental DSR or modify an HMGP project for a National Register eligible or listed property; (c) if it appears that a project funded under a grant agreement will affect a previously unidentified property that may be eligible for inclusion in the National Register or affect a known historic property in an unanticipated manner. Recipient acknowledges that FEMA may require Recipient to stop construction in the vicinity of the discovery of a previously unidentified property that may be eligible for inclusion in the National Register or upon learning that construction may affect a known historic property in an unanticipated manner. Recipient further acknowledges that FEMA may require Recipient to take all reasonable measures to avoid or minimize harm to such property until FEMA concludes consultation with the SHPO. Recipient also acknowledges that FEMA will require, and Recipient shall comply with, modifications to the project scope of work necessary to implement recommendations to address the project and the property.

6) Acknowledging that, unless FEMA specifically stipulates otherwise, it shall not receive funding for projects when, with intent to avoid the requirements of the PA or the NHPA, Recipient intentionally and significantly adversely affects a historic property, or having the legal power to prevent it, allowed such significant adverse affect to occur.

t) Recipient will assist the awarding agency in assuring compliance with the National Historic Preservation Act of 1966, as amended, 16 U.S.C. 270;

u) Recipient will assist the awarding agency in assuring compliance with the Preservation of Archeological and Historical Preservation Act of 1966, 16 U.S.C. 469a, et seq;

v) Recipient will comply with the requirements of Titles II and III of the Uniform Relocation Assistance and Property Acquisition Policies Act of 1970, 42 U.S.C. 4621-4638, which provide for fair and equitable treatment of persons displaced or whose property is acquired as a result of Federal or federally assisted programs;

w) Recipient will assure project consistency with the approved State program developed under the Coastal Zone Management Act of 1972, 16 U.S.C. 1451-1464; and

x) With respect to demolition activities, recipient will:

1) Create and make available documentation sufficient to demonstrate that the Recipient and its demolition contractor have sufficient manpower and equipment to comply with the obligations as outlined in a grant agreement.

2) Return the property to its natural state as though no improvements had ever been contained thereon.

3) Furnish documentation of all qualified personnel, licenses and all equipment necessary to inspect buildings located in Recipient's jurisdiction to detect the presence of asbestos and lead in accordance with requirements of the U.S. Environmental Protection Agency, the Ohio Department of Environmental Protection and the County Health Department.

4) Provide documentation of the inspection results for each structure to indicate:

- Safety Hazards Present
- Health Hazards Present
- Hazardous Materials Present

5) Provide supervision over contractors or employees employed by Recipient to remove asbestos and lead from demolished or otherwise applicable structures.

6) Leave the demolished site clean, level and free of debris.

7) Notify the department promptly of any unusual existing condition which hampers the contractors work.

8) Obtain all required permits.

9) Provide addresses and marked maps for each site where water wells and septic tanks are to be closed, along with the number of wells and septic tanks located on each site. Provide documentation of closures.

10) Comply with mandatory standards and policies relating to energy efficiency that are contained in the state energy conservation plan issued in compliance with the Energy Policy and Conservation Act (Public Law 94-163).

11) Comply with all applicable standards, orders, or requirements issued under Section 112 and 306 of the Clean Air Act (42 U.S.C. 1857 (h), Section 508 of the Clean Water Act (33 U.S. 1368), Executive Order 11738, and the U.S. Environmental Protection Agency regulations (40 CFR Part 15 and 61). This clause shall be added to any subcontracts.

12) Provide documentation of public notices for demolition activities.

y) Recipient will comply with Lead-Based Paint Poison Prevention Act (42 U.S.C.: 4821 et seq.), which prohibits the use of lead based paint in construction of rehabilitation or residential structures;

z) Recipient will comply with the Energy Policy and Conservation Act (P.L. 94-163; 42 U.S.C. 6201-6422), and the provisions of the state Energy Conservation Plan adopted pursuant thereto;

aa) Recipient will comply with the Laboratory Animal Welfare Act of 1966, 7 U.S.C. 2131-2159, pertaining to the care, handling, and treatment of warm blooded animals held for research, teaching, or other activities supported by an award of assistance under this agreement;

bb) Recipient will comply with the Clean Air Act of 1955, as amended, 42 U.S.C. 7401-7642;

cc) Recipient will comply with the Clean Water Act of 1977, as amended, 42 U.S.C. 7419-7626;

dd) Recipient will comply with the Endangered Species Act of 1973, 16 U.S.C. 1531-1544;

ee) Recipient will comply with environmental standards which may be prescribed pursuant to the National Environmental Policy Act of 1969, 42 U.S.C. 4321-4347;

ff) Recipient will comply with the environmental standards that may be prescribed pursuant to the Safe Drinking Water Act of 1974, 42 U.S.C. 300f-300j, regarding the protection of underground water sources;

gg) Recipient will comply with the Wild and Scenic Rivers Act of 1968, 16 U.S.C. 1271-1287, related to protecting components or potential components of the national wild and scenic rivers system;

hh) Recipient will comply with the following Executive Orders: EO 11514 (NEPA); EO 11738 (violating facilities); EO 11988 (Floodplain Management); EO 11990 (Wetlands); and EO 12898 (Environmental Justice);

ii) Recipient will comply with the Coastal Barrier Resources Act of 1977, 16 U.S.C. 3510;

jj) Recipient will comply with the Fish and Wildlife Coordination Act of 1958; 16 U.S.C. 661-666.

1.7 ASSURANCES / PROMULGATION

The State of Ohio Hazard Mitigation Plan meets the standard requirements of Section 409 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act of 1988, 42 United States Code Sections 5121 and following (commonly referred to as the Stafford Act - Public Law 93-288). Additionally, this plan meets the SRL planning requirements of 44 Code of Federal Regulations, Part 79.4 (SRL and FMA beginning in 2009).

It is intended that this plan also meet the requirements of the Section 322 of the Stafford Act which requires that States, as a condition of receiving federal disaster mitigation funds, have a mitigation plan in place that describes the planning process for identifying hazards, risk and vulnerabilities, identifies and prioritizes mitigation actions, encourages the development of local mitigation and provides technical support for these efforts. In addition, the Act requires local and tribal governments to also have mitigation plans as a condition of receiving disaster mitigation funds.

The development and implementation of this strategy is authorized and/or required by the following state statutes:

Chapter 5502, Ohio Revised Code (specifically Section 5502.22 establishes the Ohio Emergency Management Agency and requires plan development).

Chapter 5502, Ohio Revised Code (specifically Sections 5502.26, 5502.27, and 5502.271 require the establishment of county emergency management agencies and plan development).

The adoption and promulgation of the 2008 update is being done by the Executive Director of the Ohio EMA in her capacity as the Governor's Authorized Representative (GAR). The original SHMP was promulgated by Governor Taft in 2005.

State of Ohio Hazard Mitigation Plan

STATEMENT OF ADOPTION

In order for Ohio to continue to be eligible for federal disaster assistance funding, the Ohio Emergency Management Agency (Ohio EMA) is required to update the State of Ohio Hazard Mitigation Plan (SOHMP) every three years. The SOHMP was initially approved by FEMA and published by OEMA as a Standard State Hazard Mitigation Plan on January 17, 2005, upgraded to an Enhanced Plan on May 17, 2005, amended to include required elements for the Severe Repetitive Loss (SRL) program on April 22, 2008 and has now been updated in 2008 to be submitted as a Standard State Hazard Mitigation Plan with SRL amendments that will qualify Ohio for federal hazard mitigation grant funds, public assistance funds, and a more favorable cost share under the SRL and Flood Mitigation Assistance programs.

The SOHMP is a comprehensive description of the State's commitment to reduce or eliminate the impacts of disasters caused by natural and human-caused hazards, and is a federal requirement under the Disaster Mitigation Act of 2000 for the State of Ohio to receive federal funds for disaster recovery and mitigation. The SOHMP is coordinated and maintained by the Ohio EMA, but is the culmination of input and recommendations from numerous stakeholders from local, state and federal government agencies, private sector organizations, and residents of Ohio.

In adopting this SOHMP, the State of Ohio agrees to comply with all applicable state and federal statutes and regulations, as stipulated in previously documented assurances, and will update the plan at least every three years. The SOHMP has been amended to reflect emerging hazard conditions and risks as well as new or revised state and federal statutes and regulations. Future amendments will also reflect changes to State organization or policy as appropriate.

As the Executive Director of the Ohio EMA and the Governor's Authorized Representative, I the undersigned do hereby formally adopt this State of Ohio Hazard Mitigation Plan 2008 Update for the State of Ohio.

Signature:



Date: 5/16/08

NANCY J. DRAGANI, Executive Director
Governor's Authorized Representative
Ohio Emergency Management Agency