## EVANSVILLE-VANDERBURGH COUNTY COMPREHENSIVE PLAN 2015-2035

June 27, 2016



## EVANSVILLE-VANDERBURGH COUNTY COMPREHENSIVE PLAN

## 2015-2035

June 27, 2016



**Evansville-Vanderburgh Area Plan Commission** 

1 N.W. Martin Luther King Jr. Blvd Civic Center Complex, Room 312 Evansville, IN 47708 Phone (812) 435-5226 email contactus@evansvilleapc.com

This document is an update to and replaces the Evansville-Vanderburgh County Comprehensive Plan 2004-2025

## ACKNOWLEDGEMENTS

#### **CITY OF EVANSVILLE**

#### MAYOR

Honorable Lloyd Winnecke

#### **CITY COUNCIL**

Missy Mosby, President Jonathan Weaver, Vice President Dr. H. Dan Adams Jim Brinkmeyer Justin Elpers Ann Hargis Dan McGinn Michelle Mercer Constance Robinson

#### VANDERBURGH COUNTY

#### **COUNTY COMMISSIONERS**

Joe Kiefer, President Stephen Melcher Bruce Ungethiem

#### **COUNTY COUNCIL**

Angela Koehler Lindsey, President John Montrastelle, Vice President Ed Bassemier Mike Goebel Jim Raben Tom Shetler, Jr. Stephanie Terry



#### TOWN OF DARMSTADT

#### **DARMSTADT TOWN BOARD**

Bob Stobbs, President

Mallory Lowe, Clerk-Treasurer

Paul Freeman

Steve Kahre

John Sanders

#### EVANSVILLE/VANDERBURGH APC & BZA

#### **AREA PLAN COMMISSION**

Stacy Stevens, President Bill Pedtke, Vice President Dr. H. Dan Adams Marty Amsler Dewey Colter Roger Lehman Lynn Lowe Earl Milligan John Montrastelle Jeffrey Mueller Joy Payne Mike Rudolph Bruce Ungethiem

#### **BOARD OF ZONING APPEALS**

Bill Pedtke, President Becky Kasha Jonathan Parkhurst Joy Payne Carl Shepherd Gregg Utley Mike Zehner



## ACKNOWLEDGEMENTS

#### **PROJECT TEAM**

#### AREA PLAN COMMISSION STAFF

Ronald S. London, P.E., CFM, Executive Director

Blaine Oliver, Assistant Director/Planner

John Ansbro, AICP, Senior Planner

Ryan Key, GIS Administrator/Web Developer

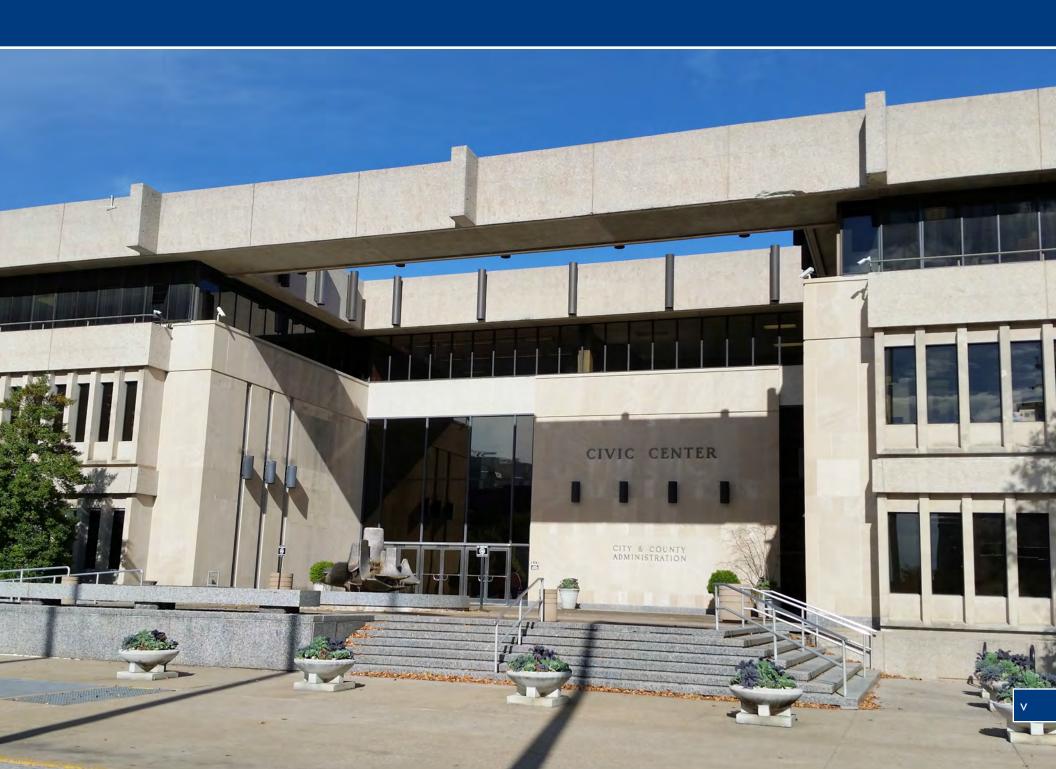
Jim McReynolds, GIS/CAD Specialist/Plat Examiner

Dirck Stahl, Attorney

#### LOCHMUELLER GROUP

Michael Shoulders, AICP, Project Manager Matthew Schriefer, AICP, Planner





## **2015 EXECUTIVE SUMMARY**

What will Evansville and Vanderburgh County look like 20 years from now? Will our area have similar characteristics as today or will it be substantially different?

The major projects proposed for the near future in the downtown and on the City's east side, the suggested activities to minimize blight in the Urban Core, and the expected spinoff development could be the catalysts for unprecedented growth in the Evansville area. However, the type and location of this growth will determine how our community and its land use pattern will change in the future. Will we continue to grow in an outward fashion and maintain the status quo of urban core decline, or will we experience substantial infill and revitalization of the core? The answers to these questions will evolve over time, but are to some degree up to us. We can either accept whatever growth we get, or we can work toward the community we desire by following a strategy and taking specific actions to guide future development to fit community goals. While our future is hard to predict, it is certain that planning is critical for being prepared to fully benefit from future growth.

The 2015-2035 Comprehensive Plan for Evansville and Vanderburgh County is the guide for decisions that relate to land use and the framework for the ongoing land use planning process. The intent is to guide growth in a manner that supports and reinforces the community qualities important to City and County residents. These qualities include employment and housing opportunities, safety and security, quality schools, neighborhoods with a strong sense of community, and a clean environment. All these amenities are important to our quality of life.

This Plan presents a general vision of Evansville's future which is expressed through population, housing and employment projections,

designating appropriate areas for development of specific land uses, and incorporating a series of action plans. These action plans focus on improving the quality of life through incorporating decisive statements that embody the community's long-range goals, objectives and policies concerning growth and the actions necessary to implement those statements. Citizen involvement in the Plan update process and in formulating these land use policies is the means to keep the Plan current and to achieve the desired vision for the community.

The 2015 Plan update reorganizes the content of the 2004 Comprehensive Plan. Some of the changes that have been made include revision of the format and simplifying/shortening the text to make the Plan more readable and easier to follow; mapping improvements through use of computer software; designation of future land use areas; use of a computer land use model to allocate future land uses; and clarification and additions to the Plan goals, objectives and policies.

Several background documents were reviewed as a guide for revisions to the policy statements. These documents included: the Sustainable Evansville Area Coalition (SEAC) Plan (our regional sustainability plan); the summary document for the VOICES process (an on-going series of public visioning sessions for Evansville's future); the 2040 EMPO Transportation Plan for the region; the Evansville Bicycle Pedestrian Master Plan; and the Parks Master Plan. The strategies in the action plans emphasize several major land use policy themes. These themes are:

- The past decline of the Central Business District (CBD) and the urban core has created a need for revitalization. As a result, the Plan calls for the removal of blight and coordinated revitalization of both the CBD and surrounding neighborhoods to provide a close and larger population to support downtown businesses. This revitalization is to occur using a recommended housing strategy including the establishment of a land bank, and with development of higher density residential, mixed use development and green space. Beyond the core, the Plan strongly emphasizes infill development throughout the City!
- It is critically important for the community to promote and attract economic development. Job retention and the creation of diverse new employment should continue to be the focus of economic development efforts. The local area is in a good position to attract industries as the I-69 project continues toward completion. This will help provide a significant boost to the economy of Southwestern Indiana. The Plan identifies a need for professional and higher skilled jobs that offer better pay and suggests intensifying recruitment efforts for employers that can offer these job opportunities.
- To address urban sprawl, or outward growth, the Plan stresses contiguous development which minimizes the loss of agricultural land, creates more efficient use of infrastructure, and increases the stability of certain uses in the City.
   Besides stressing infill and urban core revitalization, the Plan recommends a focus on those existing commercial areas that are struggling outside of the core by incorporating mixed use into these areas; and the Plan strongly discourages the rezoning of new land when significant vacant areas are available with the correct zoning for the proposed use.

A land use model was used for the first time in the preparation of our local Comprehensive Plan that factored in development constraints (e.g. floodplains, slope, etc.) and existing infrastructure (e.g. proposed road improvements, availability of or distance from existing water and sewer service, etc.) in the designation of future land use for the Plan. Other considerations for the land use allocations were the goals, objectives and policy statements and the input of the public and our local leaders.



## **2015 EXECUTIVE SUMMARY**

Some of the highlights of the Plan include:

#### POPULATION

According to Census data, the population for both Vanderburgh County and the City of Evansville increased by 14,645 persons from 1990 to 2010. The Plan presents a County population projection of 202,224 people for the year 2035 as the most likely future scenario. This projection represents the high population growth scenario from the 2010 base year (a 12.53% increase) in comparison to the other population projection in the Plan calling for a moderate growth population trend (6.99%).

#### **EMPLOYMENT**

In recent years, County employment has continued to increase. By Year 2035, the County is projected to have approximately 24,699 additional employees which represents a 19.78 percent increase. Considering the major developments under construction or expected for the near future like the projects mentioned earlier, the County employment and economic outlook is bright.

#### FUTURE HOUSING NEEDS PROJECTIONS

The County is projected to gain approximately 10,898 more housing units by Year 2035 requiring an additional seven square miles of residential land. Due to the aging population, the type of housing in the future is expected to change from single family homes on large lots to a more dense mix of smaller single family, attached and multi-family housing. Of the many areas designated in the Plan for future residential use, the forecast used by the model in allocating new housing units showed that the City's east side is projected to experience the most residential growth, followed by northeastern Vanderburgh County outside the City.

Although these areas are one and two in residential growth, the forecasts in the Plan show a major reversal in the urban core decline trend by predicting Pigeon Township to have the third fastest growth over the next 20 years (2015 permit records show that Pigeon Township was the second fastest City/County residential growth area). It is anticipated that about 2,000 blighted homes mostly in Pigeon Township could be demolished in the next 5 to 10 years creating significant opportunities for redevelopment. The Plan also generally calls for protecting the residential character of neighborhoods from incompatible uses.

# EVANSVILLE

Areas recommended for growth on the Future Land Use Map include:

#### **RESIDENTIAL LAND USE**

Northeast Side – unincorporated Center and southern Scott Townships; West Side -- the University Parkway corridor from Hogue Rd. to Marx Rd.

#### COMMERCIAL LAND USE

East Side -- largest area is between Morgan Ave., I-69, Virginia St. & Burkhardt Rd.;

North Side -- the U.S. 41 corridor south of I-64;

Northeast Side -- Boonville-New Harmony Rd. between S.R. 57 and Green River Rd.;

West Side -- north of Lloyd Expressway and west of University Parkway.

#### **INDUSTRIAL LAND USE**

North Side – primary area is the U.S. 41 N. corridor between I-64 and Baseline Rd.;

Near North Side -- infill east of U.S. 41 and north of Lynch Rd. to the airport;

Northeast Side -- the I-69 corridor between S.R. 57 and Boonville-New Harmony Rd.;

West Side -- west of University Parkway and south of Hogue Rd. along the railroad.

#### **MIXED USE (COMMERCIAL & RESIDENTIAL)**

North Main St. corridor; West Franklin St.; the old west Wal-Mart site; Washington Sq. Mall/Lawndale; & the riverfront west of the riverboat casino.

#### INFRASTRUCTURE

Road access and availability of utility services are critical factors for growth. For transportation, the Plan presents short-term and long-range road improvement projects proposed by the Evansville Metropolitan Planning Organization. Outside of the area with existing utility service, the Plan designates appropriate sites for development contiguous to the utility service area. The Plan also calls for the infrastructure necessary to serve new development to be installed with each project.



## **2015 EXECUTIVE SUMMARY**

#### SAMPLES OF POLICY STATEMENTS ADDED

- Develop a University Parkway corridor plan;
- Amend Codes to require major subs in Ag to first rezone to R-1 before platting;
- Enhance the Riverfront as a "people friendly" destination;
- Establish a City/County tree planting program;
- Investigate the need for & construction of a new indoor swimming pool;
- Incorporated EMPO Complete Streets Policy;
- New Urban Design Action Plan added with goals, objectives & policies;
- Form a Plan Implementation Committee to review plans and recommend projects to be included in an annual City/County Capital Improvements Plan.

The Comprehensive Plan is not a rigid framework for future development. Rather, it should be a dynamic and flexible process for the coordination and guidance of physical development. The Plan is regularly used by the Area Plan Commission and elected bodies to evaluate proposed rezonings, subdivisions and code amendments for their consistency with the Plan. It should also be used by individuals in both the public and private sectors for deciding the efficient use and management of land and other community resources.

The most critical step in the planning process is plan implementation or converting the Plan to action. This involves routinely referring to the Plan for guidance in community development decisions and taking actions that are consistent with the Plan. If the community desires substantial progress toward achieving specific goals, objectives and policies, a plan to attain these results and a strong commitment by the community to implement the Plan must exist. Only diligent adherence to well thought out and coordinated public policies that are supported by the community, can successfully achieve the desired goals. Ultimately, a Comprehensive Plan is only as good as its implementation.



## TABLE OF CONTENTS

SECTION 1: INTRODUCTION	2
MANDATE FOR THE PLAN	4
FRAMEWORK AND METHODOLOGY OF PLAN DEVELOPME	ENT 5
SECTION 2: HISTORY	10
SECTION 3: PHYSICAL FEATURES	18
SOILS	19
FOREST RESOURCES	21
WETLANDS	22
FLOODPLAINS	23
SECTION 4: DEMOGRAPHICS	28
POPULATION	29
GENERAL POPULATION CHARACTERISTICS	32
DEMOGRAPHIC CHARACTERISTICS OF HOUSEHOLDS	
SECTION 5: GENERAL LAND USE	40
LAND USE PLAN DEVELOPMENT	
LAND USE INVENTORY	45
POLICY DEVELOPMENT AND FRAMEWORK	51
GENERAL LAND USE ACTION PLAN	51
SECTION 6: RESIDENTIAL	56
CURRENT HOUSING STOCK CONDITIONS	57
HOUSING ASSISTANCE PROGRAMS	62
FOCUS AREAS	63
FUTURE DWELLING NEEDS ANALYSIS	65

xii

LAND USE SCENARIO MODELING 67
GENERAL HOUSING STRATEGY72
FUTURE RESIDENTIAL DEVELOPMENT AREAS
RESIDENTIAL ACTION PLAN77
SECTION 7: COMMERCIAL80
ESTABLISHED COMMERCIAL CENTERS 81
ISSUES AND CONCERNS
DEVELOPMENT LOCATION FACTORS
FUTURE COMMERCIAL DEVELOPMENT AREAS
COMMERCIAL ACTION PLAN 85
SECTION 8: CENTRAL BUSINESS DISTRICT88
ISSUES AND CONCERNS
FUTURE OUTLOOK
DOWNTOWN MASTER PLAN93
CENTRAL BUSINESS DISTRICT ACTION PLAN
SECTION 9: INDUSTRIAL96
FUTURE INDUSTRIAL DEVELOPMENT AREAS
INDUSTRIAL ACTION PLAN 101
SECTION 10: RURAL
ISSUES AND CONCERNS 105
RURAL ACTION PLAN 106
SECTION 11: ECONOMIC DEVELOPMENT108

ECONOMIC ANALYSIS	111
LABOR FORCE	114
INDUSTRY MIX OVERVIEW	115
FUTURE OUTLOOK	119
FORECASTS OF ECONOMIC COMPONENTS	125
ECONOMIC DEVELOPMENT ACTION PLAN	125

#### SECTION 12: EDUCATION AND CULTURAL ENVIRONMENT......130

EXISTING EDUCATIONAL FACILITIES	131
PROJECTED SCHOOL AGE CHILDREN	132
VANDERBURGH COUNTY SCHOOL SYSTEMS	133
HIGHER EDUCATION	135
CULTURAL ENVIRONMENT	136
EDUCATIONAL AND CULTURAL ACTION PLAN	140

#### SECTION 13: ENVIRONMENTAL QUALITY......142

AIR QUALITY	143
WATER QUALITY	145
URBAN TREES & FOREST RESOURCES	147
BROWNFIELDS	148
ENVIRONMENTAL QUALITY ACTION PLAN	149

SECTION 14: PARKS AND RECREATION ......154

STATE FACILITIES 155	
COUNTY PARKS 156	
CITY PARKS 157	
PRIVATE-NON PUBLIC PROGRAM 159	
2015 DRAFT PARK'S PLAN HIGHLIGHTS 165	

PARK ACREAGE ASSESSMENT AND PROJECTED NEEDS 166	
GREENWAYS168	
NEW PARK PROJECTS	
FUTURE RECREATIONAL DESIGNATION	
RECREATION ACTION PLAN	
SECTION 15: PUBLIC SAFETY AND HEALTH174	
DISASTER PREPAREDNESS 175	
COMMUNITY EMERGENCY RESPONSE TEAM (CERT) 176	
CRIMINAL JUSTICE 177	
EMERGENCY MEDICAL TRANSPORTATION	
AIR AMBULANCE SERVICES 180	
HEALTH CARE	
CONSIDERING LOCAL PUBLIC HEALTH IN PLANNING/URBAN	
DESIGN	
CEMETERIES	
HAZARD MITIGATION ACTION PLAN 185	
PUBLIC SAFETY ACTION PLAN	
HEALTH ACTION PLAN 190	
SECTION 16: TRANSPORTATION192	
EXISTING TRANSPORTATION SYSTEM	
RECOMMENDED TRANSPORTATION SYSTEM	
EMPO METROPOLITAN TRANSPORTATION PLAN 2040	
(MTP 2040)	
FROM THE MILLENNIAL PLAN FOR 2040 PREPARED FOR THE	
SUSTAINABLE EVANSVILLE AREA COALITION	
NEEDS OF EXISTING RURAL ROADS	1
TRANSPORTATION ACTION PLAN 209	

. . .

xiii

## TABLE OF CONTENTS

SECTION 17: PUBLIC UTILITIES	А
WATER	
SEWER	
STORM WATER DRAINAGE 225	
RURAL SEPTIC SYSTEMS 227	
SOLID WASTE 227	
WATER AND SEWER UTILITY ACTION PLAN 229	
STORM WATER DRAINAGE ACTION PLAN	
SOLID WASTE ACTION PLAN 231	

#### SECTION 18: URBAN DESIGN AND HISTORIC PRESERVATION .....234

URBAN DESIGN	235
HISTORIC PRESERVATION	238
URBAN DESIGN ACTION PLAN	241
PRESERVATION ACTION PLAN	242

SECTION 19: PLAN IMPLEMENTATION	244
STRATEGIES TO REALIZE PLAN GOALS	245
DEVELOPMENT EVALUATION	245
INVESTMENT IN PUBLIC IMPROVEMENTS	247
INCENTIVES AND COMPENSATION	248
FINANCING	248
FACTORS AFFECTING IMPLEMENTATION	249
REVIEW AND UPDATE OF THE PLAN	249
SUBAREA PLANS	249
COOPERATIVE MANAGEMENT AND JOINT DEVELOPMENT	251
CONCLUSION	254
IMPLEMENTATION ACTION PLAN	255

PPENDICES	258
APPENDIX A: INTRODUCTION	261
APPENDIX B: HISTORY	263
APPENDIX C: PHYSICAL FEATURES	267
APPENDIX D: GENERAL LAND USE	271
APPENDIX E: ECONOMIC DEVELOPMENT	273
APPENDIX F: ENVIRONMENTAL QUALITY	275
APPENDIX G: URBAN DESIGN AND HISTORIC PRESERVATION	277
APPENDIX H: ADOPTION RESOLUTIONS	281
APPENDIX I: LAND USE MAPS	289

#### **LIST OF FIGURES**

#### **SECTION 1: INTRODUCTION**

FIGURE 1-1: VICINITY MAP	6
FIGURE 1-2: GOVERNMENT JURISDICTIONS	6

#### **SECTION 3: PHYSICAL FEATURES**

FIGURE 3-1:	SOIL PRODUCTIVITY FOR CROP YIELD	20
FIGURE 3-2:	FORESTED AREAS	21
FIGURE 3-3:	WATERSHED BOUNDARIES	23
FIGURE 3-4:	SPECIAL FLOOD HAZARD AREAS	24
FIGURE 3-5:	FLOODPLAIN CROSS-SECTION	26

#### **SECTION 4: DEMOGRAPHICS**

FIGURE 4-1: CITY GROWTH BY ANNEXATION	30
FIGURE 4-2: DESCRIPTIVE AREAS	37

#### **SECTION 5: GENERAL LAND USE**

FIGURE 5-1: BUFFERING TECHNIQUES	
FIGURE 5-2: 2015 EXISTING LAND USES 45	
FIGURE 5-3: URBANIZED AREA GROWTH	

#### **SECTION 6: RESIDENTIAL**

FIGURE 6-1:	1990 - 2010 HOUSING CHANGE BY TOWNSHIP	58
FIGURE 6-2:	2010 HOUSING UNIT DENSITY	60
FIGURE 6-3:	LOCATION OF SUBSTANDARD HOUSING	62
FIGURE 6-4:	FOCUS AREAS	63

FIGURE 6-5: HISTORICAL AND PROJECTED POPULATION
FIGURE 6-6: 1990 - 2010 HOUSING CHANGE BY TOWNSHIP 69
FIGURE 6-7: LAND USE MODEL HOUSEHOLD GROWTH LOCATIONS
SECTION 7: COMMERCIAL
FIGURE 7-1: FUTURE COMMERCIAL LAND USES
SECTION 8: CENTRAL BUSINESS DISTRICT
FIGURE 8-1: CENTRAL BUSINESS DISTRICT BOUNDARY
SECTION 9: INDUSTRIAL
FIGURE 9-1: INDUSTRIAL DEVELOPMENT AREAS 100
SECTION 11: ECONOMIC DEVELOPMENT
FIGURE 11-1: REGIONAL ECONOMIC AREAS
FIGURE 11-1: REGIONAL ECONOMIC AREAS 112
FIGURE 11-1: REGIONAL ECONOMIC AREAS 112 FIGURE 11-2: COMMUTING TRENDS PROFILE 2013 113
FIGURE 11-1: REGIONAL ECONOMIC AREAS
FIGURE 11-1: REGIONAL ECONOMIC AREAS
FIGURE 11-1: REGIONAL ECONOMIC AREAS112FIGURE 11-2: COMMUTING TRENDS PROFILE 2013113SECTION 12: EDUCATION AND CULTURAL ENVIRONMENTFIGURE 12-1: SCHOOLS SERVING VANDERBURGH COUNTY134FIGURE 12-2: CULTURAL FACILITIES138
FIGURE 11-1: REGIONAL ECONOMIC AREAS112FIGURE 11-2: COMMUTING TRENDS PROFILE 2013113SECTION 12: EDUCATION AND CULTURAL ENVIRONMENTFIGURE 12-1: SCHOOLS SERVING VANDERBURGH COUNTY134FIGURE 12-2: CULTURAL FACILITIES138SECTION 14: PARKS AND RECREATION
FIGURE 11-1: REGIONAL ECONOMIC AREAS112FIGURE 11-2: COMMUTING TRENDS PROFILE 2013113SECTION 12: EDUCATION AND CULTURAL ENVIRONMENTFIGURE 12-1: SCHOOLS SERVING VANDERBURGH COUNTY134FIGURE 12-2: CULTURAL FACILITIES138SECTION 14: PARKS AND RECREATIONFIGURE 14-1: PARKS AND RECREATIONAL FACILITIES164

## **TABLE OF CONTENTS**

#### SECTION 15: PUBLIC SAFETY AND HEALTH

FIGURE 15-1: PUBLIC HEALTH AND SAFETY SERVICES...... 178

#### **SECTION 16: TRANSPORTATION**

FIGURE 16-1:	HIGHWAYS SERVING MAJOR MIDWEST CITIES	194
FIGURE 16-2:	HIGHWAYS SERVING THE EVANSVILLE MSA	194
FIGURE 16-3:	ROAD FUNCTIONAL CLASSIFICATION	195
FIGURE 16-4:	REGIONAL RAILROAD SERVICE AND WATER PORTS 2	198
FIGURE 16-5:	AIRLINES SERVING EVANSVILLE IN 2015	200
FIGURE 16-6:	COMMITTED AND RECOMMENDED PROJECTS	205

#### **SECTION 17: PUBLIC UTILITIES**

FIGURE 17-1: WATER SERVICE AREA (APPROXIMATE)	0
FIGURE 17-2: SEWER SERVICE AREA (APPROXIMATE)	2

#### SECTION 18: URBAN DESIGN AND HISTORIC PRESERVATION

#### **APPENDICES**

FIGURE C-1: GENERALIZED SEISMIC HAZARD AREAS	267
FIGURE C-2: UNDERGROUND COAL MINES POTENTIAL SUBSIDEN AREAS	
	270
FIGURE F-1: AIR MONITORING LOCATION MAPS	275
FIGURE H-1: AREA PLAN COMMISSION	281
FIGURE H-2: EVANSVILLE CITY COUNCIL	283
FIGURE H-3: DARMSTADT TOWN BOARD	. 285
FIGURE H-4: VANDERBURGH COUNTY COMMISSIONERS	. 287
FIGURE I-1: EXISTING 2015	289
FIGURE I-2: FUTURE 2035	. 290

#### **LIST OF TABLES**

#### **SECTION 4: DEMOGRAPHICS**

TABLE 4-1: EVANSVILLE METROPOLITAN STATISTICAL AREA (MSA)COUNTIES AND THEIR POPULATION: 1960 - 2010
TABLE 4-2: CHANGE IN POPULATION: VANDERBURGH COUNTY AND CITY OF EVANSVILLE: 1950-2010
TABLE 4-3: COMPONENTS OF POPULATION CHANGE FOR VANDERBURGH COUNTY
TABLE 4-4: PERCENTAGE OF POPULATION IN SELECTED AGE GROUPS:1950-2010
TABLE 4-5: PERCENTAGE OF COUNTY POPULATION BY RACE: 1950- 2010
TABLE 4-6: HOUSING UNITS, PERCENT SINGLE FAMILY, PERCENTBUILT BEFORE 1939
TABLE 4-7: OCCUPIED HOUSING UNITS, TENURE AND PERSONS PERHOUSEHOLD
TABLE 4-8: VANDERBURGH CO.: POPULATION BY TYPE OF GROUP QUARTERS
TABLE 4-9: MEDIAN HOUSEHOLD INCOME
TABLE 4-10: PERCENT OF HOUSEHOLDS BURDENED BY HOUSING COSTS

#### **SECTION 5: GENERAL LAND USE**

TABLE 5-1: LAND USE ACREAGE CHANGE 2015 TO 2035	4	8
---	---	---

TABLE 5-2: URBAN POPULATION AND URBAN AREA CHANGES FROM1990 TO 201049

#### **SECTION 6: RESIDENTIAL**

	OUSING UNITS, PERCENT SINGLE FAMILY, PERCENT BUILT BEFORE 19395	8
	AST CHANGE IN POPULATION AND HOUSING BY TOWNSHIP5	9
TABLE 6-3: FC	OCUS AREAS 6	64
	OMMUNITYVIZ MODELLING POPULATION PROJECTIONS	6
	010-2035 POPULATION AND HOUSING CHANGE BY TOWNSHIP7	'0
TABLE 6-6: 20	035 RESIDENTIAL LAND NEED PROJECTIONS	'1

#### SECTION 8: CENTRAL BUSINESS DISTRICT

TABLE 8-1: POPULATION AND OCCUPIED HOUSING UNITS IN THE	
CBD	
TABLE 8-2: BUSINESS DATA FOR 47708 ZIP CODE	

#### **SECTION 10: RURAL**

TABLE 10-1: FARM LAND USE IN VANDERBURGH COUNTY ...... 105

#### SECTION 11: ECONOMIC DEVELOPMENT

TABLE 11-1:	ECONOMIC MARKET AREAS 111	
TABLE 11-2:	POPULATION, LABOR FORCE & EMPLOYMENT 114	
TABLE 11-3:	PERCENT SHARE OF EMPLOYMENT BY INDUSTRY 115	
TABLE 11-4:	2010 EMPLOYMENT PERCENTAGE BY INDUSTRY COMPARED TO THE STATE AND NATION	
TABLE 11-5:	MAJOR EMPLOYERS IN VANDERBURGH COUNTY 117	
TABLE 11-6:	MAJOR EMPLOYERS IN SURROUNDING COUNTIES 118	xvii

### **TABLE OF CONTENTS**

#### SECTION 12: EDUCATION AND CULTURAL ENVIRONMENT

TABLE 12-1:	SCHOOL AGE GROUPS: 2010 CENSUS AND	
	PROJECTIONS	132
TABLE 12-2:	SCHOOLS SERVING VANDERBURGH COUNTY	133
TABLE 12-3:	LIBRARY LOCATIONS	139

#### **SECTION 14: PARKS AND RECREATION**

TABLE 14-1:	INVENTORY OF PARKS & RECREATION SITES	. 160
TABLE 14-2:	IDNR RECOMMENDED ACREAGE OPEN SPACE STAND	ARD
	(20 ACRES PER 1,000 POPULATION)	. 166

#### SECTION 15: PUBLIC SAFETY AND HEALTH

TABLE 15-1: FIRE STATIONS IN THE CITY OF EVANSVILLE	79
TABLE 15-2: FIRE STATIONS IN VANDERBURGH COUNTY 18	80

#### **SECTION 16: TRANSPORTATION**

TABLE 16-1:    METS RIDERSHIP    199	)
TABLE 16-2:         EVANSVILLE REGIONAL AIRPORT BOARDINGS	)
TABLE 16-3: PROJECTS TO BE COMPLETED BY THE YEAR 2022 205	•
TABLE 16-4: PROJECTS TO BE COMPLETED BY THE YEAR 2035 206	,
TABLE 16-5: PROJECTS TO BE COMPLETED BY THE YEAR 2040 206	,
TABLE 16-6: ILLUSTRATIVE NEEDS PROJECTS 207	,

#### **SECTION 17: PUBLIC UTILITIES**

TABLE 17-1:	PROJECTED AVERAGE DAY USER DEMAND	
	IN MGD (MILLION GALLONS PER DAY) 22	20
TABLE 17-2:	TREATMENT PLANT STATISTICS	
	IN MGD (MILLION GALLONS PER DAY)	21

#### **SECTION 19: PLAN IMPLEMENTATION**

TABLE 19-1: POLICIES TO BE ACCOMPLISHED WITHIN FIVE		
	YEARS	251

#### APPENDICES

TABLE A-1: PUBLIC COMMENTS ANALYSIS	262
TABLE C-1: BENCHMARKS AND HISTORIC FLOOD CRESTS FOR EVANSVILLE	269
TABLE D-1: LAND USE COMPATIBILITY MATRIX	271
TABLE E-1: OVERVIEW OF WORKERS AND COMMUTERS IN VANDERBURGH COUNTY	273
TABLE E-2: TOP 5 COUNTIES SENDING WORKERS INTO VANDERBURGH COUNTY	273
TABLE E-3: TOP 5 COUNTIES RECEIVING WORKERS FROM VANDERBURGH COUNTY	273
TABLE E-4: DETAILED COMMUTING TABLE FOR VANDERBURGH COUNTY	274
TABLE G-1: NATIONAL REGISTER OF HISTORIC PLACES	277
TABLE G-2: INDIANA HISTORICAL MARKERS	280







SOUTH

# SECTION 1: INTRODUCTION EVANSVILLE

10 S. C. 1800

## INTRODUCTION

The citizens of Evansville and Vanderburgh County want our community to continue to grow so that it remains a vibrant place in the future. With this growth will come land use changes that will alter our built environment. These changes present the challenge of guiding the location and form of new development to further enhance the community. Addressing this challenge is the primary goal in land use planning. When we follow a plan that expresses the community's vision for the future, it is likely to bring about more orderly and responsible growth, a community that is better prepared for future land use changes, maximized benefits from growth, and progress toward attaining the community's vision.

Comprehensive planning is an ongoing process that requires periodic review to keep the Plan current. This document, which updates the 2004 Comprehensive Plan, is the result of such a review. The planning process for the 2015–2035 Plan update involves public review of the draft document, public hearings, and eventual adoption by the Area Plan Commission, City Council, County Commissioners, and Darmstadt Town Board.

Successful long-range planning requires vision. Through the 2004 Plan development process, a future vision of Evansville and Vanderburgh County was developed by local residents and is restated in this Plan.

#### **Vision Statement**

"We envision Evansville and Vanderburgh County as a prominent regional center that offers prosperity, growth, and a vibrant and healthly place to live, learn, work, play, invest and visit."

This vision is supported by local population, housing, and employment projections, designating appropriate areas for new development in each land use category, identifying the community's long-range growth objectives, and indicating how the community should develop to achieve these desired objectives. In short, the Plan is a blueprint for the future development of the community, the future land use pattern and for plan implementation.

#### MANDATE FOR THE PLAN

Indiana Code, Title 36, Article 7, Chapter 4, as amended, empowers cities and counties to plan. These units of government are further charged with the purpose of improving the health, safety, convenience, and welfare of their citizens and to plan for the future development of their communities to that end:

- 1. That the highway system be carefully planned;
- 2. That communities grow only with adequate public ways, utility, health, education, and recreational facilities;
- 3. That the needs of agriculture, industry, and business be recognized in future growth;
- 4. That the residential areas provide healthful surroundings for family life; and
- 5. That the growth of the community is commensurate with and promotive of the efficient and economical use of public funds. (I.C. 36-7-4-201)

Public law further states that these units of government may establish planning and zoning entities to fulfill this purpose (*I.C. 36-7-4-202*). Resolutions by the Common Council of the City of Evansville and Vanderburgh County Board of Commissioners establishing the Area Plan Commission of Evansville and Vanderburgh County went into effect on April 10, 1968.

Furthermore, comprehensive planning is required by legislative mandate for local governments that have zoning. Specifically, Indiana statute (*I.C.* 36-7-4-501) requires a comprehensive plan to be approved by resolution for the promotion of public health, safety, morals, convenience, order, or the general welfare and for the sake of efficiency and economy in the process of development. This State law also specifies that the Plan Commission prepare the Comprehensive Plan.

*Indiana Code 36-7-4-502* states a comprehensive plan must contain at least the following:

- 1. A statement of objectives for the future development of the *jurisdiction;*
- 2. A statement of policy for the land use development of the jurisdiction; and
- *3.* A statement of policy for the development of public ways, public places, public land, public structures, and public utilities.

Besides the required Comprehensive Plan elements, State statute (*I.C. 36-7-4-503*) allows for additional contents. The 2015-2035 Comprehensive Plan includes many of these optional maps and other descriptive materials relating to the general physical, economic and social conditions.



## INTRODUCTION

#### FRAMEWORK AND METHODOLOGY OF PLAN DEVELOPMENT

The Evansville-Vanderburgh County Comprehensive Plan 2015 -2035 is the framework for the ongoing land use planning process. The Plan was based upon the following underlying principles:

#### THAT IT IS COMPREHENSIVE IN NATURE.

The plan should encompass information relative to the entire city and county, addressing all major components of development (e.g., population, land use, environment, transportation, utilities, etc.);

## THAT IT REFLECTS THE COMMUNITY'S VALUES, NEEDS, AND VISION.

The plan should state the goals, objectives and policies of the community pertaining to growth and quality of life;

#### THAT IT GUIDES PHYSICAL DEVELOPMENT.

The plan should define where development is desired, the scale of development and the areas of the community to be preserved;

#### THAT IT IS LONG RANGE IN NATURE.

The plan should identify what the community aspires to become in the next 20 years, and anticipate conditions in the future to avoid potential problems; and

## THAT IT IS THE LEGAL FOUNDATION FOR LOCAL ORDINANCES.

The plan must be approved by the City and County in order to legally adopt a zoning ordinance, and zoning is a prerequisite for adoption of a subdivision ordinance as required by State statute (*I.C. 36-7-4-601 and 701*).

Comprehensive planning is the dynamic and flexible process of coordinating and guiding physical development without being a rigid framework for the future. The Plan should be used by both the public and private sectors as a guide for deciding the efficient use and management of the community's resources.

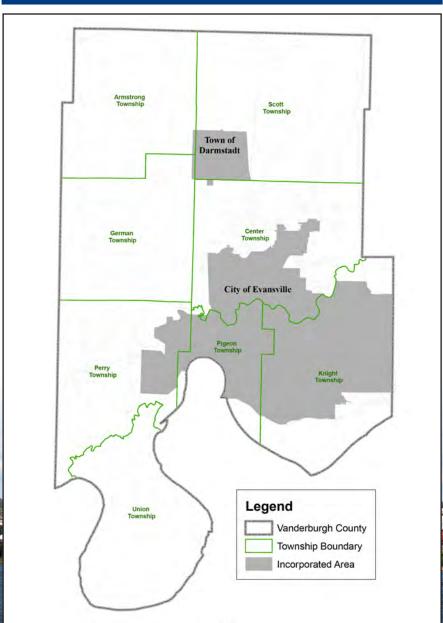
Vanderburgh County is strategically located in southwestern Indiana as shown on Figure 1-1. This Plan addresses the entire area of Vanderburgh County which, according to the Census, contains 235.74 square miles or 150,873.6 acres, eight townships, one major incorporated city (Evansville) and one incorporated town (Darmstadt). The planning area and these government jurisdictions are shown on Figure 1-2.

In preparing this update of the Plan, the Area Plan Commission requested information from numerous public and private agencies. The Plan reflects the information and comments obtained through the cooperation of these entities. Information contained within this Plan was compiled from the 2004 Comprehensive Plan, current City and County department plans which detail current facilities and services, and an analysis of current land use. A list of the Current Community Plans is in Appendix A. Public participation was also an important element in the development of the Plan. A series of public hearings were held for the Plan representing a concerted effort to obtain a broad range of community input and support. The numerous public comments received and evaluated for appropriate inclusion are tallied in Appendix A: Public Comments Analysis Table.

Through an extensive public process of meetings and hearings, the Evansville Metropolitan Planning Organization (EMPO) last year produced the Millennial Plan for 2040. The Millennial Plan is a regional sustainability plan covering the EMPO area (Vanderburgh, Warrick in Indiana and Henderson, Kentucky). In preparing the Comprehensive Plan, the Area Plan Commission staff reviewed the numerous policy statements and other contents of the sustainability plan for consideration to be incorporated into the 2015-2035 Comprehensive Plan. Wording from the Millennial Plan's vision themes, development goals and objectives were added to this document when appropriate and not already expressed in the Comprehensive Plan. The VOICES of Evansville was another public process involving visioning sessions that were categorized into three focus areas: Healthy Green Space; Experiences; and City Core. The numerous public comments from these sessions were sorted and categorized to evaluate their appropriateness for inclusion in the 2015-2035 Comprehensive Plan. Although most of the VOICES input was already expressed in the Comprehensive Plan, some of these suggestions were added where appropriate.

#### Figure 1-1: Vicinity Map





6

## INTRODUCTION

#### **ACTION PLANS**

The statements of goals establish the community's position and direction. These goals, in combination with the associated objectives and policies, form action plans which provide a framework for decision-makers and a strategy for future development. Action plans have been included at the end of most of the Plan sections. In some cases, portions of the action plans were summarized from other department's master plans on specific topics such as transportation and recreation.

By definition, goals are very general in nature. Thus, they need to be supported by a more precise and measurable indication of intent and/ or by specific action statements through objectives and policies. The definitions of terms used in the action plan for each Plan element are as follows:

#### 1. GOALS

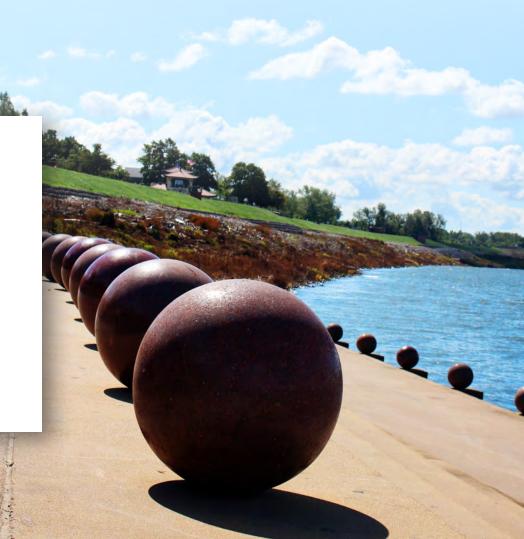
describe in general terms the underlying community values on growth and quality of life, and reflect desired outcomes. They are typically broad and long-range oriented.

#### 2. OBJECTIVES

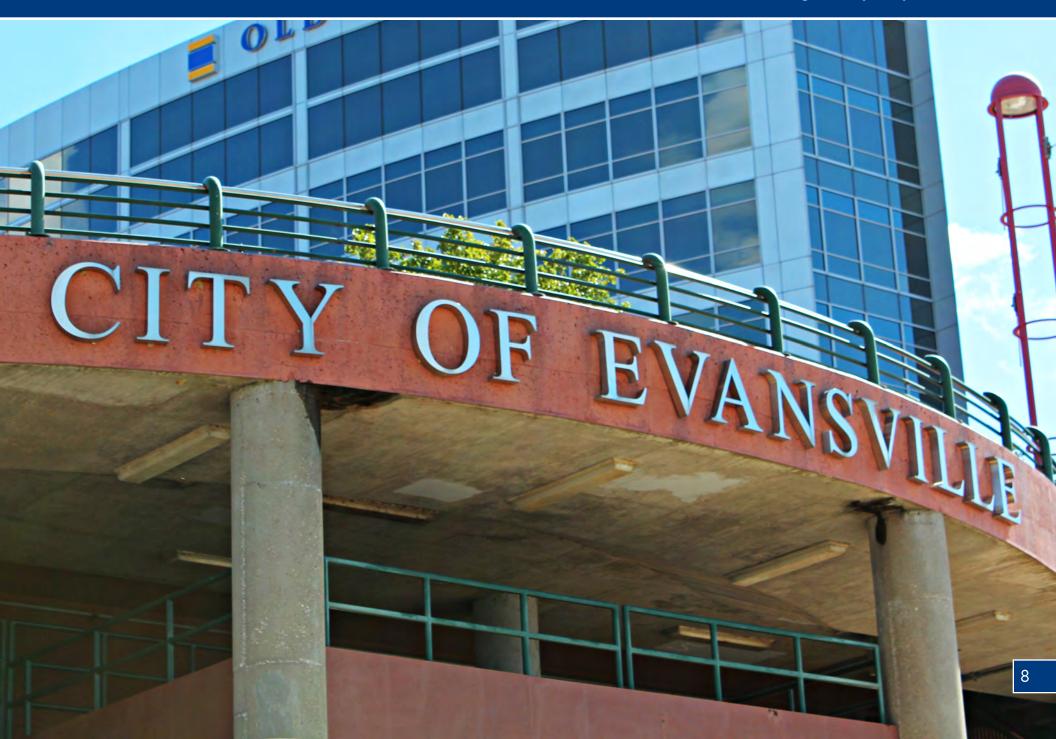
are a more specific statement designed to achieve a particular aspect of a goal. They define a desired end result which can be measured.

#### 3. POLICIES

define principles, strategies and actions that are necessary to attain a goal or objective, and the level of commitment and consistent effort needed. The action plans contained in this document are the strategies recommended to achieve the community's vision for the future in terms of responsible and orderly growth, the impacts of future development, and the needs of general areas of the City and County, especially the need to sustain a functional urban core. A concerted community-wide effort focused on the attainment of these action plan statements is called for in the Comprehensive Plan to maintain and expand the well-being of our community and its residents.



#### SECTION 1 Evansville-Vanderburgh County Comprehensive Plan









10

# **SECTION 2: HISTORY**

1 4885 S

## HISTORY

87°41' 37°57'

37-56'

87°40' 37°55'

In the development of a community master plan, it is necessary for planners to know the community history. An understanding of the past is important as it can speak volumes about the present, Evansville's identity and how we got to where we are today. The desired result is that Evansville's rich history be considered and appropriately reflected in our plan. Timelines of the significant events that have shaped our community in general and of the planning milestones that have occurred in our community over the years are shown at the end of this section. An in-depth local history text is provided in Appendix B, to help "tell our story."

Sand Bar

0

Cultiva

0

329.9 5

328.9 5

A 369.1

CONNECTING CHARTS

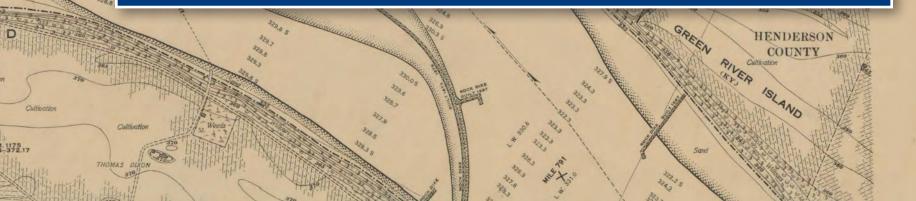
37°53'

87038' 3705

37054' 87039'

Some of the conclusions we can draw from our history are that Evansville:

- Has pride in its **river heritage** and strong river connection that still continues today;
- Has pride in its **historic areas, buildings and landmarks** such as the Riverside Historic District, the Old Court House and Angel Mounds;
- Longs for a return to "earlier Evansville", when the downtown was in its heyday;
- Delights in the resurgence of the West Franklin Street commercial area in what once was Independence;
- Still has a "blue collar" industrial base, although not as extensive as it once was;
- Has pride in its **entrepreneurial spirit**, and the consumer/industrial products that have been and are currently produced here;
- Has pride in the role that its **educational institutions** continue to have in the community;
- Has pride in its contributions to both World War efforts; and
- Has a **rich history of family-oriented traditions and events** like the Fall Festival and Shrine Circus that still continue today.



#### LA FAR ... TO MOUTH NDEX SHEET ISION OF THE DF ENGINEERS D DAMS

EER OFFICER, , ky.

## HISTORY

13

BRIEF EVANSVILLE-VANDERBURGH COUNTY HISTORICAL TIMELINE			
1800 - 1800 - Indiana Territory established	1850 - 1853 - Wabash and Erie Canal completed to Evansville - 1854 - Predecessor to U of E established / First RR line opens		
1810 - 1812 - Hugh McGary purchases 200 ac. in current downtown	<ul> <li>- 1857 - Evansville annexes the adjoining town of Lamasco</li> <li>- 1863 - Police Department established</li> </ul>		
<ul> <li>- 1816 - Indiana becomes 19th state</li> <li>- 1818 - Vanderburgh County created by State Legislature</li> <li>- 1819 - Evansville Incorporates</li> </ul>	- 1868 - First public High School built - later called Old Central 1870 - 1870 - Evansville incorporates area known as Independence - 1872 - St. Mary's Hospital opens at Ohio St and Wabash		
1830 - 1834 - Predecessor to Old National Bank established	1880       - 1879 - Old Post Office built         - 1882 - Fist electrical generating plant goes online         - 1885 - Willard Library opens / RR bridge built to Henderson, KY		
1840 - 1839 - Lamasco incorporates	<ul> <li>- 1888 - Fire Department established</li> <li>- 1890 - State Hospital established at current location</li> <li>- 1891 - Historic Vanderburgh County Court House completed</li> </ul>		
<ul> <li>- 1845 - The Courier newspapers start printing</li> <li>- 1847 - Evansville receives city charter</li> </ul>	- 1893 - Deaconess Hospital opens at Mary and Iowa		
1850	1900		

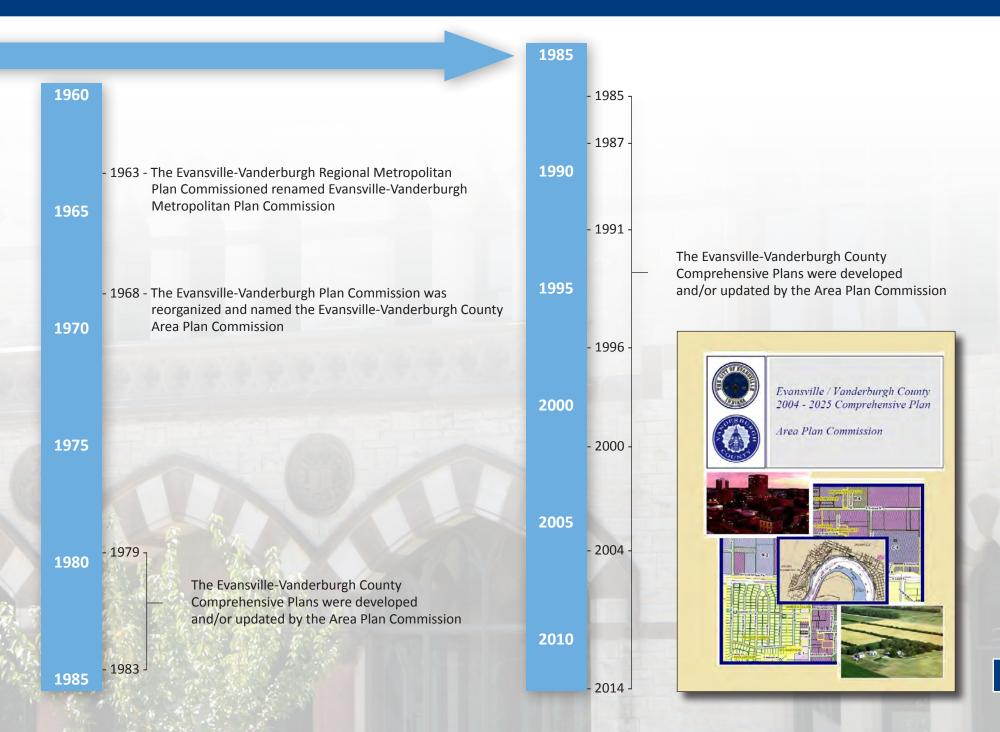
		1950	- 1950
			- 1953
1900			
			- 1956
	- 1904 - Evansville museum purchases first collection		- 1959
	1006 The Dross starts printing neuropeners	1960	- 1960
	- 1906 - The Press starts printing newspapers	1900	- 1963
1910			- 196
1910			- 196
	- 1913 - Evansville Public Library system established		- 1967
	- 1915 - Bosse Field built (3rd oldest baseball stadium in U.S.)		- 1969
	- 1916 - Evansville annexes Howell	1970	- 190:
			- 1972
1920			- 1972
	- 1923 - First Westside Nut Club Fall Festival held /		
	WGBF AM first broadcast		- 1977
	<ul> <li>- 1925 - McCurdy-Sears building, 1st Sears purely retail outlet located outside a major city</li> </ul>	1980	
	- 1928 - EVV Airport established / Mesker Zoo established	1900	- 1983
1930	and the second sec		
1900	- 1932 - U.S. 41 bridge over Ohio River built to Henderson, KY		- 198
	- 1936 - Burdette Park dedicated		- 1988
	- 1937 - Record city flooding: Ohio River at 53.7 feet		- 1989
	<ul> <li>- 1938 - Greyhound Bus Station opens / Angel Mounds State Historic site established</li> </ul>	1990	- 1990
	- 1939 - Levee system construction begins		
1940	- 1940 - Local Soil & Water Conservation District established		- 1994
	(1st in state)		- 1994
	- 1942-1945 - Local industries produce the P-47 Thunderbolt, the LST & bullets for WWII		1
		2000	
		2000	

1950	- 1950 - 4-H Center established		
	- 1953 - WFIE (Channel 14) first broadcast		
	- 1956 - St. Mary's current location opens		
1960	<ul> <li>- 1959 - Museum of Arts &amp; Science current location opens</li> <li>- 1960's - Portions of I-64 built</li> </ul>		
	<ul> <li>- 1963 - Washington Sq. Mall opens (1st enclosed mall in state)</li> <li>- 1965 - Indiana State University Evansville campus opens</li> </ul>		
	<ul> <li>1966 - Second U.S. 41 bridge over Ohio River opens</li> <li>1967 - Dress Plaza riverfront rebuilt</li> </ul>		
1970	- 1969 - Civic Center dedicated		
	- 1972 - New Highway <mark>41 corrido</mark> r opens - 1972 - Ivy Tech secures permanent Evansville campus		
	- 1977 - University of Evansville basketball team plane crash		
1980	- 1981 - Eastland Mall opens		
	- 1985 - USI becomes independent state university		
1990	- 1988 - Lloyd Expressway opens - 1989 - EVV Airport current terminal opens - 1990 - I-164 opens		
	- 1994 - Levee system completed		

- 2005 - Tornado kills 21 people in Vanderburgh County - 2011 - Ford Center opens

1950

	HISTORY OF L	DCAL PLANNING	AL PLAN	
1910		1935	1935	
1915	- 1916 - First zoning ordinance in the United States (New York City)	<b>1940</b> - 1940 - The Vanderburgh County Plan Commission was established	1940 -	lished
1920	<ul> <li>- 1921 - The Evansville City Plan Commission was created under the authority of the State of Indiana Planning Act</li> <li>- 1924 - U. S. Department of Commerce issues a standard State Zoning Enabling Act</li> </ul>	<b>1945</b> - 1945 - First zoning code adopted for Vanderburgh County	1945 -	
1925	<ul> <li>- 1925 - Adoption of the first city zoning ordinance and comprehensive plan element, "Plan for the Development of a System of Major Streets"</li> </ul>	1950	1950	
	<ul> <li>- 1926 - Village of Euclid v. Ambler Realty Constitutionality of zoning upheld by the U.S. Supreme Court</li> <li>- 1927 - Other plan elements "Public Recreation Facilities in Evansville" and "The City's Appearance, Suggestions for Improving" were adopted</li> </ul>	O A Q		
1930	- 1928 - U.S. Department of Commerce issues a Standard City Planning Enabling Act	1955 - The Evansville-Vanderburgh County Regional Plan Commission was established. This commission was organized with a joint city and county function.	1955 -	
1935		- 1957 - The Evansville-Vanderburgh Comprehensive Plan was developed by the Regional Plan Commission		





# **SECTION 3: PHYSICAL FEATURES**

# **PHYSICAL FEATURES**

The physical features of the County, such as soils and floodplains, are an important consideration in the development of a land use plan. Some of these natural features can present constraints or limitations on development. Depending on the severity of the limitations, there can still be potential to develop the land if the limitations are properly addressed in project design. More severe development constraints can render some areas unsuitable for certain uses and other areas completely unsuitable for any development. This section provides a description of the physical features in Vanderburgh County that should be considered in community planning.

### SOILS

The U.S. Department of Agriculture, Natural Resources Conservation Service Web Soil Survey provides detailed analysis of the soil types in the County and their suitability for numerous development activities and potential crop yields.

Four of the development activities were closely examined: dwellings, with and without a basement; small commercial buildings; and septic tank absorption fields. Common ratings for dwellings, with and without a basement, and small commercial buildings are based on the soil properties that affect the capacity of the soil to support a load without movement and on the properties that affect excavation and construction costs. The septic tank absorption field ratings are based on the soil properties that affect absorption of the effluent (soil percolation), construction and maintenance of the system, and public health. The Soil Survey ratings for these development activities are:

- **NOT LIMITED** indicates favorable soil features for most uses.
- SOMEWHAT LIMITED indicates moderately favorable soil features for many uses. The limitations can be overcome or minimized by special consideration to site design, and/or special site preparation or construction measures.
- VERY LIMITED indicates soil features are unfavorable for most uses. The limitations are generally tough to overcome without expensive site design considerations, special site preparation or construction measures. Over 80 percent of the County soils have this rating.

For Vanderburgh County, the Soil Survey shows that most of our soils have a poor rating and low suitability for development. This means that it is important to investigate the soil before any development activity is initiated to confirm the soil type and to determine if any special planning, design, or installation measures will be required.

20

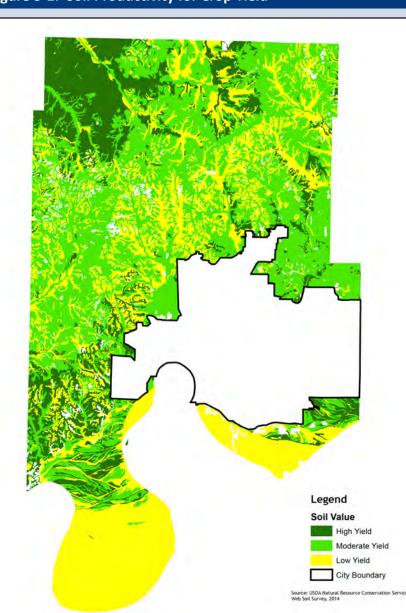


Figure 3-1: Soil Productivity for Crop Yield

The Soil Survey also provides detailed analysis of the estimated average yields per acre that can be expected by numerous non-irrigated crops under a high level of management. The estimated yields reflect the productive capacity of each soil for that selected crop. This management includes the numerous activities in the growing cycle from preparation to post harvesting. In any given year, yields may be higher or lower than those indicated because of variations in rainfall and other climatic factors. According to the Indiana Agricultural Statistics for 2014-2015, the three crops ranked in the County for yield amounts are corn, soybeans, and winter wheat. Figure 3-1 illustrates the rating from the Soil Survey for the three crops mentioned above showing that nearly 69 percent of the soils in Vanderburgh County are moderate to high yield in productivity.

# PHYSICAL FEATURES

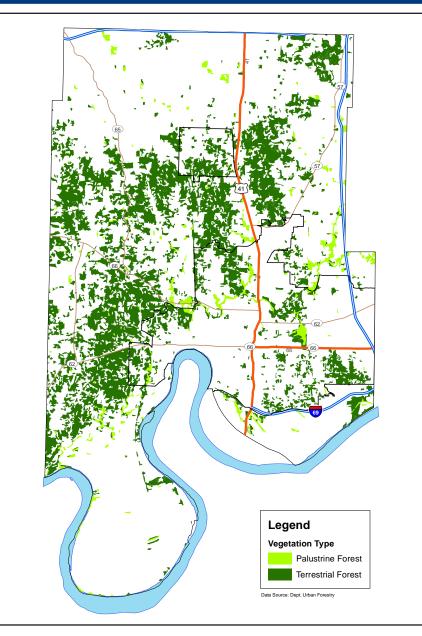
### FOREST RESOURCES

Before the land clearing activities that occurred in this area in the 1800's, one of the most noticeable physical features of what is now Vanderburgh County would certainly have been its trees. At that time, most of Indiana was a dense hardwood forest covering 85 percent of the State's land.

The type of forest classification in our area today is dominated by the Oak–Hickory and the Gum–Oak-- Beech forests, which are broad-leafed trees that shed their leaves in winter. The most common species in Indiana are oak, hickory, hard and soft maple, and tulip poplar (the State tree).

Urbanization is regarded as the biggest threat to remaining forests throughout the State. Only pockets of wooded areas are left in Vanderburgh County. The APC 2010 land use inventory shows that about 9.7 percent of the County contains the larger forested parcels. A depiction of the overall forested areas in the County is shown on Figure 3-2 within two forest categories – Terrestrial (non-wetland) and Palustrine (wetland). This Indiana Department of Natural Resources data indicates that Vanderburgh County has a total forested cover area of approximately 33,055 acres or 23.6 percent of the County. The general areas still having substantial wooded lands are the southwestern portion of the County, northeastern German Township and the far northeastern corner of the County. The larger forest parcels are also shown on the Existing and Future Land Use Maps in Appendix I.

#### Figure 3-2: Forested Areas



### WETLANDS

Due to our location in the Ohio River valley, Vanderburgh County has an array of wetland areas. Wetland features such as bottomland swamps, oxbow lakes and sloughs exist as an indirect result of the meandering river. The National Wetlands Inventory digital maps indicated that the County had approximately 5,000 acres of wetlands with over half being forested habitat.

Wetlands are a complex ecosystem containing a combination of soils, hydrology, and plant and animal life. They are transitional places between land and water. Three types of wetlands are found in Vanderburgh County. These types are:

- **LACUSTRINE:** Areas associated with large permanently flooded lakes, reservoirs, and smaller basins greater than six feet deep.
- **PALUSTRINE:** Areas associated with small and/or shallow waters, usually with a dominance of vegetation that has adapted to areas that contain saturated soils at least part of the year. Palustrine areas include marshes, swamps and bogs.
- **RIVERINE:** Contained within a channel that at least periodically has flowing water. An example of an important riverine wetland in the City and County is Pigeon Creek, a tributary of the Ohio River.



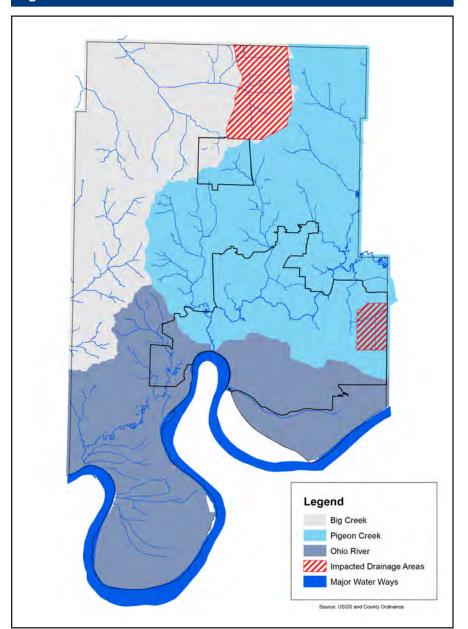
# **PHYSICAL FEATURES**

### **FLOODPLAINS**

Vanderburgh County is in the Ohio River watershed. Portions of the County can further be distinguished within the hierarchy of the local tributaries and where they flow: Big Creek into the Wabash River, and Pigeon Creek into the Ohio River. These watershed areas and their boundaries within the County can be seen on Figure 3-3. The Pigeon Creek Watershed drains an area covering portions of Gibson, Warrick and Vanderburgh Counties. The Big Creek watershed is a much more limited area in northwestern Vanderburgh County and Posey County. There are two sources of flooding on the local tributaries – one from excessive storm water as it drains through these watersheds; and from backwater flooding when the Ohio River backs up into its tributaries.

The potential for flooding on the Ohio River, Pigeon Creek and other smaller streams has been recognized as a hazard in the Evansville area since the earliest settlement. The most extensive flood in the history of Evansville took place in January, 1937; when the Ohio River rose well above the flood stage of 42 ft, cresting at 53.7 ft. The major damage and disruption experienced in this flood would be unlikely to reoccur as the U.S. Army Corps of Engineers has built an extensive levee system. These levees protect portions of Evansville's flood prone areas to a level 3.4 feet higher than the crest of the 1937 flood. The Ohio River has crested above flood stage16 times since 1960, and the most recent occurrence was in March, 2015.

Many areas of Evansville and Vanderburgh County are within the floodplain of the 100-year or base flood, which is shown on Figure 3-4 and defined at the end of this section. This map is based on the official Federal Emergency Management Agency (FEMA) floodplain maps that identify the flood prone areas for the National Flood Insurance Program (NFIP). The current floodplain maps are available on the City/County Geographic Information System (GIS) website <u>evansvillegis.com</u> (click on Flood Information). A typical cross-section of a floodplain is illustrated and its components are described in Figure 3-5.



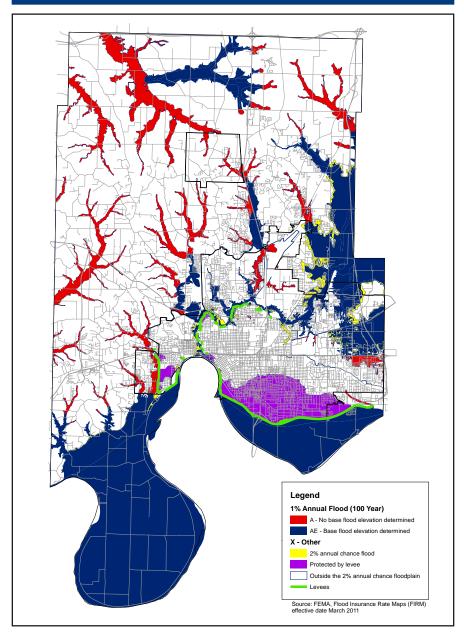
#### **Figure 3-3: Watershed Boundaries**

The NFIP is the Federal program administered by FEMA to mitigate future flood losses through locally adopted and enforced floodplain management ordinances, and to provide access to federally backed flood insurance protection for property owners. The NFIP is designed to provide an insurance alternative to disaster assistance to meet the escalating costs of repairing damage to buildings and their contents caused by floods. Both Vanderburgh County and Evansville have participated in the National Flood Insurance Program since 1980, and 1981 respectively. As of November 2015, property owners in the City and County had over 1,100 flood insurance policies valued at nearly \$268.4 million dollars.

The NFIP also offers voluntary participation in the Community Rating System (CRS) that encourages a community to implement floodplain management activities beyond the minimum NFIP requirements for reductions in the dollar amount of the flood insurance premiums paid in our community. The City of Evansville and Vanderburgh County have participated in the CRS program since 1998, and both have achieved a Class 8 rating, which allows a 10% discount on local flood insurance premiums.

In addition to the regulatory protection through the Floodplain Management Ordinances, the City of Evansville and Vanderburgh County are structurally protected by a major levee system. This system, owned, operated, and maintained by the Evansville/Vanderburgh County Levee Authority, was initiated and designed by the Army Corps of Engineers to protect the City from a flood event slightly higher than the crest of the 1937 flood.

#### Figure 3-4: Special Flood Hazard Areas



# **PHYSICAL FEATURES**

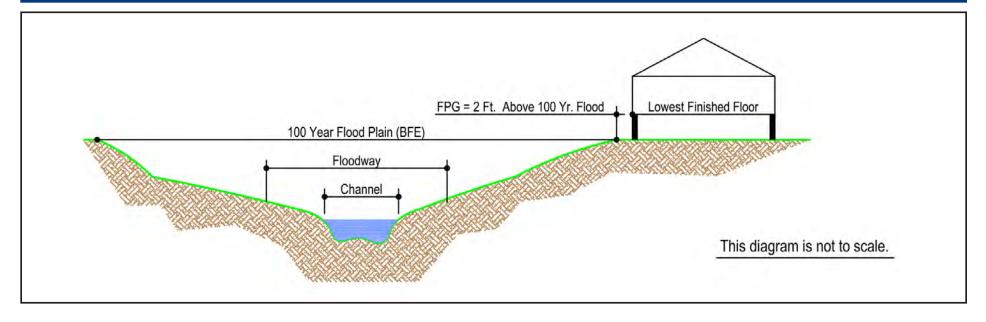
The levee system involves almost 18 miles of earth levee, concrete walls, roadway levees and 20 pumping stations. It is considered to be the most extensive levee system in Indiana. The levee, shown on Figure 3-4, has the following four general sections:

- 1. The Downtown section along Riverside Drive;
- 2. The East section from downtown along Veterans Memorial Parkway and I-164 to the Vanderburgh/ Warrick County line;
- 3. The North section along Pigeon Creek to U.S. 41; and
- 4. The West section along Tekoppel Avenue.

The pumping stations are activated at specific water levels that vary according to the location. The Corps of Engineers estimates that this flood protection system has already reduced potential flood damage by more than \$20 million dollars. The local levee was inspected and certified by the Army Corps of Engineers in 2011.



#### Figure 3-5: Floodplain Cross-Section



#### DEFINITIONS FOR THE DIAGRAM SHOWN ABOVE.

**Channel:** Carries the normal flow of water in a creek, ditch, stream, or river through a watershed area.

**Flood:** A general and temporary condition of partial or complete inundation of normally dry land areas from the overflow, the unusual and rapid accumulation, or the runoff of the surface waters from any source.

**Floodplain:** Includes the channel and the adjacent land areas which have been or are susceptible to being inundated by a flood.

**Floodway:** Includes the channel and the immediate land area which are reasonably required to efficiently carry and discharge the peak flow of a flood.

**Regulatory Flood:** A flood having a one percent (1%) probability of being equaled or exceeded in any given year, commonly referred to as either the 100-year flood or "base flood." These are shown on the Flood Insurance Rate Maps (FIRM) which are prepared the Federal Emergency Management Agency (FEMA) and are adopted by ordinance by both the City and County.

**Flood Protection Grade (FPG):** The required elevation for the lowest finished floor of any structure that must be at least two feet (2 ft) above the Base Flood Elevation. Current Indiana law and local regulations allow development within the floodplain outside of the floodway. However, the City and County Floodplain Management Ordinances require the lowest floor elevation to be two feet above the 100-year flood level (or base flood elevation). All development is reviewed for compliance with these regulations through the subdivision and permitting processes.



# **SECTION 4: DEMOGRAPHICS**

all is a

28

STA

## **DEMOGRAPHICS**

### POPULATION

This Section describes the local population using data from the 2010 Census. Knowing the characteristics of our local population is essential in developing a plan that is appropriate for the residents of our community.

#### **EVANSVILLE METROPOLITAN STATISTICAL AREA**

This discussion begins at the regional level, with Vanderburgh and the surrounding counties. Our region is known as the Evansville Metropolitan Statistical Area (MSA). The City of Evansville is the central city for our MSA.

An MSA is defined by the Census Bureau as having at least one urbanized area of 50,000 or more population, plus adjacent territory that has a high degree of social and economic integration with the core as measured by commuting ties.

The MSAs were established to provide statistics on geographic areas that include large urban areas and their closely interrelated surrounding counties. A map of the Evansville MSA counties is provided in Figure 11-1 in Section 11. Table 4-1 shows the growth of the counties in the Evansville MSA since 1960. The 2010 regional population was 358,676.



#### Table 4-1: Evansville Metropolitan Statistical Area (MSA) Counties and their Population: 1960 - 2010

COUNTIES	1960	1970	1980	1990	2000	2010
Gibson, IN	29,949	30,444	33,156	31,913	32,500	33,503
Posey, IN	19,214	21,740	26,414	25,968	27,061	25,910
Vanderburgh, IN	165,794	168,772	167,515	165,058	171,922	179,703
Warrick, IN	23,577	27,970	41,474	44,920	52,383	59,689
Henderson, KY	33,519	36,031	40,849	43,044	44,829	46,250
Webster, KY	14,244	13,282	14,832	13,955	14,120	13,621
County Total	286,297	298,239	324,240	324,858	342,815	358,676
MSA Total	199,313	232,775	309,408	278,990	342,815	358,676

Notes: BOLD numbers represent those counties that were in the MSA for that decade.

(The Evansville, Indiana-Kentucky MSA was redefined in 2013 to no longer include Gibson County, Indiana and Webster County, Kentucky) Source: STATS Indiana, Population

#### VANDERBURGH COUNTY AND CITY OF EVANSVILLE

The 2010 Vanderburgh County population was 179,703 as shown on the next page on Table 4-2. There was very little change in the County population between 1960 and 1990. Between 1990 and 2010, the population grew by 8.9 percent. This is the highest level of growth the County has experienced over the last 50 years.

In regard to the City population, historical data indicates that the City continued to grow until 1960. Interpretation of this data is complicated by past annexations which resulted in added population. Figure 4-1 shows the growth in City land area by annexation from 1819 to the present. Since the City population peak in 1960, Table 4-2 shows consistent population decline to its 2010 total of 117,429. It is evident that Evansville has followed the strong national trend toward decentralization of population from the urban core into outlying areas (also known as out-migration or movement of residents from inside to areas outside the City). From 2000 to 2010, the City population decreased by 3.4 percent.

Population change results from two components: natural increase (births minus deaths) and net migration (people moving into the County minus those moving out). Table 4-3 on the next page reflects the components of population change from 1990 to 2000 and 2000 to 2010. The data shows the impact that the strong birth rate and migration had on the County population. Over the last 20 years, the out-migration trend of the 1980's reversed as the County is now strongly trending to positive net migration. As a result, contributions from both the birth rate and migration have provided a welcome boost to the County population totals over the last two decades.

#### Figure 4-1: City Growth By Annexation

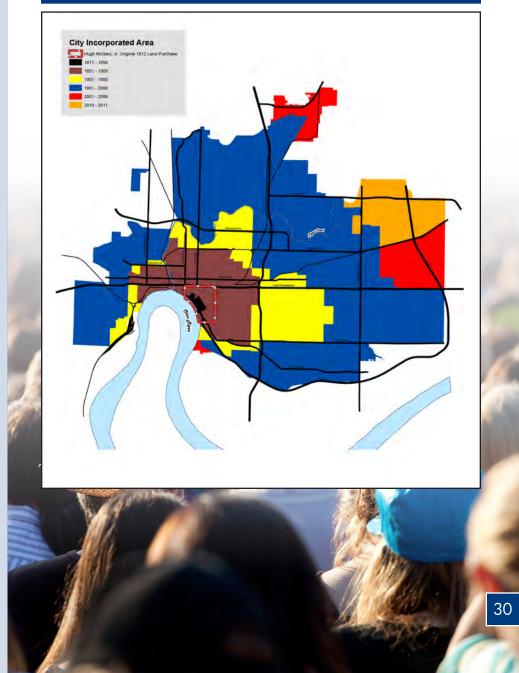


Table 4-2. Change in Population. Valuerburgh County and City of Evansvine. 1930-2010								
		COUNTY		СІТҮ				
YEAR	POPULATION	AMOUNT OF CHANGE	PERCENT OF CHANGE	POPULATION	AMOUNT OF CHANGE	PERCENT OF CHANGE		
2010	179,703	7,781	4.53	117,429	- 4,153	- 3.42		
2000	171,922	6,864	4.16	121,582	- 4,690	- 3.71		
1990	165,058	-2,457	- 1.47	126,272	- 4,224	- 3.24		
1980	167,515	-1,257	74	130,496	- 8,268	- 5.96		
1970	168,772	2,978	1.80	138,764	- 2,779	- 1.95		
1960	165,794	5,372	3.35	141,543	12,907	10.03		
1950	160,422			128,636				

Table 4-2: Change in Population: Vanderburgh County and City of Evansville: 1950-2010

Source: STATS Indiana, Population

#### Table 4-3: Components of Population Change for Vanderburgh County

YEAR	1990 to 2000		YEAR	2000 to 2010		
1990	Population	165,058	2000	Population	171,922	
	Births	+ 22,787		Births	+ 28,844	
	Deaths	- 17,311		Deaths	- 24,785	
	Migration	+ 1,388		Migration	+ 3,772	
2000	Population	171,922	2010	Population	179,703	
	Net Change	+ 6,864		Net Change	+ 7,781	

Source: Birth and death statistics are compiled by the Evansville-Vanderburgh County Health Department

### **GENERAL POPULATION CHARACTERISTICS**

#### AGE

As shown in Table 4-4, the County population is aging. In the 2010 Census, the median age for Vanderburgh County was 37.5, which was more than 0.5 year older than the median age for the nation and state. Over the past 50 years, the median age has increased by six years, which is consistent with national and state trends. The largest increase in percentage of the overall County population was recorded in the over 65 age group, while declines in percentage occurred in the two youngest age groups shown on the Table. These trends are expected to continue in the future.

#### Table 4-4: Percentage of Population in Selected Age Groups: 1950-2010

YEAR	preschool <b>(0-4)</b>	SCHOOL (5-17)	COLLEGE (18-24)	ADULT (25-64)	AGE 65 & OLDER	MEDIAN AGE
2010	6.47	15.72	11.80	51.60	14.41	37.5
2000	6.22	16.92	11.52	50.02	15.31	36.9
1990	6.93	16.95	10.08	50.32	15.72	34.5
1980	6.88	18.61	13.81	46.97	13.73	31.4
1970	7.48	25.39	10.81	44.75	11.56	30.3
1960	11.08	24.10	7.61	47.12	10.08	31.3
1950	10.81	18.94	10.32	51.86	8.06	30.8

Source: U.S. Census

The aging population trend results from an increase in life span and a decline in birth rate. Continuation of this trend will directly impact the City and County by affecting the types of services and facilities the population will require. Senior housing, parks and recreation, transportation, medical care, and education are only some of the services that will be affected by this age shift.

#### SEX

The percentage of population that is female (51.8%) is higher than that for males (48.2%). These percentages have changed very little (1%) since the 1950 census. Compared to Indiana and the nation, Vanderburgh County has had a slightly higher percentage of female population since 1950 (1%).

#### RACE

The U.S. Census divides population into four minority groups, including Blacks, American Indians, Asians, and other races. In the 2010 Census, the minority population in the County was 13.8 percent of the population. This was a 4 percent increase from 2000 toward diversity. Further analysis shows that 14.7 percent of the minority population lives in the unincorporated part of the County, while 85.3 percent live in the City. Historical County data on minority population is shown in Table 4-5.

#### Table 4-5: Percentage of County Population by Race: 1950-2010

YEAR	WHITE	BLACK	AMERICAN INDIAN	LATINO	ASIAN	OTHER
2010	85.18	9.03	.19	2.15	1.10	2.33
2000	88.68	8.15	.16	.97	.75	1.24
1990	91.25	7.51	.19	.43	.57	.05
1980	91.87	7.15	.15	.44	.36	.02
1970	93.73	6.09	.06	n/a	.05	.06
1960	94.19	5.76	.01	n/a	.02	.01
1950	94.26	5.71	.00	n/a	.01	.00

Source: U.S. Census

## **DEMOGRAPHICS**

### DEMOGRAPHIC CHARACTERISTICS OF HOUSEHOLDS

The following analysis examines demographic and housing characteristics. Data on these characteristics can shed light on the strategies and programs that are needed to have a viable housing sector in our community. This analysis of county-wide housing statistics was obtained from the 2010 Census, 2006-2010 American Community Survey 5-year estimates and from the 2010-2014 Comprehensive Housing and Community Development Plan prepared by the Department of Metropolitan Development DMD.

#### HOUSING UNIT TOTALS

The U.S. Census Bureau classifies living quarters as either housing units or group quarters. A housing unit is a house, an apartment, or a mobile home. The housing unit growth in Vanderburgh County and the City of Evansville over time is shown on Table 4-6. In 2010, the County had a total of 83,003 housing units, including those in the City; and Evansville had 57,799 units. This data indicates that the number of housing units has continued to increase significantly in the unincorporated County, while in the City housing units peaked in 1990 and have stayed just below that level since then. Most of the recent growth has occurred in unincorporated Center and Scott Townships. Overall, the rate of growth for housing has been exceeding the growth of the general population. Since 1990, the housing unit total in the County has grown by 14.3 percent, while the County population grew 8.9%.

#### **TYPE OF DWELLING UNIT**

There is a variety of dwelling unit types in the County from single-family homes to multi-family rental units. The most prevalent type of dwelling unit found in Vanderburgh County and in the City of Evansville is the single-family house as shown in Table 4-6. In 2010, 71.5 percent of the total units in the County were classified as single family, while the data shows that the City offers somewhat more housing options.

Table 4-6	Table 4-6: Housing Units, Percent Single Family, Percent Built before 1939								
	VANDERBURGH COUNTY			EVANSVILLE					
YEAR	TOTAL HOUSING UNITS	% SINGLE FAMILY	% BUILT BEFORE 1939	TOTAL HOUSING UNITS	% SINGLE FAMILY	% BUILT BEFORE 1939			
2010	83,003	71.50	22.20	57,799	67.80	28.20			
2000	76,300	70.66	21.28	57,065	66.84	25.72			
1990	72,637	69.31	25.81	58,188	65.14	29.29			
1980	67,502	82.77	34.21	54,210	80.88	38.90			
1970	58,011	77.14	47.23	49,139	74.32	51.27			
1960	55,082	84.28	59.60	47,744	81.94	62.64			
1950	49,573	66.95	75.62	40,819	61.40	78.38			

Source: U.S. Census

#### **HOUSEHOLD SIZE**

The U.S. Census Bureau defines a household as all persons who occupy a housing unit. The changing age structure of the population and housing supply are among many factors that will affect the size and composition of future households. Generally, household size is the lowest in the City center and climbs with distance from the center.

The 2010 household size in Evansville (2.23) and Vanderburgh County (2.31) are both lower than for the nation and state (at 2.52). Table 4-7 illustrates a downward trend for household size in Evansville/Vanderburgh County. This trend is a result of several factors including our aging population, and changes in family structure.

#### Table 4-7: Occupied Housing Units, Tenure and Persons Per Household

	VANDERBURGH COUNTY				EVANSVILLE			
YEAR	OCCUPIED HOUSING UNITS	PERCENT OWNER OCCUPIED	PERCENT RENTER OCCUPIED	AVERAGE PERSONS/ HOUSEHOLD	OCCUPIED HOUSING UNITS	PERCENT OWNER OCCUPIED	PERCENT RENTER OCCUPIED	AVERAGE PERSONS/ HOUSEHOLD
2010	74,454	64.50	35.50	2.31	50,588	56.00	44.00	2.23
2000	70,623	66.81	33.19	2.33	52,273	59.95	40.05	2.24
1990	66,780	64.82	35.18	2.40	52,948	58.98	41.02	2.30
1980	64,030	65.90	34.10	2.55	51,310	61.98	38.02	2.46
1970	54,771	68.69	31.31	3.00	46,404	65.01	34.99	2.90
1960	50,642	69.17	30.83	3.21	44,042	66.58	33.42	3.14
1950	47,597	58.86	41.14	3.29	39,403	54.69	45.31	3.20

Source: U.S. Census

34

## **DEMOGRAPHICS**

#### **GROUP QUARTERS**

All persons not in households are classified by the Census Bureau as living in group quarters. Out of the 2010 total County population, 4.2% lived in group quarters. Table 4-8 shows the housing types of the group quarters population. Just over half of the non-institutional group quarters population are college students living in university housing managed by the University of Evansville and University of Southern Indiana. Nursing homes and the County Jail are examples of institutional group quarters.

GROUP QUARTER TYPE	POPULATION	% OF GROUP QUARTER POPULATION
INSTITUTIONALIZED		
Adult Correctional Facility	691	9.2
Nursing Homes	1,497	19.9
Other	218	2.9
Total	2,406	31.9
NONINSTITUTIONALIZED		
University Housing	3,886	51.6
Other	1,239	16.5
Total	5,126	68.1
TOTAL	7,531	100.0

Source: 2010 Census

#### **HOUSEHOLD INCOME**

Household incomes since 1960 for the City and County are displayed in Table 4-9. The City median household income from the 2010 American Community Survey 5-year Estimate was \$35,469, and the County estimated income was \$42,369. Both of these median household income figures are well below that of the State and Nation. Generally, incomes are the lowest at the City center and climb with distance from the center. The population with income below poverty level in the County was estimated at 28,003 or 15.6% in 2010, an increase from the 11.2% living below poverty in 2000.

#### Table 4-9: Median Household Income

YEAR	VANDERBURGH COUNTY	EVANSVILLE	
	HOUSEHOLD INCOME	HOUSEHOLD INCOME	
2010 ACS	\$42,369	\$35,469	
2000	\$36,823	\$31,963	
1990	\$25,798	\$22,936	
1980	\$16,070	\$14,565	
1970	\$ 7,697	\$ 7,255	
1960	\$ 5,405	\$ 5,299	

Source: Decennial Census and 2010 American Community Survey 5-year Estimates



#### AVERAGE MONTHLY HOUSING COST

The census definition for monthly costs attributed to housing is the sum of rent or mortgages, taxes, insurance, and utilities. The conventional public policy indicator of housing affordability in the United States is the percent of income spent on housing. These expenditures that exceed 30 percent of household income have historically been viewed as the threshold indicating a housing affordability problem, or housing that is burdened by excessive costs. For example, a family earning the median household income in the City having monthly housing costs greater than \$887.00 would be considered as burdened.

The percentage of households burdened by housing costs since 1960 for the City and County are shown in Table 4-10. In 2010, 22.7 percent of owner occupied units and 53.1 percent of renter occupied units were burdened in the City, which results in an estimated total of 17,612 City households burdened affecting more than 35,000 household residents. The percentages for the County were slightly lower. The negative impacts of housing cost-burden on households can result in insufficient resources for families to cover other critical needs; the threats of mortgage default; eviction and homelessness; and unhealthy levels of stress.

#### Table 4-10: Percent of Households Burdened by Housing Costs

YEAR		RBURGH INTY	EVANSVILLE		
TLAN	OWNER	RENTER	OWNER	RENTER	
2010 ACS	20.7	52.8	22.7	53.1	
2000	15.0	35.3	16.2	35.2	
1990	13.4	37.6	14.5	38.1	
1980	14.1	33.3	14.8	34.2	

Source: Decennial Census and 2010 American Community Survey 5-year Estimate

# **DEMOGRAPHICS**

#### **DESCRIPTIVE AREAS**

In analyzing the 2010 Census data for Vanderburgh County, it is apparent that certain areas have similar demographic characteristics. An effort has been made to identify and map these areas to:

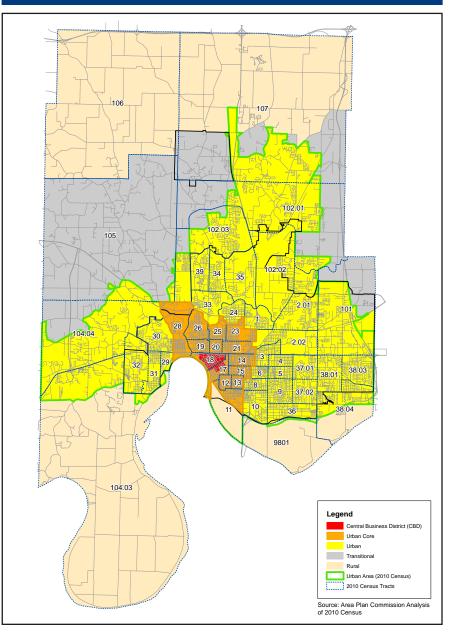
- Better understand the demographic characteristics, similarities and differences in the Census Tracts that make up the County; and
- 2. Provide descriptive areas that can be referred to throughout the Plan.

The following variables and what they measure or reflect were used in identifying the descriptive areas:

- Population Density
- Longevity In The Same Residence
- Owner/Renter
- Housing Built Before 1939
- Vacancy

The analysis of Census data for these select demographic variables resulted in the identification of five distinct areas within the County. The five Descriptive Areas illustrated on Figure 4-2, were established using census tract/block group boundaries. The following is a general discussion of each descriptive area.

#### Figure 4-2: Descriptive Areas



#### **CENTRAL BUSINESS DISTRICT**

The Central Business District (CBD), the traditional downtown area for the City of Evansville, is Census Tract 18. It is the location where the City of Evansville began in 1819. Today, the Evansville CBD can be characterized as a regional financial center with significant service, entertainment, and government sectors.

#### **URBAN CORE**

The Urban Core area can be characterized as having population densities greater than in the City as a whole. Applying other criteria, this portion of the City has a higher percentage of homes built before 1939, a higher renter-occupied housing percentage, and higher vacancy rates than found in the City as a whole. Its boundaries are nearly the same as Pigeon Township. Most of the City's redevelopment efforts focus on this area.

#### URBAN

The primary criterion used to identify this area was the Census Bureau's Urban Area designation. Other defining characteristics of this area include: lower vacancy rates, more owners than renters, and higher percentage of residents who have lived in the same house when compared to the City as a whole. Although this area is predominantly residential, many of the community's commercial areas are located in this zone. Most of the Urban area within the City has been annexed since 1950, and can be characterized as being suburban style development.

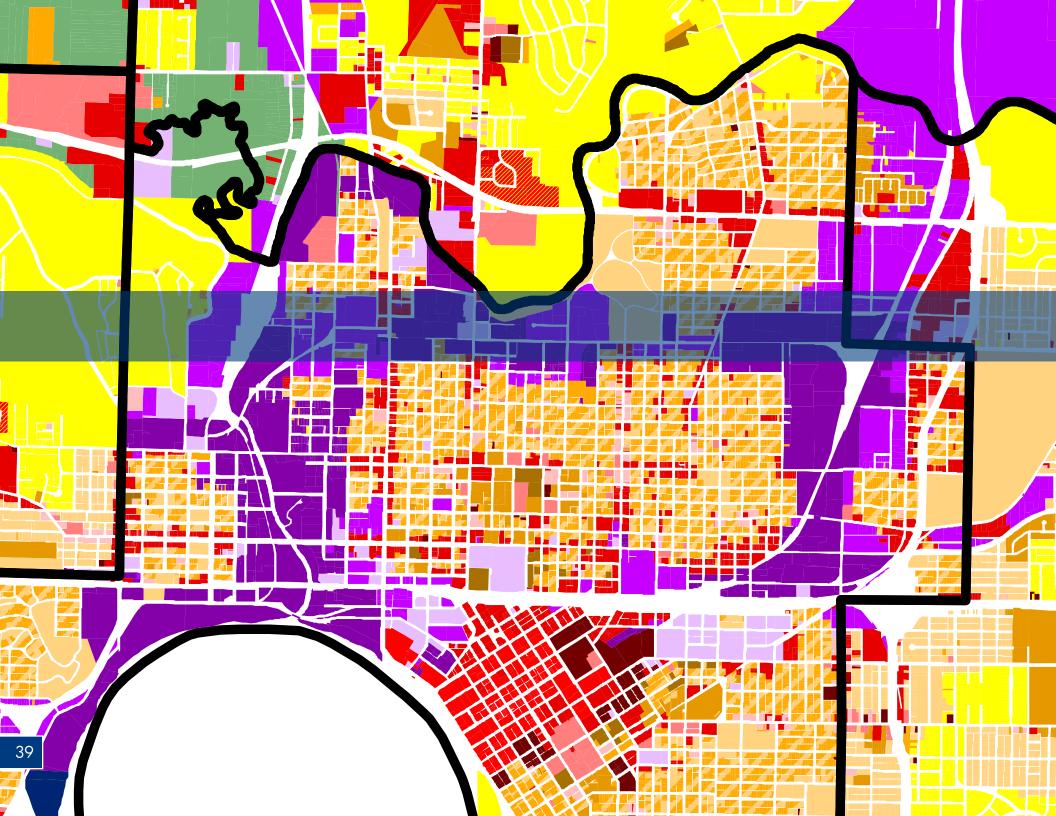
#### TRANSITIONAL

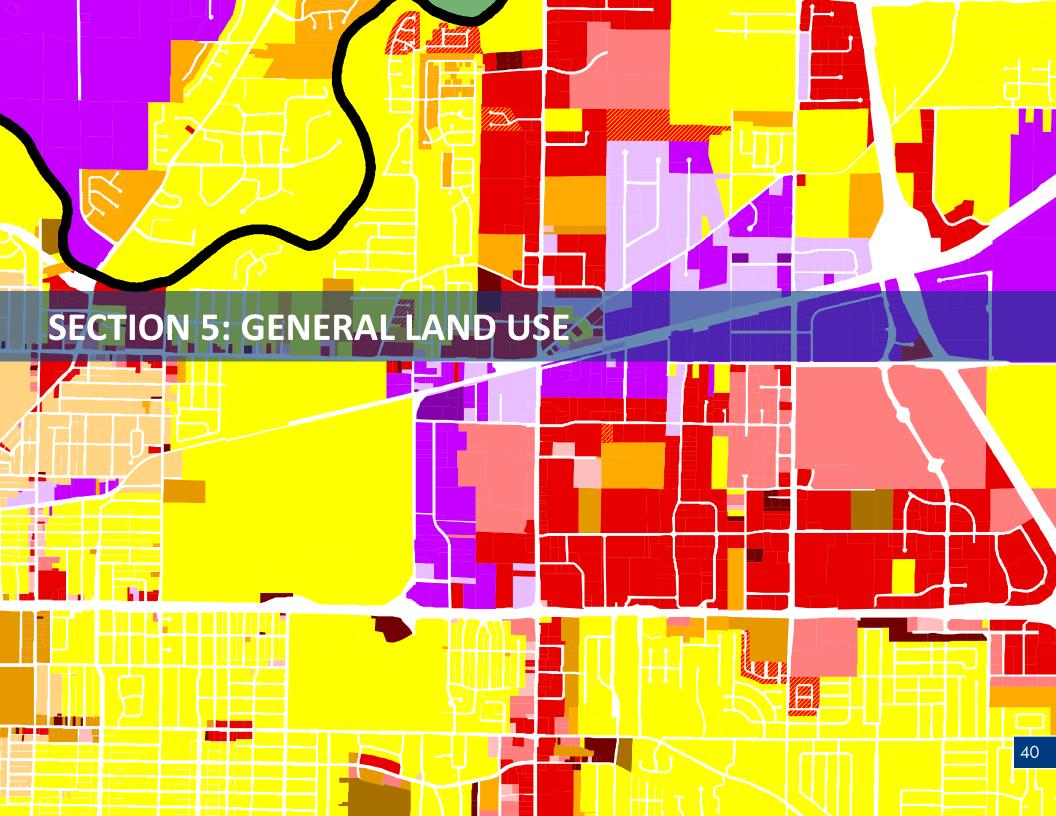
The main characteristic of this area is that it has a population density between that of the Urban Area (as defined by the Census Bureau) and that of Indiana as a whole. Land uses in the Transitional area are being converted from agricultural or open land to suburban uses, primarily residential subdivisions. This area forms a growth ring around the City. The development of this area increases the urban footprint and extends the infrastructure service area, in lieu of infill or redevelopment closer to or in the City core.

#### RURAL

The Rural area is identified as having a population density less than the State of Indiana as a whole, and a higher percentage of rural farm households than any other area in the County. The dominant land use in the Rural area is agriculture, along with some scattered woodlands, villages, and single-family homes. Most of the residences in this area use septic systems for sewage disposal since public sewers are not available. Growth in this area potentially presents problems such as traffic and farm versus new subdivision conflicts.







# **GENERAL LAND USE**

The Comprehensive Plan establishes the desired land use pattern and development goals, objectives, and policies that provide guidance for land use decisions. The underlying principal of the land use plan is to assure that Evansville and Vanderburgh County can reasonably accommodate the expected and desired growth in an orderly manner that meets the needs and vision of the community. This Section of the Plan covers overall land use issues, while the sections of the land use plan that follow cover residential, commercial, industrial and rural land use categories.

### LAND USE PLAN DEVELOPMENT

This land use plan provides a blueprint for the future to be accomplished through addressing the needs identified in the overall Comprehensive Plan and implementing the goals, objectives, and policies and the Future Land Use Map within the Plan. The principles for guiding development location, type, design and review provided in this Plan should be observed in all future land use decisions and in the preparation of subarea (e.g. neighborhood, corridor) plans.

The plan is based on the following general themes:

- the need for responsible and orderly growth and economic development;
- the need to maintain and revitalize the CBD and Urban Core areas;
- the conservation of natural, cultural, and historic resources; public and private investments; and other unique community assets;
- the need to maintain, protect, and where necessary improve Evansville's existing neighborhoods since they are a vital community resource; and,
- the need to maximize the use of the existing infrastructure and undeveloped or underutilized land within the City through infill development.

The general theme of infill is particularly important in this land use plan. Most new development and all redevelopment that occurs in the City can be considered infill. It can "fill in" vacant lots or can involve removal of existing structures to establish a new use(s) on a property, sometimes changing from a lesser to a more intensive use. The following terms related to infill are commonly used to describe certain types of development sites:

**Greyfields** are often large retail/office locations characterized by long-term, excessive vacancy, or other economic circumstances that negatively impact surrounding properties. This term refers to the expanse of empty, grey parking lots that usually encompass a major portion of these sites.

**Redfields** are underperforming and/or foreclosed commercial sites (as in red ink) that are no longer viable economically. This decline can result from changes in the preferences of tenants and consumers, which ultimately erode their popularity, attractiveness and ability to provide sustainable income.

Although they are distressed parcels, Greyfields and Redfields also provide redevelopment opportunities due to convenient location, sizable acreage, and the availability of existing infrastructure (e.g. served by major roads, multiple access points, etc.). The alternative to re-using these sites is continued "greenfield" development.

**Greenfields** are farm fields, forests, or other undeveloped land outside of the urban area that are being converted to urban uses. This development comes with much higher costs to the community including infrastructure extension, transportation, loss of open space/forest/farmland, and an inefficient land use pattern. Although there is not a one-size-fits-all solution, there are several possible alternatives that can be used to revitalize potential infill sites. Some of these options are:

- POLICY SUPPORT establishes an overall land development policy that provides a thought-out strategy of specific actions to encourage infill.
- ADAPTIVE REUSE converts distressed structures to productive uses; and
- DEMOLITION AND REDEVELOPMENT provides exciting opportunities to transform older areas with new construction.

Development proposals must be evaluated for consistency with the land use plan. However, the plan is a conceptual guide and is meant to be flexible. There will be development proposals in the future which do not conform to this land use plan. The justification and rationale supporting such proposals, and the extent to which they are responsible and beneficial to the community, must be carefully evaluated to determine whether they warrant deviating from the community's land use goals, objectives and policies or the recommended land use pattern on the Future Land Use Map.

#### LAND USE COMPATIBILITY

Land Use Compatibility is the extent to which adjacent land uses coexist with each other over time. Adjacent uses are deemed compatible when one of the uses does not have a negative impact directly or indirectly on the other. Incompatible or unbalanced land uses can result in major negative impacts on one of the properties, and depending on the extent and number of occurrences, it can alter the physical, sociological and economic health of a community.

One of the goals of land use planning is achieving compatibility between land uses. This goal is implemented through the City and County Zoning regulations and private development decisions. Land use planning recognizes that factors such as the surrounding natural and built environment, and the nature of the existing and proposed land uses can influence the appropriateness of placing two different uses next to one another. The Zoning Ordinance helps to implement the Comprehensive Plan by giving local officials a tool for influencing the general land use pattern, the uses on individual parcels/lots, and the specific site development standards that developers must conform to.

Decisions of individuals, boards, and developers achieve compatibility when there is a positive interrelationship between the land uses. This creates an environment for both individual developments and for the overall land use pattern that enhances the community.

State law dictates that, when considering land use proposals, the Area Plan Commission and the elected bodies

... shall pay reasonable regard to:

- (1) the comprehensive plan;
- (2) current conditions and the character of current structures and uses in each district;
- (3) the most desirable use for which the land in each district is adapted;
- (4) the conservation of property values throughout the *jurisdiction; and*
- (5) responsible development and growth. (IC 36-7-4-603)

These considerations and the similar statements in the City and County Zoning Codes were established in response to the potential impact some development proposals can have on surrounding properties, and in recognition of the following characteristics that influence land use compatibility:

- Basic land use interdependence;
- Visual compatibility;
- Social ramifications;
- Traffic generation;
- Other impacts/physical site requirements; and
- Differences in the nature and intensity of land uses.

# **GENERAL LAND USE**

The range of compatibility between existing and proposed land uses is a scale that depends on the nature of the relationship between adjacent uses. Understanding this concept can assist decision makers in determining whether a proposed use fits with the existing uses in an area. The "compatibility scale" can be grouped into three categories of land use relationships. These categories are defined and described as follows:

#### COMPATIBLE • QUESTIONABLE • INCOMPATIBLE

**COMPATIBLE** when adjacent land uses are the same; or when they are different, they are mutually beneficial and complement each other; they have only minimal differences in intensity of use; and they are not anticipated to have negative impacts or the expected impacts are to be unnoticeable. It is very likely that a proposed action having compatibility with its neighboring properties would also be consistent with the character of the area and the Comprehensive Plan.

Example - single family residential (R-1 Zoning District) adjacent to low intensity neighborhood commercial uses (CO-1, CO-2 and C-1 Zoning Districts).

**QUESTIONABLE** when only one land use benefits from its proximity with the adjacent use; when there will be moderate use intensity differences between a proposed action and the surrounding uses; when mild concerns arise about whether a proposal is consistent with the character of the site area or the Comprehensive Plan, and about the anticipated negative impacts on the area. Throughout most of the Questionable compatibility range, these concerns could be mitigated by use of proper urban design elements such as buffering (if incorporated into a use and development commitment). Examples of preferred buffering techniques are shown on Figure 5-1.

Example - single family residential adjacent to medium intensity commercial (C-2).

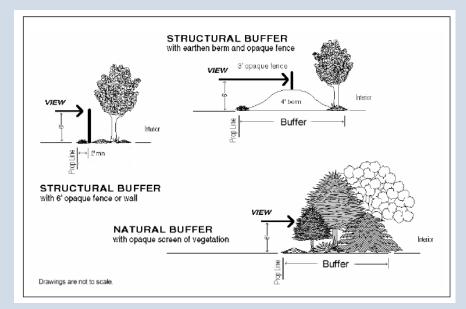
**INCOMPATIBLE** when adjacent land use neither benefits nor complements the other; when there are major anticipated negative impacts including industrial emissions, odors, handling of hazardous materials, loud noises, reduced property values and ability of adjacent land owners to enjoy their property; when differences in the use intensity are substantial; and when it is obvious that a development proposal does not fit the character of the area and is substantially incompatible with the Comprehensive Plan. These conditions can become economic barriers by discouraging adjacent land owners from investing in their properties, which can effect both the surrounding neighborhood and community at large.

Example – single family residential next to heavy industrial use (M-2 & M-3).

This "scale" by land uses is further illustrated in Appendix D on the Land Use Compatability Matrix.



### Figure 5-1: Buffering Techniques







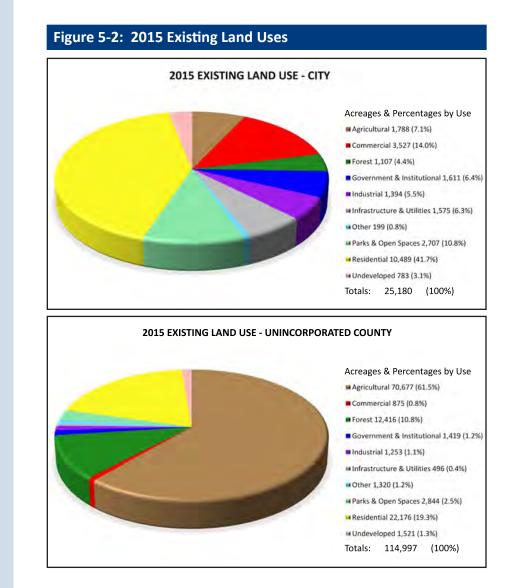


# **GENERAL LAND USE**

### LAND USE INVENTORY

The land use inventory is part of the framework upon which a land use plan is built. The land use classifications determined from multiple sources were: agricultural, commercial, forest, government and institutional, industrial, infrastructure and utilities, mixed use, parks/open space, other, residential, and undeveloped. The results of this inventory are presented on Figure 5-2 for Evansville and Vanderburgh County, and are also illustrated on the Existing Land Use Map 2015 in Appendix I.

The acreage and the corresponding percentages of the City and County totals for each land use from the land use inventory indicate that Agriculture was the most common land use, which accounted for almost 62% of the land in the County. The 70,677 acres currently being used for agriculture equates to more than 110 square miles. The Residential and Forest categories in the County were second and third at 19% and 11%. Residential was the most dominant use in the City (over 10,000 acres or 42%). The Commercial use category was a distant second in the City at 14%. These figures show that the County is more rural in nature, while the City is almost all urban. Only 7% of the City land area was classified as Agricultural and only 4% was Forest.



### SECTION 5 Evansville-Vanderburgh County Comprehensive Plan



# **GENERAL LAND USE**

#### **DEVELOPING THE LAND USE MAPS**

Appendix I contains the maps illustrating the existing land use and the recommended land uses for 2035. These maps are at such a scale that they are not intended to be site specific; nor used to determine parcellevel land use. The use classifications shown are the same as those used in the land use inventory. The difference between these two maps is that the future land use also includes mixed uses. The most common example of what is envisioned for the mixed use areas is residential housing units located over commercial space in multi-storied structures (includes live-work). This designation allows for mixed use properties to be used for residential or commercial only, although the mixed use is preferred.

The 2035 map also shows some areas that have been designated for different uses than those that currently exist. This simply means that if a proposal is filed for reuse or redevelopment of one of these existing sites in the future, the recommended use should be considered as suitable, and the best use for these locations. In the meantime, it does not mean that the existing uses must be converted by 2035, or that they are not currently considered as viable.

The following steps were used to develop the recommended land use pattern on the Future Land Use-2035 Map:

- Analyze the existing 2010 General Land Use Map;
- Project population and convert increase into land needs for the future;
- Project the location, type, pace and extent of future development in the City of Evansville and Vanderburgh County based on current trends;
- Evaluate the suitability of the land for development using the various physical feature maps (illustrated in Section 3 and Appendix C);
- Integrate the concepts of Land Use compatibility and existing character;
- Evaluate the availability of utility services and accessibility to the future road network (see Sections 17 and 19);
- Evaluate the input received from local officials and the public;
- Evaluate the Millennial 2040 Plan, other Master Plans, and subarea plans;
- Analyze the results of the CommunityViz computer land use model as a tool in plan development;
- The final step was to allocate future 2035 land uses.

In the future land use allocation, local government planning must designate sufficient land in a variety of locations to accommodate developers with a choice of sites that have potential for successful development, both economically and for the community as a whole. While economic market forces primarily dictate development location (and ultimately the level of economic success), another important consideration is that location decisions be consistent with the Plan, unless the benefit to the community from a proposal clearly overrides any inconsistencies with the Plan. Although the Future Land Use Map is intended to be conceptual and not site specific, for comparative purposes, a GIS analysis of the Future Land Use-2035 Map was done to look at the potential increase in acreage and percentage by land use category in the City and unincorporated County as compared to the Existing Land Use Map. The results of this analysis are reflected in Table 5-1, which shows approximately 29 square miles recommended for development in the future. The 2035 Future Land Use Map shows more acreage than will be needed to accommodate the anticipated future growth in the land use categories in Table 5-1, so that developers have flexibility in their site selection. Of this total, 19.5 square miles is recommended for residential development; 2.1 square miles for commercial development; 6.1 square miles for industrial development; and 1.4 square miles for mixed use development. The City total for residential does not reflect the infill that will occur on lots with an existing home to be demolished and redeveloped with a future residence.

It is likely that certain areas will develop in the future that are designated as agriculture/undeveloped on the Future Land Use Map for 2035. These development proposals will require a thorough evaluation by the community and decision makers before final action. To maintain a reasonable sequencing of development, these areas should only get approvals to develop when there is existing or proposed development nearby and commitments are in place from the private sector and/ or the public sector for construction of the necessary water and sewer extensions and transportation network improvements.

The Forest designation on the Future Land Use Map contains some of the larger existing forested areas, which represent almost 13 square miles. Where possible, these locations should be preserved, either through preference of the owners, the establishment of conservation easements, or purchase by Land Trusts. In regard to future development, scattered residential use already exists in some of these areas, and any proposed lower density residential use (e.g. large lot or cluster development housing) should be considered as consistent with this classification. However, site planning for these developments should preserve as much of the forest as possible.

#### Table 5-1: Land Use Acreage Change 2015 to 2035

	Ci	ty	Unincorporated County		
Land Use	2015 Existing Land Use Acreage	Acreage Added & % Increase by 2035	2015 Existing Land Use Acreage	Acreage Added & % Increase by 2035	
Residential	10,489	1,542 (14.7%)	22,176	10,972 (49.4%)	
Commercial	3,527	605 (17.1%)	875	721 (82.4%)	
Industrial	1,394	456 (32.7%)	1,253	3,475 (277.4%)	
Mixed Use	N/A	746 (100%)	N/A	134 (100%)	



# **GENERAL LAND USE**

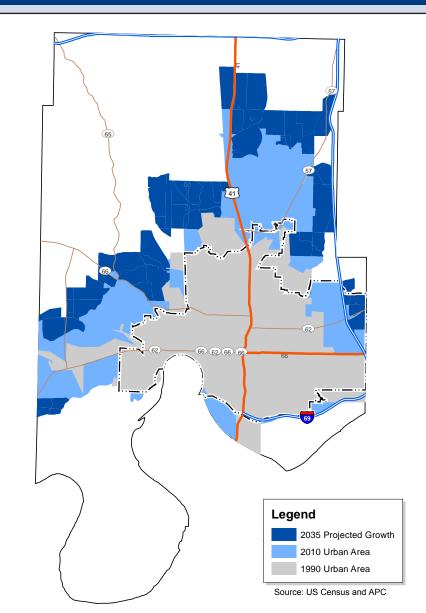
#### **URBAN AREA**

When considering variables that measure how the community has grown, one way to illustrate this is to examine the Census Urban Area Boundary over time. The Census Bureau's Urban definition is used by planners in many ways, such as to track the amount of urbanization indicated by changes in the urban/rural land acreage ratio.

An URBAN AREA is defined by the Census Bureau as having at least 50,000 or more people comprised of a densely settled core of census tracts and/or census blocks that meet minimum population density requirements, along with contiguous territory also containing nonresidential urban land uses.... Figure 5-3 illustrates the 1990 and 2010 Census Urban Area Boundaries. The increase in urban land area from 1990 to 2010 is about 33 square miles. The Map also shows area that could be urban in 2035 if the same trend continues over the next 20 years. Table 5-2 describes how the County and State of Indiana have changed in the past 20 years in relation to the Urban Area. While the County and State's urban populations have grown at nearly the same rate, the more telling number is the County's increased rate of land area that is considered urban. The County increased from 22 percent urban in 1990 to 35 percent urban in 2010.

Table 5-2: Urban Population and Urban Area Changes from 1990 to 2010						
	Percent of Population in Urban Area 1990	Percent of Population in Urban Area 2010	Percent of Population Change	Percent of Land Area in Urban Area 1990	Percent of Land Area in Urban Area 2010	Percent of Land Area Change
Vanderburgh County	85.5%	90.3%	+ 5.3%	22.2%	35.4%	+ 13.1%
Indiana	64.9%	72.4%	+ 7.5%	5.0%	7.0%	+ 2.0%

Source: 1990 and 2010 Census



#### Figure 5-3: Urbanized Area Growth

#### **INTERSTATE 69 AND FUTURE LAND USE**

In developing the land use plan, the I-69 project was a major consideration in this planning process. This project is expected to have more influence in the future land use pattern in the region and in northeast Vanderburgh County than any other single factor or project over the next 20 years. The I-69 Environmental Impact Statement describes the anticipated impact on land use as follows:

"....the project may both generate new growth and shift existing growth to locations in proximity to the Interstate interchanges."

Most of the expected land use changes from I-69 will result from a proposed industrial corridor from S.R. 57 to Boonville-New Harmony Road and from commercial development around the interchanges. Although these areas will contain the majority of the growth, many undeveloped areas throughout the remainder of the I-69 corridor are also likely to develop due to this project.

The I-69 Gateway Small Area Plan, completed in 2010, encompasses the northern portion of the I-69 corridor in Vanderburgh County from the County line (I-64 /I-69 interchange) to Pigeon Creek/Heckel Road. The land use recommendations in the Comprehensive Plan generally follow the proposed land uses in this subarea Plan. To further prepare for the anticipated growth and to maximize the potential benefits for Vanderburgh County and the region, planning efforts concerning the I-69 corridor must be coordinated with Warrick County.

50

# **GENERAL LAND USE**

### POLICY DEVELOPMENT AND FRAMEWORK

Of all the Action Plans in the Comprehensive Plan, those in the land use sections have a higher level of importance than the others, because they provide the framework for our strategy on development location decisions and growth. Although consideration of the Plan, including the land use policy statements, is required by State law in making land use decisions, just considering the Plan is the minimum level of expectation and effort. The effectiveness of this Plan at helping Evansville and Vanderburgh County to become a better place to live in the future depends on the level of support for the land use Action Plans from the private sector and the community as a whole, and on the level of adherence over time to those policy statements relevant to individual land use decisions.

### **GENERAL LAND USE ACTION PLAN**

#### GOAL

• To create an overall pattern of orderly development through the arrangement of land uses that are adequately and efficiently served by a system of transportation, community services, and utilities, and sensitive to the natural physical qualities of the area.

#### **OBJECTIVE**

• Growth of the community should progress outwardly from an intensely developed CBD, its surrounding neighborhoods and other major activity centers to areas with lower density development. To minimize unplanned or leapfrog growth in the Transitional and Rural areas, growth should occur as infill development or be contiguous to existing built up areas.

#### POLICIES

- Raise awareness of the health, social and economic benefits of a more visually appealing built environment.
- Endorse equitable development that provides for the needs of underserved neighborhoods and individuals through projects, programs and/or policies that reduce disparities while fostering an environment that is healthy, vibrant, and diverse.
- Focus efforts on downtown Evansville to ensure its continued economic viability and dominance as the focal point of social, cultural and financial activity in the community.
- Develop higher density residential uses in or near activity centers (*employment, commercial, and social*) to promote efficiency in land use, use of infrastructure and alternative modes of travel.
- Explore the use of form based codes or overlay zones and incentives as means to upgrade the urban form and intensity of use.
- Support development that is contiguous and compact, and which minimizes future urban challenges such as traffic congestion, storm water runoff, and unplanned growth.
- Support the implementation of the City's Land Bank program to acquire land for redevelopment.
- Provide a transportation network and utility systems that direct development to desired growth areas.
- Coordinate with Warrick and Gibson Counties on establishing a regional strategy for planning and development of the I-69 corridor to prepare for the future and maximize the benefits this highway will provide to the region.

#### **OBJECTIVE**

• The development pattern should efficiently utilize the existing land, environmental and fiscal resources, infrastructure and services.

#### POLICIES

- Enhance the environment for revitalization, redevelopment and rehabilitation by expanding public and private incentives.
- Promote infill on shovel ready sites and adaptive reuse of vacant or underutilized structures to efficiently use land and existing infrastructure.
- Examine alternative development types, including cluster developments and planned unit developments, as a means of protecting green space and environmentally sensitive areas.
- Maintain a generally compact form of urban development in order to efficiently utilize public/private investments.
- Promote more mixed—use development. Encourage street level commercial uses in mixed-use structures that generate pedestrian activity such as retail, restaurants, and services.
- Manage development along thoroughfares and environmental corridors, using appropriate techniques (e.g. corridor plans, overlay zoning, access management, buffering and other best management practices).
- Pursue the establishment of a subarea/corridor plan for the University Parkway that will consider adoption of an overlay zone as a tool for its implementation.
- Encourage the reuse of greyfields/redfields to reduce negative impacts of vacancy and provide new mixed-use and/or housing options.
- When locating new community facilities, consideration should be given to land use in terms of the impact on future development and sprawl, and to the life time costs.

- As growth occurs, the provision of community facilities and services will need be addressed to meet future demands.
- Encourage reuse by developing a variety of tools that incentivize infill.
- Initiate a dialogue with local developers communicating the mutual economic benefits of infill and reuse to them and to the entire community.
- Endorse the provision of available open space for community, neighborhood, and school vegetable gardens.

#### **OBJECTIVE**

• Require new developments to incur the full cost or participate in the cost of the public infrastructure (e.g. roads, water and sewer) needed to meet future demands.

#### POLICIES

- Use impact analyses in the review of proposed developments to determine the effect of new developments on the environment, road network, educational system, community services, and utilities.
- Ensure that the utility system and transportation system improvements necessary to accommodate new development are in place when needed to mitigate development impacts.
- Amend the Subdivision Ordinance to provide the Area Plan Commission with the authority to require special studies to address off-site improvements as warranted to mitigate substantial development impacts on community infrastructure, services and flood control.
- Research and establish the threshold criteria on traffic studies for new development.

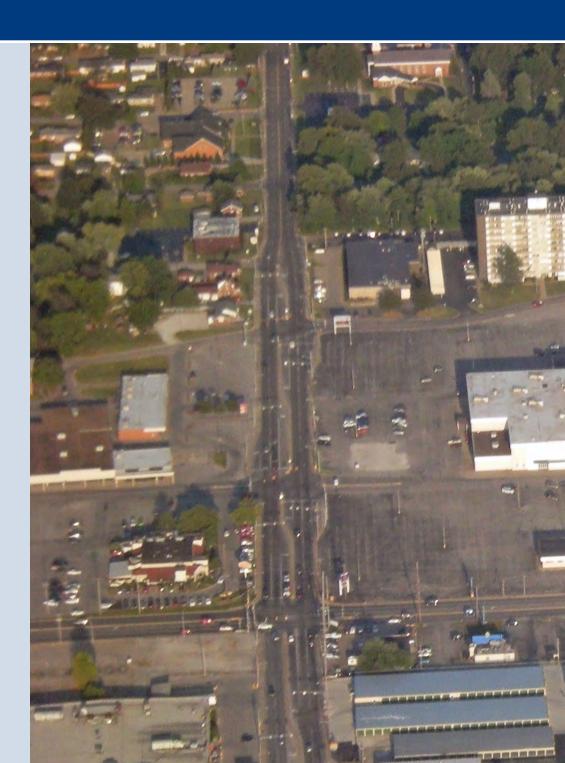
# **GENERAL LAND USE**

#### **OBJECTIVE**

• Continue to keep the Zoning and Subdivision Ordinances current to address development issues and opportunities.

### POLICIES

- Discourage rezonings that will require a variance to meet code requirements.
- Encourage progressive site design and compliance with all Zoning Code requirements to reduce the need for variances.
- Investigate changing the sign requirements in the Zoning Code to enhance/improve signage as a contributing element in the aesthetic quality of the community in general and particularly along major corridors and at I-69 interchanges.
- Investigate changing the parking requirements in the Zoning Code to set minimum and new maximum amounts of offstreet parking spaces required and to address proper parking location.
- Investigate amending the Zoning Code to establish bufferyard requirements for new development to address visual (aesthetic) compatibility issues.
- Subdivision design should provide connecting streets and sidewalks in new developments to enhance safety, to link developments, and to increase opportunities for physical activity. Stub streets should be required where subdivisions are adjacent to undeveloped land.
- Explore changes to the Zoning Ordinance that would offer incentives for providing specific amenities to enhance walkability, bike ability and open space.
- Investigate updating the Zoning Ordinance to include architectural and landscaping requirements that would improve the visual appeal/attractiveness of the City and County.







# **SECTION 6: RESIDENTIAL**



The common thread weaving through most issues related to residential use is diversity. This diversity is evident in housing types, housing design, lot size, and ultimately in the people living within these residences. One of the issues that is a focal point of the Comprehensive Plan is the diversity in housing location, which ranges from rural, to traditional suburban subdivisions, to dense urban settings. Where we choose to live is important to us, as is having choices of desirable residential areas to move to. Considering that the purchase of a home is the biggest investment most of us will make in our lifetime, and that the overall housing stock is our community's largest long-term capital asset, these investments deserve protection to uphold residential property values. To address these issues, this Plan recommends diverse locations for future residential use, and establishes land use policies to help protect residential areas from potentially incompatible land uses.

Existing residential use accounts for over 19 percent of the unincorporated County land area, which equates to approximately 35 square miles. Residential use totals to almost 42 percent of the land area in the City, or about 16 square miles. The 2010 Census reported that Vanderburgh County had 83,003 residential units in 2010, and the City had 57,799 units. The extent of housing in the County averages to about 356 units per square mile, while it jumps to 1,309 units per square mile in the City.

Housing and neighborhoods are viewed as community assets and resources. Due to their respective roles in the provision of housing, government and the private sector must work in cooperation to achieve housing goals and to initiate actions that will expand or enhance these valuable resources. Although the private sector supplies the majority of new housing, government involvement in ensuring an adequate quantity and affordability of housing is justified as an extension of its mission to provide for the health, safety and welfare of all citizens.

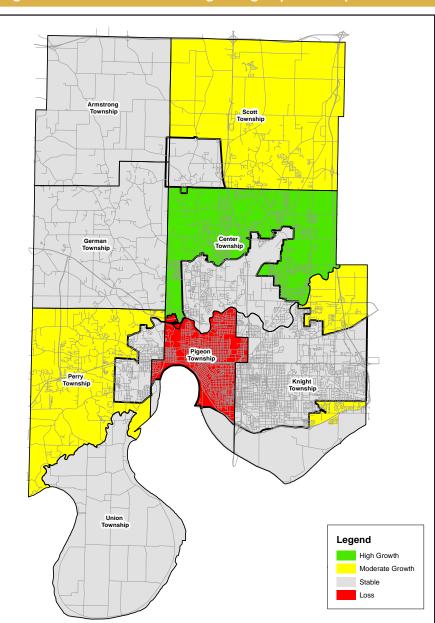
### **CURRENT HOUSING STOCK CONDITIONS**

#### **TYPE OF DWELLING UNIT**

There is a variety of dwelling unit types in the County from single-family homes to multi-family rental units. The most prevalent type of dwelling unit found in the City and County is the single-family house as shown in Table 6-1. In 2010, 71.5 percent of the total units in the County were classified as single family, while the data shows that the City offers somewhat more housing options.

Table 6-2 shows the specific amount of population and occupied housing change over 20 years between 1990 and 2010 by Township. In general, this data shows a continuation of the outward growth trend. Vanderburgh County housing grew by 11.5 percent over this period. The northeast portion of the County (unincorporated Center Township) has been the County's premier growth area for many years. Figure 6-1 illustrates the housing data trends for these geographic areas. The map categories for the amount of change in occupied housing units are:

- Loss: More than 500
- Stable: Between 499 and + 499
- Moderate Growth: + 500 to 1,499
- High Growth: More than +1,500



#### Figure 6-1: 1990 - 2010 Housing Change by Township

#### AGE

Table 6-1 shows that over 28 percent of the City's housing units were built before 1939. Without a major investment in maintenance, a significant number of the estimated 16,300 housing units constructed prior to 1940 in the City will need to be replaced by Year 2035. Therefore, upkeep of these areas of older housing, especially those with low to moderate income, is essential for maintaining the desired condition of the housing stock, market strength, neighborhood stability and vitality in the Urban Core.

# Table 6-1: Housing Units, Percent Single Family, Percent BuiltBefore 1939

	Vande	rburgh Co	ounty	Evansville			
Year	Total Housing Units	% Single Family	% Built Before 1939	Total Housing Units	% Single Family	% Built Before 1939	
2010	83,003	71.50	22.20	57,799	67.80	28.20	
2000	76,300	70.66	21.28	57,065	66.84	25.72	
1990	72,637	69.31	25.81	58,188	65.14	29.29	
1980	67,502	82.77	34.21	54,210	80.88	38.90	
1970	58,011	77.14	47.23	49,139	74.32	51.27	
1960	55,082	84.28	59.60	47,744	81.94	62.64	
1950	49,573	66.95	75.62	40,819	61.40	78.38	

Source: U.S. Census

#### Table 6-2: Past Change in Population and Housing by Township

	Population				Occupied Housing Units			
	1990	2010	Amount of Change	Percent of Change	1990	2010	Amount of Change	Percent of Change
Vanderburgh	165,058	179,703	14,645	8.9%	66,780	74,454	7,674	11.5%
Evansville	126,272 <i>a</i>	117,429	-8,843	-7.0%	59,948 <mark>a</mark>	50,588	-9,360	-15.7%
Darmstadt	1,346	1,407	61	4.6%	472	544	72	15.3%
Unincorporated	37,440 <i>a</i>	60,897	23,427	62.6%	13,360 <mark>a</mark>	23,322	9,962	74.6%
Armstrong TWP*	1,694	1,599	-95	5.6%	560	604	44	7.9%
Center TWP Total	27,185	39,007	11,822	43.5%	10,479	15,478	4,999	47.7%
City	14,115	14,886	771	5.5%	5,758	6,252	494	8.6%
Unincorporated*	13,070	24,121	11,051	84.6%	4,721	9,226	4,505	95.5%
German TWP*	7,063	7,441	378	5.4%	2,461	2,791	330	13.4%
Knight TWP Total	65,522	67,945	2,423	3.7%	27,640	30,070	2,430	8.8%
City	63,153 <mark>a</mark>	61,872	-1,281	-2.1%	26,794 <mark>a</mark>	27,222	428	1.6%
Unincorporated	2,369 <mark>a</mark>	6,072	3,703	156.4%	846 <mark><i>a</i></mark>	2,848	2,002	236.7%
Perry TWP Total	20,615	25,092	4,477	21.8%	8,056	9,904	1,848	23.0%
City	11,243	10,872	-371	-3.3%	4,678	4,839	161	3.5%
Unincorporated	9,372	14,220	4,848	51.8%	3,378 <b>gq</b>	5,065	1,687	50.0%
Pigeon TWP	37,856	29,797	-8,057	-21.3%	15,720	12,275	-3,445	-22.0%
Scott TWP*	4,731	8,528	3,797	80.3%	1,705	3,191	1,486	87.2%
Union TWP	392	292	-100	-25.5%	159	141	-18	-11.4%

Source: 1990 and 2010 Census Note: \* - includes portions of

\* - includes portions of the Town of Darmstadt

*a* - not adjusted for annexations, not comparable area.

gq – not adjusted for changes in USI group quarters, not comparable count

#### DENSITY

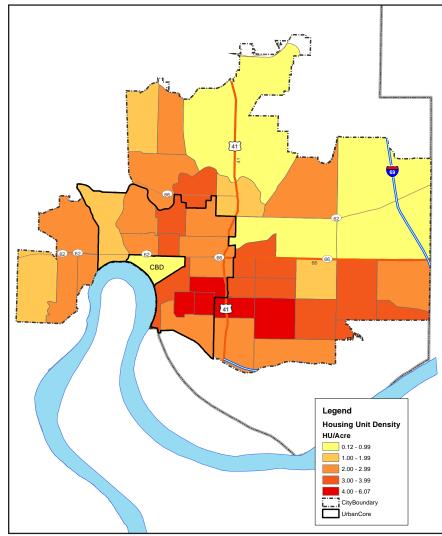
Figure 6-2 illustrates the 2010 Census housing density by Census Tract. This map shows that the CBD and some of the surrounding neighborhoods are much lower in density than expected. Census Tract 18 in the CBD falls in the least dense category of the 5 density groupings on the map (0.72 units per acre). Six other Census Tracts in the Urban Core fall in the middle density category, while only three fall into the highest density group. These Census Tracts have been decreasing in density since 1960. Given the age of the housing, the increasing number of vacant lots, and the decreasing density in the Urban Core, this Plan proposes a strong policy emphasis be placed on infill development. The housing density should be regularly tracked as an infill policy effectiveness measure.

The amount and location of new residential units permitted should also be tracked as another policy effectiveness measure. The infill development baseline data is:

• APC residential permits for 2011 – 2015 show that 50 percent of these units were permitted in the City.



#### Figure 6-2: 2010 Housing Unit Density



#### SUBSTANDARD HOUSING

Substandard housing is commonly described as: Housing units which do not meet the minimum standards contained in the City and County Building and Housing Codes (i.e. do not provide adequate shelter, or endanger the health, safety, or well-being of the occupants). There are two categories of substandard housing:

**Suitable for Rehabilitation** - housing units that are structurally sound and can be rehabilitated at a reasonable cost; and

**Needs Replacement** - categorized by housing surveys as structurally unsafe and having unreasonably high rehabilitation costs. For units in this category, government should issue orders for demolition.

Frequently used indicators of substandard conditions are available from the U.S. Census. Data on these indicators from the Census American Community Survey for the City of Evansville is as follows:

- Severely Overcrowded (more than 1.5 Persons per room): 411
- Lacking complete plumbing facilities: 115
- Lacking complete kitchen facilities: 249
- Built in 1939 or earlier: 16,300

Considering this city-wide data, there could be a large number of substandard housing units in the existing housing stock that are older homes which no longer meet standards for being structurally safe, and have unreasonably high rehabilitation costs. Using County Assessor parcel data in a GIS analysis, Figure 6-3 illustrates the extent of the substandard housing issue. This analysis involved using the following criteria:

- 1. Homes built before 1940;
- 2. Homes with an assessed value less than \$50,000;
- 3. The observed condition of the housing structure being either
  - Poor extensive deferred maintenance and functional inadequacies; or
  - Very Poor unfit for use and/or approaching abandonment.
- The observed quality grade, which is related to condition but involves generalized construction materials and design elements found on the house, being graded either "D" - meets minimum building code or "E" - may not meet building code.

The Area Plan Commission analysis found approximately 1,000 housing structures which meet this criteria for substandard housing. A vast majority are located in Pigeon Township (the Urban Core), specifically in Census Tracts 12, 13, and 15. Upgrading the condition of the housing stock in the Urban Core should be a community priority.

In the City's *"A Report on Blight, Vacancy, and Abandonment" (2015)*, the Building Commission Code Enforcement Division identified roughly 1,800 parcels that would likely meet the minimum criteria for demolition on the State of Indiana Blight Elimination Program's evaluation matrix.

# Figure 6-3: Location of Substandard Housing Leaend Substandard Housing Loca # of Homes Per Block Group 0-3 4 - 10 11 - 16 17 - 29 30 - 46 CityBoundary 2010 Census Tracts lata Source : Census 2010, and Vanderburgh Co. Asses

#### **SUBSIDIZED HOUSING**

Although government and non-profit subsidized housing is just a portion of the total housing stock, it is important in that it provides an additional housing alternative for families and individuals in need. There are 19 government subsidized apartment sites that include over 1,600 housing units operated by the Evansville Housing Authority, non-profits, and others. Another 19 apartment projects with over 1,400 housing units are available by voucher, tax credits, and other government programs. In addition, rental assistance programs are available for scattered singlefamily homes, and stable housing for the homeless is offered by the Permanent Supportive Housing Program.

### HOUSING ASSISTANCE PROGRAMS

There are several government programs that provide assistance in obtaining housing. For more detailed information about housing assistance, see the 2015-2019 Consolidated Plan or contact the Department of Metropolitan Development. These programs are:

#### LOCAL GOVERNMENT

- City-County Human Relations Commission
- Building Commission
- Department of Metropolitan Development
- Evansville Housing Authority (EHA)

#### LOCAL NON PROFITS

- Community Action Program of Evansville (CAPE)
- Echo Housing Corp (EHC)
- Habitat of Evansville
- Hope of Evansville
- Memorial Community Development Corporation (MCDC)
- Community One

#### **STATE GOVERNMENT**

• Indiana Housing and Community Development Authority

### **FOCUS AREAS**

Review of census data indicates that some City neighborhoods are more stable and have fewer problems than others. Since planning efforts should focus on addressing neighborhood needs, this analysis identifies those census tracts (or neighborhoods) which could benefit the most from redevelopment, rehabilitation, revitalization and/or other social programs. This determination was based, in part, on variables used by various sources to identify distressed neighborhoods.

The variables used and the data for the Focus Area Census Tracts are listed in Table 6-3. Criteria, known as ALICE (Asset Limited, Income Constrained, Employed), which is being used nationally to benchmark available income, is listed in the table. ALICE individuals and families are working, but are unable to afford the basics for housing, child care, food, transportation, and heath care needs. It includes more households than just those having an income at or below poverty level. The ALICE Threshold is:

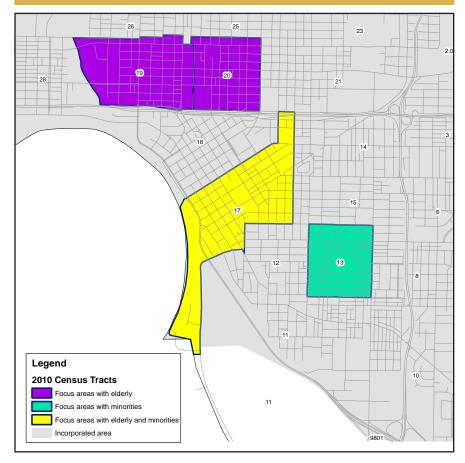
the average level of income that a household needs to afford the .... costs of basic necessities.....

Also in the Table is the U.S. Department of Health and Human Services designation as Medically Underserved Areas. Criteria for this designation includes: too few primary care providers, and high infant mortality.

Another consideration is the U.S. Housing and Urban Development (HUD) designation for Racial/Ethnic Concentrated Areas of Poverty (R/CAP) which uses criteria for census tracts (CT) with a greater than 50% non-white population and more than 40% of individuals below poverty. Although CT 13 & 14 met the HUD criteria, CT 14 did not qualify as a Focus Area.

This analysis focused on the portion of the Urban Core in Pigeon Township. The method used to identify neighborhoods in need of enhancement involved the comparisons of census tract percentages for a listed variable to that same variable's percentages for Pigeon Township. Census tracts with percentages greater than those for Pigeon Township for at least four out of the seven variables were considered to be "focus areas". As illustrated on Map 6-4, Census Tracts 13, 17, 19, and 20 in the Urban Core qualify to be Focus Areas. Due to their characteristics, these neighborhoods should be priority areas for enhancement activities by both the public and private sectors. However, it is recognized that increased focus should be placed on improving the entire Urban Core, and specific neighborhoods in other areas that also deserve attention.

#### Figure 6-4: Focus Areas



A primary reason for using such criteria in analyzing neighborhoods and identifying Focus Areas is not to dwell upon the negative aspects of the Urban Core, but to establish base line conditions for indicator variables to periodically analyze trends and the extent of neighborhood change. The intended result is to provide information to evaluate progress and the success of revitalization efforts. There are many positive and rewarding aspects of life for residents of our Urban Core neighborhoods that are not reflected in the census data. The Focus Areas identified in this analysis should not be perceived as "undesirable" places to live or work because they also have strong assets that can be sound building blocks for vibrant neighborhoods (e.g. the resurgence of the Haynie's Corner area). By addressing the current problems, we can put other neighborhoods in position to share similar positive results as those occurring at Haynie's Corner.

#### Table 6-3: Focus Areas

	Evansville	Pigeon Township	Census Tracts in Pigeon Township			
Percentage of:			13	17	19	20
Individuals below Poverty	19.5%	30.3%	50.1%	35.4%	46.7%	47.1%
Population >25 Yrs Old Non H.S. Graduates	16.2%	26.8%	36.7%		58.5%	38.8%
Households w/ Food Stamp Assistance	13.9%	22.2%	27.4%		41.0%	
Renter Occupied Housing	44.0%	53.1%		76.3%	70.5%	76.6%
Renters Burdened by Housing Costs	53.1%	55.5%	94.8%		57.6%	56.5%
Households without a Vehicle	11.9%	22.6%		31.4%	40.4%	47.5%
Vacant Housing	12.5%	20.5%	30.3%	17.2%	21.8%	24.0%
Minority	19.1%	29.2%	58.8%	34.7%		
Pop. >65 Yrs Old	14.4%	12.3%		17.8%	13.5%	25.5%
Designated Medically Underserved Areas (MUA)	N/A	Yes except for 3 CT	Yes	Yes	Yes	Yes
Percent of Households below A.L.I.C.E. Threshold and Poverty	46.0%	62.0%	N/A	N/A	N/A	N/A
Population Change between 2000 – 2010	-3.4%	-11.5%	-15.4%	-15.3%	-13.0%	-22.1%
Change in Households between 2000 – 2010	-3.2%	-12.8%	-17.9%	-17.8%	-21.3%	- <b>24.6%</b>

Notes: (--) Data not presented when percentage was below that of Pigeon Township.

**Colored** numbers represent the highest percentage of the four Focus Areas.

Source: 2010 Census, 2010 American Community Survey 5-year Estimate and U.S. Department of Health and Human Services, Health Resources and Services Administration, 2014 Indiana ALICE Report, Indiana Associations of United Way

### FUTURE DWELLING NEEDS ANALYSIS

#### **2035 POPULATION PROJECTIONS**

The population size of a city or county gives an indication as to the dimensions of the man-made environment. It supplies a base measurement from which current estimates of needs can be made. When planning for the future, estimates or projections of the population size are essential to quantify the "target" population for the planning process, which helps determine what tomorrow's needs might be.

As shown in the Historical Population graph on Figure 6-5, the population of the County has experienced both growth and decline. In the past 20 years (1990-2010) the County grew by 8.9%. Past trends are one of the factors considered in the methodologies used for calculating the population projections.

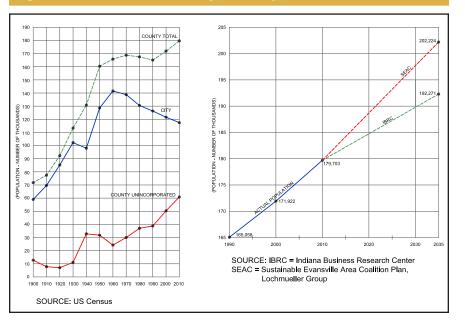
It is common practice for comprehensive plans to use a 20-year horizon as the planning period. To be consistent with standard planning practice and our previous comprehensive plans, this Plan projects the population to Year 2035.

There are many methods that can be used in population projections with each producing somewhat different results, and some being better or more scientific than others. For this reason, the two Vanderburgh County population projections presented below for comparison, discussion and analysis are the two most recently published projections for the County. The range of these future population figures provides a moderate and a high projection alternative for the County.

#### The Indiana Business Research Center (IBRC)

The IBRC, the demographic clearinghouse for the State of Indiana, produced population projections in 2012 for all Counties in Indiana. Their projections are developed using the Cohort Survival Method, which involves the distribution of the population into age cohorts. It forecasts the age groups forward into the future, applying past birth and death rates, and factoring the impact of migration. The results of the IBRC methodology predicts a 2035 population of 192,271 persons.

#### Figure 6-5: Historical and Projected Population



#### **SEAC** Plan

The Sustainable Evansville Area Coalition (SEAC) Regional Plan for Sustainable Development compared the projections from the IBRC, Kentucky State Data Center (KSDC), and Woods & Poole Economics, Inc. Population projections from Woods & Poole are based on trends in economics, population and employment over time. These three data sources were compared to straight-line trends for the three counties included in the SEAC Plan, and a line of best fit was calculated to produce a composite population projection for the entire three county area. A land use model was used to distribute population between all three counties based on higher or lower amounts of infill development. Of these infill scenarios, the one selected as the best fit for the future development pattern in the SEAC Plan resulted in a 2035 County population projection of 202,224 people. Table 6-4 summarizes these County population projections that provide both a moderate and high growth scenario.

#### SECTION 6 Evansville-Vanderburgh County Comprehensive Plan

Table 6-4: CommunityViz Modelling Population Projections							
Source	2010 Census Population	2035 Projected Population	Amount & Percent of Change				
IBRC	179,703	192,271	12,568 (6.99%)				

Sources: Indiana Business Research Center and the Sustainable Evansville Area Coalition Regional Plan for Sustainable Development

202,224

179,703

SEAC

22,521

(12.53%)

These projections quantify our growth and show a relatively bright outlook for the County population in the future. The SEAC projection would involve significantly higher in-migration than the IBRC projects. Some of the recent and expected positive developments in regard to future population are that:

- Employment and business establishments in the County continue to steadily increase according to the IU Kelley School of Business short-term forecasts of employment and income; and the currently improving national economic trends suggest a strong local economy for the foreseeable future.
- Employment and quality of life factors will continue to attract new residents to Vanderburgh County (in-migration) and also play a role in keeping current residents here. One of the most important findings from the 2010 Census was that the County continued to grow at a steady rate even though in the later years of the last decade the economy was in a significant recession.
- A strong natural population increase is expected to continue to occur in both the County and region.
- Positive impacts are expected from the completion and opening of I-69, the downtown convention hotel, and the IU School of Medicine.



### LAND USE SCENARIO MODELING

A land use model was used to help determine the future land use in the City and County. The model used a range of development constraints, the existing Zoning Districts for Evansville and Vanderburgh County, and a variety of suitability factors for future development.

The model was built in CommunityViz, an extension for ESRI's ArcGIS program that provides a variety of analytical land use planning tools. It helps planners make informed recommendations about future land uses and quickly and easily adds or modifies data to enhance the analysis. It also allows planners to easily develop multiple development scenarios or alternatives to determine the impact of a variety of future conditions, such as lower or higher growth rates and amount of infill development. The three major steps to the CommunityViz analysis are described below.

#### **Constraints**

The first step in developing a future land use model is determining and applying environmental features that prevent development, and defining the parcels of land not available for development. The model ensures that no structures are allocated to these constrained areas for the future.

#### **Build-Out**

In the Build-Out step, the model determines the maximum number of households and other buildings that could be built within Vanderburgh County, and it calculates the amount of space available if every unconstrained parcel was built out to its maximum buildable area. The maximum build out is determined based on the existing zoning. The minimum lot sizes in the City and County Zoning Ordinances for residential development were used to determine the maximum amount of future development.

#### Allocation

The final step in the Land Use Modeling process is the allocation of projected households and employees. The Allocation step used projections for Year 2035. This step also included four different scenarios of future development based on the amount of projected growth and the amount of infill (infill is considered to be any development/redevelopment within the City). The four scenarios are:

- Moderate Growth/Moderate Infill
- Moderate Growth/High Infill
- High Growth/Moderate Infill
- High Growth/High Infill



The scenario chosen for the Comprehensive Plan as the best fit for the future development pattern is the High Growth/Moderate Infill scenario. Therefore, only discussion of and data for that scenario is provided below.

#### **POPULATION AND HOUSEHOLD PROJECTIONS**

The two 2035 population projections, IBRC and SEAC, mentioned earlier were used in calculating the four scenarios showing the impact of the growth rate. Because the land use model allocates structures to parcels, the population projections needed to be translated into number of households in order to allocate houses. The number of households was calculated based on the trend of decreasing household size and an assumption that the group quarters population would continue at the same percentage of the total population into the future.

#### **EMPLOYMENT PROJECTIONS**

A moderate and a high employment projection for the Year 2035 were also used for the four scenarios modeled to correspond to the population projections. Only commercial employment for retail and office space, was allocated to parcels in the modeling process. To avoid redundancy, the data from the model on commercial use is not described in the Comprehensive Plan because the results for the future commercial areas were very similar to the draft Future Land Use Map developed by the APC staff.

Industrial employment is projected by Woods & Poole Economics, Inc. to decrease, which follows the past trend. Although new industrial sites will be developed in the future, industrial land use was not included in the model due to the projected decrease in industrial employment, and the fact that most new industry is likely to occur in the County's existing industrial parks, or could locate in old industrial areas/structures that are vacant or underutilized.

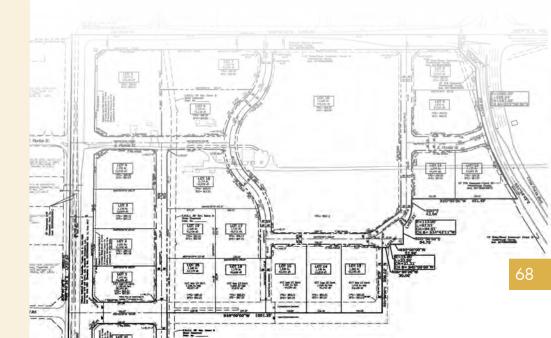
#### **SUITABILITY SCORING**

After the amount of households and commercial employees to be allocated was determined, the process for allocating was developed. The Land Use Model uses a suitability score to allocate households and other structures. This suitability score was calculated based on several factors, ranging from highly desirable sites based on proximity to services and/or a lack of limitations; to undesirable sites with limitations from environmental features or parcels not available for development.

Several GIS layers were used to score the suitability of a parcel for development such as:

- Limitations due to physical features (e.g. floodplains);
- Proximity to essentials and amenities (e.g. parks, schools and grocery stores).

All of the scores from all of the datasets are averaged to determine a final score for each scenario.



#### ALLOCATION OF HOUSEHOLDS AND EMPLOYMENT

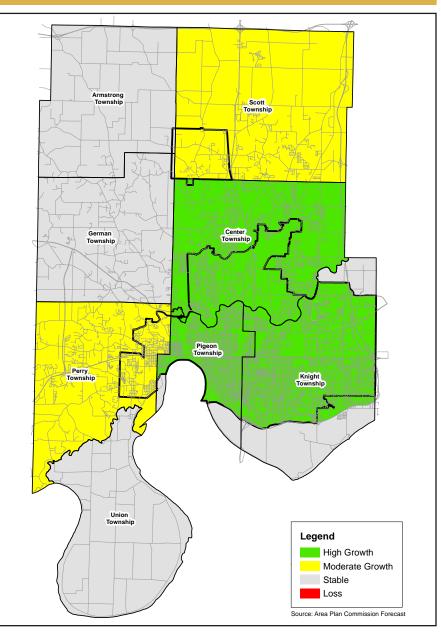
Once all of these steps are complete, CommunityViz allocates households and employment to parcels in the County based on the maximum number of households permitted or the maximum commercial square footage feasible, household and employment projections, and the suitability score of each parcel.

Based on the SEAC Plan 2035 County population total, the land use model calculated estimates for occupied housing units for each township. Table 6-5 shows the projected amount of occupied housing change between 2010 and 2035 by Township. The Table also shows the future population projections for Townships based on the occupied housing projections from the land use model, and an APC analysis assigning population into the projected 2035 housing. The assumptions used in these calculations were based upon recent Census data trends and the following assumptions:

- The percentage of occupied housing to the total number of housing units will stay consistent with the current trend;
- The number of institutional and group quarter residents will remain the same;
- Average household size will continue to decline;
- The estimate of total housing units needed for the 2035 population is for occupied units (projecting volatile vacancy rates is problematic); and
- The density of new single and multi-family housing (measured by average housing units per acre) will increase.

The final results of the modeling process are shown in Table 6-5 and Figure 6-6, which illustrate the projected amount of change in occupied housing units between 2010-2035 by Township. Comparing the historic growth data for residential units on Figure 6-1 with the anticipated growth shown on Figure 6-6, it is evident that growth trends are expected to change somewhat. Knight Township, located mostly within the City but also partially in the unincorporated County, is expected to be the fastest growing area through Year 2035 with a gain of 3,808 households (or almost a 13 percent increase) and an additional 7,133 new residents. Center Township, which has been the leading growth area in the County for many years, is projected to have the second highest gain. The majority of this growth is still projected to be single-family houses, although it is expected to also include a variety of housing types.

#### Figure 6-6: 1990 - 2010 Housing Change by Township



For other areas, this forecast shows significant growth projected for the City, while Armstrong, German and Union Townships are to remain stable. In Pigeon Township, the trend of decline is expected to transition to infill growth for the neighborhoods surrounding the downtown. Instead of the decline that has gripped the Urban Core since the late 1950's, Pigeon Township is projected to add almost 2,000 new households representing a 16 percent increase from the 2010 total, and over 4,000 additional residents by Year 2035. This projected change would be both exciting and refreshing news, as past perceptions of the Urban Core would become invalid once major redevelopment and new construction begins to transform the area. The current options for buying new housing are nearly all located in the unincorporated County. However, as redevelopment occurs in the Urban Core, the options for new housing in the City will also increase, expanding the residential market in that area. Revitalizing Pigeon Township is the biggest challenge facing the future of Evansville.

	Population				Occupied Housing Units			
	2010 Census	2035 Projection	Amount of Change	Percent of Change	2010 Census	2035 Projection	Amount of Change	Percent of Change
Vanderburgh	179,703	202,224	22,697	12.63%	74,454	85,352	10,898	14.64%
Armstrong TWP	1,599	1,817	218	13.63%	604	695	91	15.07%
Center TWP	39,007	43,842	4,835	12.39%	15,478	17,691	2,213	14.30%
German TWP	7,441	8,145	704	9.46%	2,791	3,096	305	10.93%
Knight TWP	67,945	75,078	7,133	10.50%	30,070	33,878	3,808	12.66%
Perry TWP	25,092	27,777	2,685	10.70%	9,904	11,253	1,349	13.62%
Pigeon TWP	29,797	33,836	4,039	13.55%	12,275	14,262	1,987	16.19%
Scott TWP	8,528	11,437	2,909	34.11%	3,191	4,336	1,145	35.88%
Union TWP	292	292	0	0%	141	141	0	0%

#### Table 6-5: 2010-2035 Population and Housing Change by Township

Source: 2010 Census; Housing Projections from Land Use Model and Population Projections from APC Analysis

### FUTURE LAND NEEDS ANALYSIS

The projections for the City and County Year 2035 population and occupied housing units were used to determine future land use needs. An occupied housing unit estimate for 2035 was provided by the land use model. An individualized average lot size per household for each Township was calculated based on the type of development occurring (e.g. parcelizations of 5 or more acres, subdivided lots with septic systems at 2.5 acres or more per lot; homes in an urban setting on the minimum 6,000 square foot lot allowed by the Zoning Code; and a higher density mix of single family and some multi-family use). The appropriate average lot size was then applied by the land use model to the projected number of households to produce the acreage needed to house the 2035 population in each Township and for the County as a whole.

This information was used to derive Table 6-6, which illustrates the land needed to house the future population. The two future scenarios in the table show the estimated range of housing unit increase needed by 2035 and the land needed to accommodate those new residential units. The high growth scenario would involve 10,898 additional units on 6.9 square miles by 2035. The amount of land on the Future Land Use Map (Appendix I) for new residential growth represents 19.5 square miles, and thus, will more than meet the land needs for future residential use, and will provide developers with flexibility in site locations for new housing.

The types of housing units needed to meet this predicted demand will be dictated by the current housing stock, market trends, future household size, and energy resources. However, it is certain that the new housing in the future will cover the variety of types ranging from single family, to condo/townhouses, rental apartments, mobile homes, and progressive senior living (allowing aging in place from independent living to intensive nursing care).

#### Table 6-6: 2035 Residential Land Need Projections

	IBRC	SEAC
Population	192,271	202,224
Occupied Housing Units (HU)	82,632	86,174
Increase in Occupied Housing (HU) from 2010 Census	6,705	10,898
Land Needed for Housing in Square Miles	4.01	6.9

Sources: Population Projections and Area Plan Commission Analysis



### **GENERAL HOUSING STRATEGY**

Improving the quality of housing and maintaining an adequate supply for all citizens is an issue that requires participation and cooperation by the public, non-profit and private sectors to be effective. Creating an environment that is supportive of expanding and enhancing cooperation among all parties is vital in accomplishing any housing strategy. Certainly the private sector is the most important participant, as it has and will continue to supply the majority of the new housing to meet our community's needs.

In establishing our housing strategy, we must strike a balance between new construction and rehabilitation of existing stock. The preservation of older existing neighborhoods should be emphasized to aid them in retaining their general character and viability, with rehabilitation of homes still in good enough condition for rehab to be practical. To promote this option, incentives should be provided for home owners to improve the condition of these structures including energy efficiency retrofits; and an emergency home repair program should be provided for immediate more basic repairs. In conjunction with rehabilitation, blighted homes should be identified, removed and replaced with a variety of new housing types, while increasing density and adding mixed use in appropriate locations. Considering that our population will continue to age into the future, there will be an increasing need to provide senior housing for the Baby Boomers. As the older blighted homes are replaced over time, with most of these units being located in the Urban Core where income levels are generally low and the percentage of rental units is high, there will also be a need to add more affordable rental housing. Some of the new units in the future should be affordable senior rental housing, to address both needs. In regard to the housing strategy for seniors, another important concept to plan for is aging-in-place. For this strategy to be successful, stable, adaptive housing and supportive services (e.g. transportation and in-home health care) will be required.

The housing policies and program should be comprehensive in nature and applicable to all neighborhoods, not only those experiencing deterioration. A substantial commitment by all participants to invest in improving the housing component of our community will be needed to provide adequate housing for our future residents. The current shortterm housing strategy for the City is available in DMD's 2015-2019 Consolidated Plan.



# FUTURE HOUSING AND NEIGHBORHOOD PLANNING EFFORT

There is a need for an updated and expanded survey of existing housing conditions for the City and County. This information, along with information similar to that used in this analysis, would provide a basis for neighborhood planning and development programs. These programs would help to detect housing trends, determine existing housing needs and problems, determine future housing needs, and plan for action to address the needs.

Although currently there are limited funding sources, neighborhood planning and development programs could serve to make planning more proactive by helping to identify needs of the neighborhood before they become major problems. The advantages of a neighborhood planning and development program are:

- provides a specific vision and direction in attaining the vision for a neighborhood through outlining a recommended strategy of actions;
- emphasizes that neighborhoods are an integral part of the quality of life in the City and County;
- provides an opportunity for involvement by neighborhood residents;
- allows residents who best know their area to identify their neighborhood's improvement needs and the actions required for solving those needs; and
- allows the City and County to better prioritize and budget scarce financial resources, thus maximizing the benefits from those resources.

#### **DEVELOPMENT LOCATION FACTORS**

There are many factors which influence where and how much residential development occurs. These include:

- Accessibility of the area;
- Availability and capacity of water and sewer utilities (most of the City and a substantial portion of the unincorporated County have these services);
- Proximity to essentials and Quality of Life factors (e.g. employment, schools, recreation, shopping, etc.);
- Cost of the land; and
- Physical site features.

Of these factors, the availability and capacity of sanitary sewer has the most impact on development density and potential for growth. Without sanitary sewer service, residential development can occur only on a large lot, low-density basis. The Vanderburgh County Subdivision Ordinance requires a minimum lot size of 2.5 acres for new houses that will use septic systems.

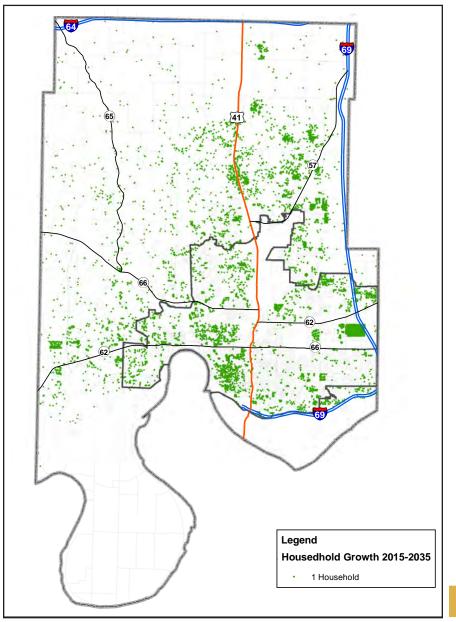


#### **FUTURE RESIDENTIAL AREAS**

Figure 6-7 illustrates the specific areas that were chosen by the land use model to be the best locations for residential growth through Year 2035. This map shows growth to occur in eastern Knight, unincorporated Center, and Scott Townships, along with additional growth in unincorporated Perry Township once sewer is extended north of the Lloyd Expressway to serve that area. It also reflects that significant infill redevelopment will occur in the Urban Core. The residential growth areas recommended on the Future Land Use Map were based on the results of the land use model. These areas represent 19.5 square miles.

Scattered residential growth is not an efficient use of existing economic and community resources. Due to the fact that our population will continue to age along with decreasing family size, the type of residential development may change in the future. In areas served by water and sewer outside of the City, these changes are likely to trend toward smaller homes on smaller lots, and involve developments with a mix of housing types including multi-family use. From a land use perspective, these changes should be encouraged as this kind of development would be less land intensive and would not affect as much agricultural and forested land.

To build on these trends, new residential developments in the City should create attractive places to live by providing a variety of housing types at higher densities, clustered around a central, properly-sized, common open space. Residential neighborhoods developed in such a manner encourage a community atmosphere among residents, create neighborhood stability and enhance how the City is perceived as a place to live.



#### Figure 6-7: Land Use Model Household Growth Locations

### FUTURE RESIDENTIAL DEVELOPMENT AREAS

#### WESTERN UNINCORPORATED PERRY TOWNSHIP

**Existing Development Attractors:** The University Heights and Eagle Plaza Commercial Centers; and the University of Southern Indiana.

**Potential Development Attractors:** Proximity to USI; Improved access to this area provided by University Parkway.

**Potential Development Constraint:** Hilly topography and limited availability of public sewers.

# NORTHERN UNINCORPORATED CENTER AND SOUTHERN SCOTT TOWNSHIPS

**Existing Development Attractors:** Wooded and rolling topography. Public sewers are available in many locations. The new North Middle and High Schools. The appeal of rural communities such as Darmstadt and McCutchanville.

**Potential Development Attractor:** Developing commercial area at U.S. 41 and Boonville-New Harmony Road.

#### NORTHEASTERN UNINCORPORATED CENTER TOWNSHIP

**Existing Development Attractors:** Minimal slope of the land. Good access to the Green River Road commercial corridor and to State Road 57.

**Potential Development Constraint:** Portions of this area are below the 100-year flood elevation.

#### **CITY PORTION OF NORTHEASTERN KNIGHT TOWNSHIP**

**Existing Development Attractors:** Minimal slope of the land; good access provided by Lynch Road and the I-69 interchange; and close to eastside shopping areas.

Potential Development Attractor: 1-69 corridor.

**Potential Development Constraint:** The minimal slope, existing floodplain/floodway and proximity to Pigeon Creek and Crawford-Brandeis Ditch present some concerns.

#### SOUTHEASTERN UNINCORPORATED KNIGHT TOWNSHIP

**Existing Development Attractors:** Minimal slope of the land. **Potential Development Attractor:** Proposed Pigeon Creek Greenway.

**Potential Development Constraint:** Limited undeveloped land protected by the levee.

#### **PIGEON TOWNSHIP**

**Existing Development Attractors:** Existing infrastructure and community services.

**Potential Development Attractors:** Adjacent to the downtown, Pigeon Creek Greenway, IU Med School, and major employers.

**Potential Development Constraint:** Issues with historical small platted lots.

### SECTION 6 Evansville-Vanderburgh County Comprehensive Plan



### **RESIDENTIAL ACTION PLAN**

#### GOAL

• Ensure an adequate and reasonable supply of safe, affordable, and aesthetically pleasing housing with a variety of housing types in neighborhoods that are recognized as highly valued resources.

#### **OBJECTIVE**

• Preserve the character and aesthetics of the neighborhood environment by maintaining the number and condition of housing units in stable areas and reversing the rate of housing loss in declining areas.

#### POLICIES

- Encourage the wide variety of housing types, which include single family owner-occupied units, condo/townhouse, rental apartments, mobile homes, and progressive senior living (aging-in-place).
- Extend the minimum performance standard in the housing code to all dwellings in the County and enforce it in a fair and equal manner.
- Encourage infill housing of all types within the City, especially the Urban Core.
- Promote, facilitate and sustain efforts in the preservation, maintenance and rehabilitation of neighborhoods.
- Infill development should reflect both existing and desired architectural styles appropriate for each specific neighborhood.

- When administering enforcement programs that require improvements, use available assistance programs to aid those who cannot afford the improvements.
- Promote, facilitate and sustain available public and private housing programs that encourage home ownership and owner occupancy.
- Encourage infill redevelopment as appropriate to improve declining areas and to prevent other areas from decline.
- Expeditiously remove abandoned, dilapidated residential structures that are deemed unsuitable for rehabilitation creating shovel ready sites for infill development.
- Support neighborhood and police efforts in reducing crime and enhancing safety to improve stability in residential neighborhoods, particularly in the urban core.
- Sustain existing neighborhood associations, promote organization of additional groups and encourage their input in the public decision-making process.
- Continue to encourage and support non-profit, religious, private and government entities in providing affordable housing.
- Support landlords working with social service agencies to reduce homelessness.
- Encourage developers to provide diversity, accessibility and energy efficiency in housing types.
- Eliminate or revise any regulations that contribute to the cost of housing without improving safety or housing conditions for a suitable living environment.

#### **OBJECTIVE**

• Preserve the neighborhood environment by minimizing negative impacts on residential areas.

#### POLICIES

- Exclude incompatible uses from residential neighborhoods that would alter the character of the area or would not primarily serve neighborhood residents.
- Multi-family housing should be viewed as an appropriate "buffer" use between single family and commercial developments.
- Study the selective use of traffic calming features/methods to minimize through traffic in urban core neighborhoods, especially in the historic district.

#### **OBJECTIVE**

• Ensure that residential growth occurs in appropriate areas and creates a favorable environment for neighborhood living.

#### POLICIES

- Investigate changes to the Zoning and Subdivision Ordinances that would require rezoning from Agricultural to Residential prior to platting major residential subdivisions.
- Promote creative subdivision design that is sensitive to and minimizes the impact on natural features, and provides for common open space, and bicycle and pedestrian ways.
- Encourage sidewalks/pathways in new residential subdivisions creating a safe place to walk and promoting the opportunity for physical activity.





# **SECTION 7: COMMERCIAL**

lon

CLOTHER

COTHE

Factoria a a a

80

# COMMERCIAL

The focus in planning for commercial uses is to identify appropriate areas that are convenient and functional for future commercial activities while protecting residential areas. The businesses in the commercial use classification could range from retail stores and restaurants to offices or service establishments. This section discusses existing and future commercial areas as well as various issues and concerns relevant to commercial activities. It also establishes land use policies for future commercial development to minimize the impact on the surrounding area and the community.

### **ESTABLISHED COMMERCIAL CENTERS**

The existing commercial land use accounts for about 1 percent of the unincorporated County land area, or almost 1.4 square miles. Commercial use also totals to 14 percent of the City land area, which represents 5.5 square miles. The majority of these uses are concentrated on the east side of the City and in the downtown. They range in size and intensity, from large regional centers to those that serve neighborhood residents. The larger existing centers are listed below:

#### **The Central Business District**

Regional center for the financial, government and service sectors located along several blocks either side of Main Street (Downtown Evansville).

#### **Green River Road Commercial Corridor**

Super-regional retail center extending from Covert Avenue to Lynch Road.

#### East Lloyd Expressway Commercial Corridor

Super-regional retail center located along Lloyd Expressway from Cullen Avenue to I-69.

#### West Lloyd Expressway Commercial Corridor

Regional commercial center located between Rosenberger Avenue and Boehne Camp Road.

#### **North First Avenue Commercial Corridor**

Community shopping center located between Mill Road and Diamond Avenue.

#### **Diamond Avenue Commercial Corridor**

Community retail center located between U.S. 41 and Heidelbach Avenue.

#### Franklin Street Commercial Corridor

Community shopping/entertainment center between St. Joseph Avenue and Pigeon Creek.

In addition to the major commercial areas, there are numerous neighborhood centers of commercial activity. These smaller commercial nodes are usually surrounded by residential use, and thus, are more accessible to residents via active travel modes providing for more walkable neighborhoods. Examples include portions of the Weinbach Avenue and Covert Avenue corridors.

### **ISSUES AND CONCERNS**

The issues and concerns related to commercial activities include traffic congestion, adequate parking, access, storm water drainage, encroachment on residential areas, and revitalization of older commercial areas.

Perhaps the most noticeable problem resulting from commercial development is traffic congestion. In some areas, the cumulative effect of piecemeal commercial growth has created increased pressures on the road network. Correction of these deficiencies around existing commercial areas are often addressed in an incremental fashion through measures that enhance traffic flow and improve safety. Common examples of corrective measures are the construction of medians and turn lanes, closing of median crossovers, restriction of curb cuts or installation of traffic signals. These solutions are often not popular with shoppers and businesses, but are necessary to move traffic safely and efficiently.

Encroachment of commercial development into residential areas and conversion of houses to commercial uses are often viewed in a negative way by surrounding residents. The typical problems caused by encroachment are increased traffic, impacts from parking and change in neighborhood character. Typical problems caused by either residential conversion to commercial uses or areas with small lots can include requests for variances to meet code requirements (e.g. parking, setbacks, etc.) and numerous curb cuts in a short distance. Limiting spot zonings, which create commercial encroachment and conversions in residential areas, can minimize these potential impacts.

For new or redeveloped commercial sites, protection for any adjacent residential areas should be required through buffering and creative site design, to soften the visual effects of higher intensity/volume commercial uses.

Revitalization efforts and investments are needed to maintain and improve older commercial areas. The recent trend of businesses moving to outlying commercial centers leaving large vacant buildings in more established areas is a major concern. Smaller retail businesses should be offered incentives and be encouraged to locate in and share these large vacant commercial buildings. This outward movement of anchor stores not only casts doubt on the stability of the remaining businesses in these older commercial centers, but also affects the stability and perception of the surrounding neighborhoods. The loss of businesses selling essential goods and services (e.g. grocery stores) is another important factor in neighborhood decline.

For these older commercial areas to remain competitive, they need creative reuse of vacant space and periodic upgrades to be appealing and economically viable. Meanwhile, more land continues to be rezoned. Currently in Vanderburgh County, there are about 400 acres of commercially zoned land that is undeveloped. The impact of new commercial areas on established areas and on undeveloped commercially zoned land must be considered in the rezoning process.



# COMMERCIAL

### **DEVELOPMENT LOCATION FACTORS**

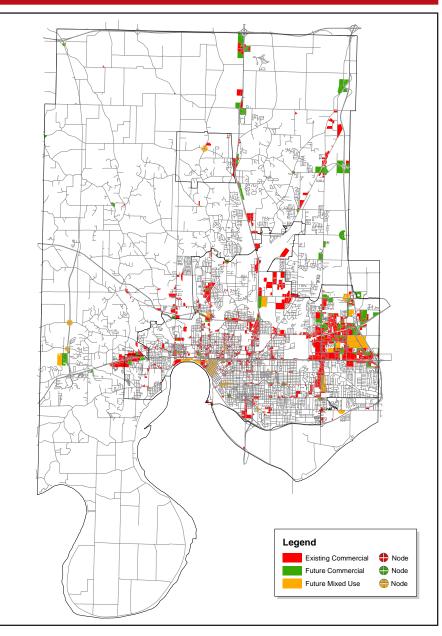
The site requirements used in this Plan to designate areas for future commercial growth are:

- Location on primary, high visibility/high traffic volume roads, typically along existing commercial corridors;
- Easy, safe access provided by frontage roads, adequate turn lanes and where possible, driveways on lower classified streets;
- Supporting population is available at either the neighborhood, community, or regional level; and
- Minimal site preparation needed, including clearing and grading, connecting to available utilities, and installing storm water drainage facilities.

### FUTURE COMMERCIAL DEVELOPMENT AREAS

Many of these areas share common existing development attractors (e.g. available land), and potential development constraints such as the lack of zoning and platting approval; and available utility services. The locations within the 2.07 square miles recommended for commercial use illustrated in green on Figure 8-1 are as follows:

#### Figure 7-1: Future Commercial Land Uses



#### NORTH U.S. 41/I-64

**Location:** Along both sides of U.S. 41 south of I-64.

#### **Existing Development Attractors:**

Frontage and access to U.S. 41; existing utilities.

**Transportation Access:** U.S. 41, CSX railroad.

Potential Development Constraints:

Needs frontage roads and local road network. Meet stricter requirements for storm water in the impacted drainage area.

#### NORTH U.S. 41/HILLSDALE

**Location:** East side of U.S. 41 between Hillsdale Rd. and Mt. Pleasant Rd.

**Existing Development Attractors:** U.S. 41 frontage.

**Transportation Access:** U.S. 41 and Hillsdale.

#### **Potential Development Constraint:**

Needs INDOT approval for any direct access to U.S. 41; and Little Pigeon Creek floodway and floodplain.

#### NORTH U.S. 41/LYNCH

**Location:** Between Lynch Rd., Maxx Rd., Pigeon Creek, & U.S. 41.

#### **Existing Development Attractors:**

U.S. 41 frontage; and proximity to future Greenway Trail.

**Transportation Access:** U.S. 41; Lynch Road to I-69; proximity to EVV Airport. **Potential Development Constraint:** 

INDOT approval for any U.S. 41 access.

#### NORTHEASTERN COUNTY

**Location:** Around the Green River/ Boonville-New Harmony Road intersection.

#### **Existing Development Attractors:**

Some of the area has commercial zoning; availability of utilities; proposed Wal-mart; and community of Daylight.

**Transportation Access:** Boonville-New Harmony Road to S.R. 57 and I-69.

#### **Potential Development Constraint:**

Floodplain; and mix of land uses.

#### EASTSIDE/I-69

**Location:** Between Oak Grove Rd., I-69, Columbia Street & Burkhardt Rd.

#### **Existing Development Attractors:**

Concept marketing plan for "The Promenade" project; and commercial zoning.

Transportation Access: Multiple streets.

#### EASTSIDE/BURKHARDT

Location: West of Burkhardt Rd. from Oak Grove Rd. to Lloyd Expressway. Existing Development Attractors: Infill on numerous parcels/platted lots with existing zoning and infrastructure. Transportation Access: Multiple streets. Potential Development Constraints:

Traffic congestion/ Road network improvements needed.

#### **INTERSTATE 69 INTERCHANGES**

**Location:** Around the Boonville-New Harmony Road, Lynch Road, Morgan Avenue, and South Green River Road interchanges on I-69.

#### **Existing Development Attractors:**

Visibility for typical interstate interchange development.

**Transportation Access:** I-69 and cross roads.

**Potential Development Constraint:** Varies with interchange location.

#### **WESTERN CITY**

**Location:** Along both sides of West Lloyd Expressway between Rosenberger Avenue and Red Bank Road.

#### **Existing Development Attractors:**

Infill on numerous parcels/platted lots with existing zoning and infrastructure; and proximity to USI.

**Transportation Access:** Lloyd Expressway and cross roads.

#### **Potential Development Constraints:**

Traffic congestion/ Road network improvements needed.

# COMMERCIAL

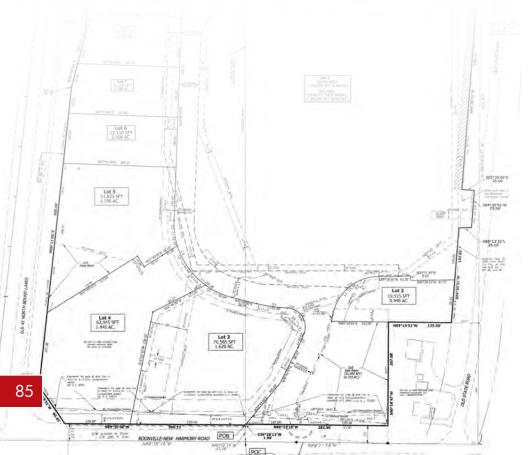
### **COMMERCIAL ACTION PLAN**

#### GOAL

 Commercial uses that benefit the region, community, and neighborhoods through their contribution to the overall pattern of orderly development, the local economy, and how the community is perceived.

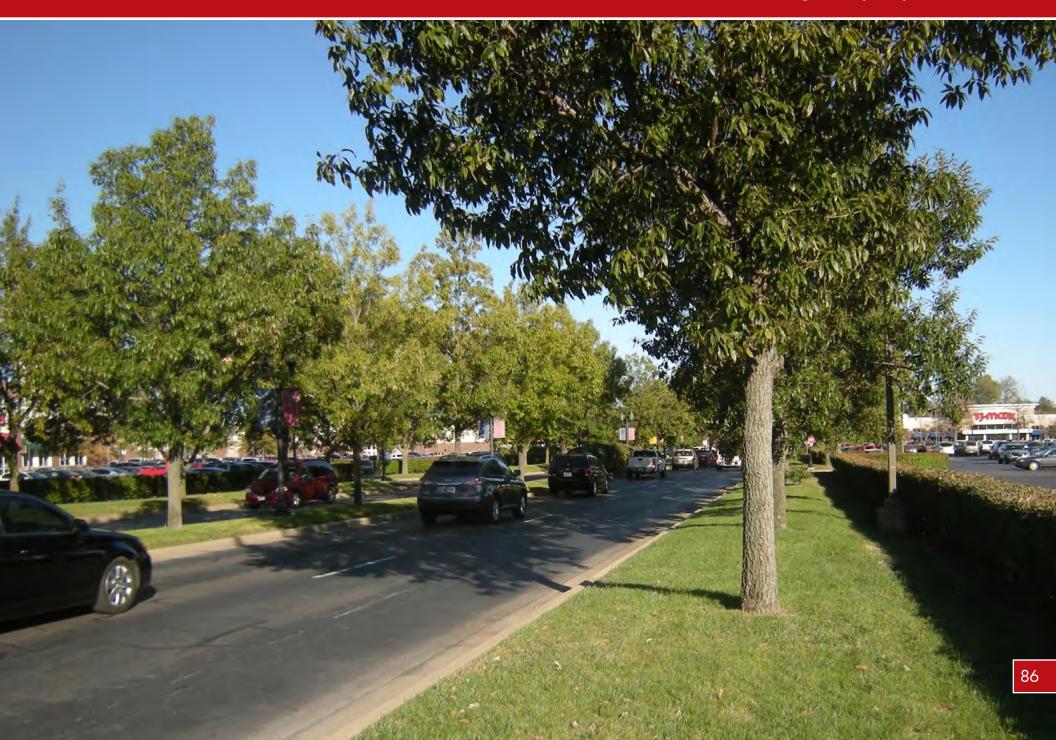
#### **OBJECTIVES**

• Ensure efficient and appealing commercial development in the appropriate areas that minimizes adverse impacts on surrounding property, the road network, and utility systems.



#### POLICIES

- Support the revitalization/redevelopment of older commercial areas, especially in the Urban Core, that serve residential needs.
- Support actions that encourage stabilization and upgrading of existing commercial areas.
- Encourage the development of multi-storied mixed uses in appropriate locations where businesses are on the ground floor and residential units are on upper floors.
- Direct new commercial development into existing underutilized commercial areas prior to rezoning new land.
- Encourage compact commercial areas and, where possible, avoid new or expanded inefficient strip development.
- Discourage spot zonings of property for higher intensity/volume commercial uses in residential areas.
- Encourage small-scaled, commercial uses that primarily serve neighborhood residents at major intersections or in existing commercial centers within residential areas.
- When new or redeveloped commercial sites are located adjacent to residential areas, schools, churches, public parks, and the greenway, encourage an appropriate buffer that exceeds the minimum setback requirements in the Zoning Code.
- Encourage and develop incentives so that smaller retail businesses can locate and share in the reuse/redevelopment of larger vacant commercial buildings.
- Investigate changes to the Zoning Code to create flexibility and sustain compact older commercial areas that serve residential needs.
- Investigate amending the Zoning Ordinance to allow for pop up stores, food trucks, outdoor seating at restaurants, and other similar activities which create vibrant places within certain areas/zoning districts.





# **SECTION 8: CENTRAL BUSINESS DISTRICT**

H

H



# **CENTRAL BUSINESS DISTRICT**

The Central Business District (CBD) contains a unique concentration and variety of activities found in no other single area of the region. It is the principal center for the finance, government and legal services sectors in the community; it is a regional activity center; and it is the focal point for how our entire community is perceived.

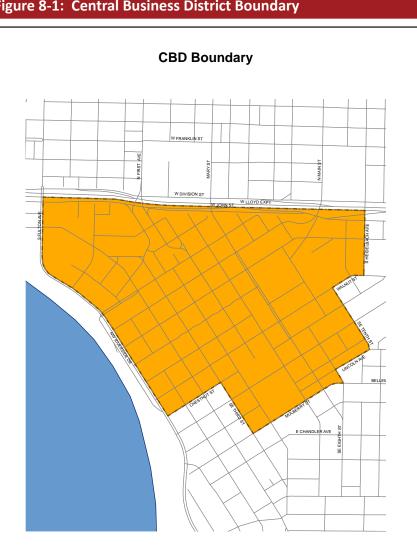
The CBD is the area of the City core that is predominantly commercial land use. The existing geographic areas that can be used to outline the perceived CBD boundaries are: Census Tract 18 and the Downtown Redevelopment Area. The latter boundary forms a somewhat larger area that is more representative of the perceived CBD. Therefore, for the purposes of this Plan and the Zoning Code, the CBD is considered to be the area in which C-3 zoning is allowed and that generally follows the Redevelopment Area boundary as shown on Figure 8-1. This area contains 384 acres or just over half of a square mile.

Like many downtowns throughout the nation, Evansville's CBD has experienced declining numbers of both residents and retail businesses, and an under-utilization of some properties. This is due in part to public mobility and suburban development. The residential population of Census Tract 18 over the last 60 years is shown in Table 8-1 below. In 2010, the CBD population reached its lowest level over this period at about 40 percent of the 1960 total. The residential component of the downtown is critical for providing support for downtown commercial activity, and for 24/7 vitality. The addition of quality higher density or high-rise housing in the downtown would provide the most benefit for the area by increasing its population more rapidly.

#### Table 8-1: Population and Occupied Housing Units in the CBD

	1960	1970	1980	1990	2000	2010
Population	1,623	662	972	857	946	648
Households	841	372	430	218	231	242

Source: Census



#### Figure 8-1: Central Business District Boundary

The latest economic data for Zip Code 47708, which closely corresponds to the boundaries of Census Tract 18, can be found in the U.S. Census Bureau's 2013 Business Patterns. Table 8-2 shows data from this report including the number of businesses, employees, and the amount of payroll in the CBD. Although these figures have declined, the nearly 8,000 employees working in the area and the \$348 million in payroll for businesses located there in 2013 still show that the CBD is a major employment center and a significant contributor to the local and regional economy.

#### Table 8-2: Business Data for 47708 Zip Code

	1995	2004	2013
Number of Establishments	429	369	337
Number of Employees	9,560	10,864	7,733
Payroll (in million \$)	251.62	429.59	347.64

Source: Census County Business Patterns



#### **ISSUES AND CONCERNS**

One of the pressing development issues facing the CBD is what the future character of this area will be. The changes that have occurred over the last 30 years have transformed the CBD from a major commercial district to a regional government, finance, and legal center. However, this is likely too narrow of a role for the downtown. In the future, the character of the area needs to evolve so that it offers more extensive uses in categories beyond those that exist today. Preferably, the CBD would also have substantial retail, service, residential, cultural and entertainment components, producing a thriving multi-use center.

For the retail and entertainment businesses downtown to be prosperous, an adequate and stable population base within and surrounding the CBD is necessary as well as having places and activities that can attract patrons from the entire region to support downtown commercial uses. The continued population decline of the CBD and the Urban Core erodes the ability to attract these commercial activities. As a result, the focus must be wider than just the CBD to recognize the impact of deteriorating adjacent neighborhoods by including the Urban Core in our revitalization efforts. This could take the form of improving the neighborhood linkages to the CBD, reducing the crime rate, and a comprehensive public/private enhancement program for the Urban Core. Although Evansville's most prominent natural and recreational asset is the Ohio River, development of the riverfront has not left many areas available for green space and public viewing/enjoyment of the River. In fact, green space is lacking in both the riverfront and in the downtown as a whole. Riverside Drive also presents a barrier between the downtown and the River which limits the potential of our riverfront.

Another issue in the CBD is the amount of existing parking. Opinions on this subject vary. However, in the perception of some citizens, there is not enough parking in the downtown, requiring visitors to walk longer distances to their destinations. A GIS analysis of the downtown reveals that the ratio of parking area to total land area in the Evansville CBD (or the parking coverage rate) is almost 29%. In comparison, the area under downtown buildings is only 24% and the area used in parking garages is only 2% of the total. Therefore, the CBD has more area in parking than it does in buildings.

It should be recognized that some major accomplishments have occurred in recent years, such as the loft program and the new Ford Center arena, that have helped improve the downtown. The proposed medical school and convention hotel will also help greatly. However, these projects alone will not turn things around. They must be followed by appropriate coordinated actions over time planned to transform our CBD into what the community envisions it can be.

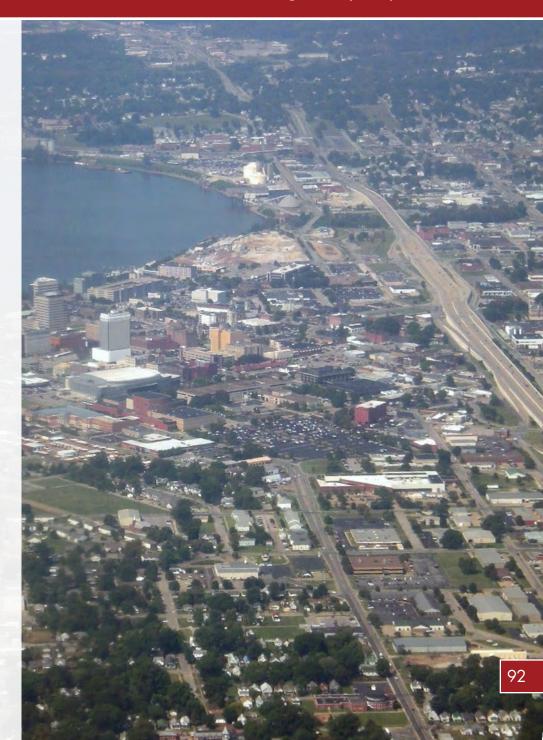
#### SECTION 8 Evansville-Vanderburgh County Comprehensive Plan

#### **FUTURE OUTLOOK**

Trends in major urban areas across the country are turning in favor of downtowns due to people desiring to live and/or hang out in these areas. Urban living in or near the downtown is becoming "hip" again, especially for retirees and the millennials. Evansville needs to put itself in position to seize this trend.

If these groups have an affinity to consider living in the CBD or nearby, revitalization actions must be taken to give them a CBD they want to live in. This includes both basic needs (e.g. a grocery store) and amenities (green space on the riverfront and elsewhere, streetscape improvements and public space to interact and hold events). In short, we need a strong CBD and Urban Core that provides the opportunity for an identity and lifestyle that is not possible in rural or suburban settings.

This effort will only succeed if it is not one-sided or half-hearted. It has to include all stakeholders allowing for government to partner with the private sector and with non-profits to accomplish common goals. In fact, private sector involvement is critical to leverage the needed investment in our city center for funding revitalization projects. Efforts should continue to maintain the CBD as the region's dominant general office, government, legal and financial center, while at the same time, growing the residential, commercial and cultural sectors. The status quo must no longer be acceptable.



# **CENTRAL BUSINESS DISTRICT**

#### **DOWNTOWN MASTER PLAN**

The 2016 Downtown Master Plan is in the approval process.

#### **CENTRAL BUSINESS DISTRICT ACTION PLAN**

Source: Community / Area Plan Commission

#### GOAL

• Strengthen the planning and development efforts to improve the economic and social vitality of the CBD.

#### **OBJECTIVES**

- Support the implementation of the new Downtown Master plan.
- Expand the number of businesses, employees, residents and visitors in the CBD through redevelopment/revitalization activities.

#### POLICIES

- Enhance the city's relationship to the Ohio Riverfront creating it as an appealing site for social interaction and entertainment opportunities.
- Expand the residential component of the downtown by encouraging conversion of second and third story storefronts to loft apartments, and encouraging the construction of new, quality, multi-family housing in this mixed use area.
- Encourage additional green space in the downtown, especially on the riverfront.
- Discourage development of surface parking lots, and prohibit any new surface lots that would front on Main Street.
- Encourage infill development on the existing surface parking lots facing Main Street.
- Promote the construction of additional multi-level and subterranean parking structures within the downtown.
- As part of the CBD revitalization, consider the linkages (e.g. pedestrian, transit, etc.) to adjacent neighborhoods.

- Support streetscapes that include the appropriate placement of public art, especially along the riverfront, Main Street, and at downtown gateways.
- Explore creating an overlay zone for the entire downtown that incorporates form based code elements.
- Support uniform wayfinding signage and placement in the downtown.
- Support maintaining downtown's walkability in all revitalization efforts.
- Investigate possible funding sources and incorporate them into a financial plan to fund the public improvement projects that will be identified in the Downtown Master Plan.



# **SECTION 9: INDUSTRIAL**



# INDUSTRIAL

97

The purpose of designating areas for industrial use is to provide potential locations to best accommodate the diverse functional needs of industry and the community. Industrial land uses currently account for only about 1 percent of the County's unincorporated land area, or about 2 square miles. In the City, industry totals to 5.5 percent, or 2.2 square miles. Maintaining a profitable and diverse industrial sector is critical to provide good paying jobs for the local economy. In addition to the obvious economic side of the benefits provided to the community from new industrial areas, there are also many other factors to consider in the assessment of community benefits including adherence to sound land use principals and any anticipated impacts to existing residential areas.

The industrial use designation accomplishes the following:

- It protects sites for industrial use that might otherwise be developed with conflicting uses, rendering the site unsuitable for many industrial operations. Conflicting uses should either not be allowed to develop in areas designated for industry or should only be developed with special site planning considerations addressing adjacent industrial use; and
- It provides viable areas for future industry which minimizes intrusion by incompatible industries on areas designated for other land uses.

Additional land for industrial use is designated on the Future Land Use Map for 2035 which allows for a wide range of location choices. It is strongly recommended that available land already planned and zoned for industrial use within areas served by water and sewer be utilized before additional land areas are rezoned. A significant savings would be realized by fully utilizing the existing infrastructure, instead of extending improvements beyond the developed area. The U.S. 41 North corridor is an example of an area that has been planned for industrial use; it has utility service, available land (only 11 percent of the area is developed), and is generally ready for development, or "shovel ready." An example of where the necessary infrastructure improvements and zoning are needed prior to development is the area west of the University Parkway along Hogue Road.

A preferred form of industrial development is an industrial site platted with large lots as opposed to strip development. This type of platting is intended to provide for an open and environmentally attractive site with good access, parking, circulation, utility services, and buffering for any adjacent non-industrial uses. Proposed new industrial sites and their surrounding uses will be evaluated according to the policies, the compatibility matrix in the General Land Use Section and the Future Land Use Map in Appendix I. Older industrial structures proposed for improvements and/or reuse already have the proper zoning and will not trigger full review under this Plan. In the Urban Core there are many older industrial sites that are surrounded by residences and other uses. Industrial reuse efforts involving these sites should focus on: improving access and circulation, improving the site appearance and adding green infrastructure elements. When possible they should also incorporate protection for any adjacent residential uses through creative site design and landscape buffering to soften the effects of the more intense industrial use, and to reduce potential use conflicts. Garvin Industrial Park, River City Industrial Park and the old Whirlpool plant near the Airport are successful examples of redevelopment/reuse of older industrial tracts.

Some older industrial buildings have deteriorated or have been abandoned, but with improvements could still support an operating business or other positive use. Other older structures have already or will have outlived their usefulness within the next twenty years. It is recommended that a program be established to identify such structures for targeted demolition and preparation for redevelopment. Environmental studies will be needed before redevelopment occurs to determine whether any contamination exists on these sites, and if so, to what extent.

Several location factors contribute to the desirability of sites for industrial use. These are:

- Transportation Access: To highway, Evansville Regional Airport, barge, rail, and intermodal facilities.
- Availability of Utilities: Water and sewer, gas and electric; and cable/fiber optic.
- Growth Potential: Availability of large tracts of appropriately zoned and platted land, visibility, economic incentives, road improvement projects and close to I-69.
- Development Constraints/Delays: Rezoning, platting, land use conflicts, environmental features (such as floodplains, soils, topography, drainage, etc.), lack of utility service, lack of an internal road network and poor access. Nearly all of the areas recommended for future industrial use have at least several sites within the 100-year floodplain. Development of these sites would require special site design.



# INDUSTRIAL

#### FUTURE INDUSTRIAL DEVELOPMENT AREAS

The locations within the 6.14 square miles recommended for industrial use illustrated in green on Figure 9-1 are as follows:

#### **US 41 NORTH CORRIDOR**

**Location:** Along both sides of U.S. 41 between Inglefield Road north to I-64.

**Existing Development Attractors:** This is our primary industrial corridor. Substantial undeveloped land is available, with only 11 percent of this very large area currently developed. Utilities are available.

**Transportation Access:** U.S. 41, I-64, and CSX railroad tracks west of U.S. 41.

**Potential Development Constraint:** The area lacks a local road network including frontage roads.

#### STATE ROAD (SR) 57

**Location:** Along the east side of SR 57 between Boonville-New Harmony Road north to Coal Mine Road.

**Existing Development Attractors:** Substantial undeveloped land is available to accommodate large facilities.

**Transportation Access:** SR 57, Old Highway 57, and Indiana Southern Railroad tracks east and parallel to SR 57.

**Potential Development Constraint:** Access to SR 57/Old Highway 57 and local road network will be needed for additional industrial development to take place. Some of the area is not zoned or subdivided for industry. Utilities are available to this area.

#### **MILL ROAD**

**Location:** The triangular area bounded by Mill Road, CSX Railroad tracks, and the former Indiana Hi-Rail tracks (the diagonal line from Allens Lane and CSX to Mill Road and St. Joseph Avenue).

**Existing Development Attractors:** A large portion of this area is available with appropriate zoning.

**Transportation Access:** CSX railroad track on the east and Indiana Hi-Rail track on the west.

**Potential Development Constraint:** Access is limited to Mill Road for an entrance into the area and a local road network will be needed for industrial development.

#### I-69/MORGAN AVENUE

**Location:** The area east of I-69 and extending south of Morgan Avenue (SR 62).

**Existing Development Attractors:** Minimal site preparation due to flat topography.

**Transportation Access:** SR 62 (Morgan Avenue), I-69, and Norfolk Southern Railroad tracks south of and parallel to Morgan Avenue. Access could be provided from Oak Grove Road.

**Potential Development Constraint:** Future industrial use in this area would have to obtain State approval for any access on SR 62. A local road system will also be needed. The area is subject to ponding and has some drainage concerns.

#### **UNIVERSITY PARKWAY**

**Location:** The area west of University Parkway, along the south side of Hogue Road and south of the Western Railroad track.

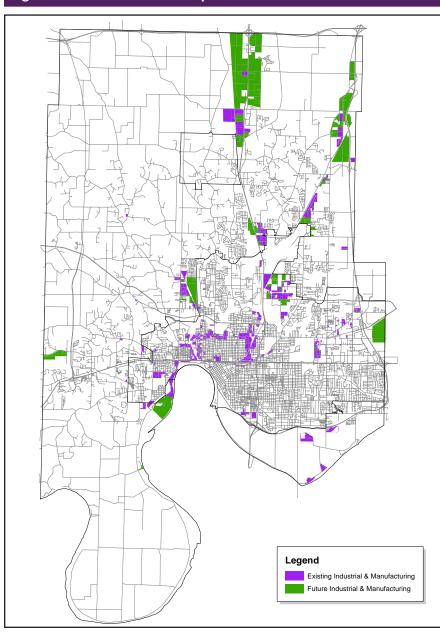
**Existing Development Attractors:** Minimal site preparation due to slightly rolling topography. Proximity to University of Southern Indiana.

**Transportation Access:** Hogue Road to University Parkway to Lloyd Expressway and Evansville Western Railroad.

**Potential Development Constraint:** The area is not zoned or subdivided for industry. A local road system will be needed. Utilities will need to be extended.



#### Figure 9-1: Industrial Development Areas



## INDUSTRIAL

#### INDUSTRIAL ACTION PLAN

#### GOAL

• Promote industrial developments that are clean industries, involve new technologies that minimize resource use and waste in the manufacturing process and contribute to the local economy by providing diverse employment opportunities.

#### **OBJECTIVE**

• Insure compact industrial development in appropriate areas that addresses any major impacts on surrounding property, the transportation network, public safety services and utility systems.

#### POLICIES

- Encourage proposed industrial projects to locate within existing or new industrial parks.
- Encourage reuse and revitalization of existing industrial facilities to regain their productivity.

- For those structures that cannot reasonably be reused, a program should be established to identify these properties and target them for demolition and redevelopment.
- Industrial redevelopment efforts in older areas should focus on improving access and circulation, reducing or mitigating potential use conflicts, making the sites more attractive through landscaping, screening, and incorporating green infrastructure.
- Encourage new industrial developments to be open and environmentally attractive with good access, parking, circulation, landscaping and utility services.
- When new or redeveloped industrial sites occur adjacent to residential areas, schools, churches, public parks, and the proposed greenway, consider potential environmental impacts and encourage an appropriate buffer using distance (exceeding the minimum setback requirements in the Zoning Code) and/ other appropriate screening treatments.
- Promote development of a new research park (possibly located near University Parkway north of USI) and an intermodal logistics park (possibly located along the U. S. 41 North industrial corridor) on appropriate sites in Vanderburgh County.







# **SECTION 10: RURAL**

15 A. m. 500

104

## RURAL

Historically, Vanderburgh County planning has focused on the urbanized area and the immediately adjacent undeveloped land. The area in Vanderburgh County considered to be Rural using certain Census demographic data, is shown on the Descriptive Areas in Figure 4-2 in Section 4. To a large extent, rural land has been viewed as land not yet suburbanized. In the past, the degree of change expected in rural portions of the County has been considered minimal. This is no longer true, as the Plan projects the land needed, to house the 2035 population, at up to 6.9 square miles for new residential development. Therefore, the importance of planning for the efficient use and management of rural land should be as important as planning for urban land. The evaluation of land use potential for this Plan over the planning period has considered the entire County, and both rural and urban needs.

Although this area mainly has agricultural uses, there are many scattered single-family homes and some subdivision developments that also share this land. Much of this residential development utilizes septic systems. Small, unincorporated communities scattered throughout the Transitional and Rural areas include St. Joseph, St. Wendel, and Daylight. The bulk of the rural, non-farm development should be encouraged to occur in or near these rural communities, as they provide an alternative to urban city living, and at the same time, help to minimize scattered rural development.

#### **ISSUES AND CONCERNS**

The cost of providing utilities and other infrastructure to serve rural scattered home sites is much higher than the cost of compact/clustered development. The potential for stream pollution and ground water contamination also increases with the amount of development utilizing on-site sewage disposal systems. The majority of the land in the County has severe limitations for septic systems. Development pressures on high yield farm lands could also inhibit the economic viability of the agricultural sector.

According to the 2010 APC land use inventory and the 2012 Census of Agriculture, about 61.5 percent or 110 square miles of the land in unincorporated Vanderburgh County is currently in agricultural use. As expected, agriculture accounts for only 7 percent or 2.8 square miles of the land in the City. Table 10-1 shows the historical trend for the loss of farmland in Vanderburgh County. Since 1982, the amount of land used for agriculture in the County has declined by more than 5,000 acres, which equates to about 8 square miles. Nearly all of this decrease occurred over the last ten years as shown on the Table. Agricultural land is lost through conversion to residential and other uses as development occurs in the Transitional and Rural areas. Table 10-1 also shows an interesting trend. The number of farms in the County is decreasing, while the average size of farms is increasing.

The 2035 Plan generally proposes that rural land remain in agricultural uses. This helps address the need to strengthen the support for agriculture as a viable element in our economy, the need to protect valuable agricultural lands and the need to encourage infill development for efficient provision and use of services and utilities.

#### Table 10-1: Farm Land Use in Vanderburgh County

YEAR	FARM LAND (ACRES)	PERCENT OF COUNTY LAND AREA*	NUMBER OF FARMS	AVERAGE ACREAGE OF FARMS
1982	81,779	54.1	408	200
1992	80,958	53.6	305	265
2002	82,035	54.3	306	268
2012	76,554	50.6	275	278

Note: \* = Total County Land Area = 151,084 Acres Source: USDA, Census of Agriculture



In order to maintain Vanderburgh County's agricultural economy, consideration must be given to protecting the lands currently used for farming activities in the Rural area, and especially those lands that are productive for agriculture due to their soil qualities (see the soils rated moderate to high for farm crop yield on Figure 3-1 in Section 3). Urban pressures on the County's farm communities pose a significant problem in maintaining viable farm operations. Conversion pressures have resulted from rising property taxes, the high degree of mobility, land use conflicts, the search for less expensive or more desirable land for development and the potential for farmers to make an immediate profit from selling their land. Given the prevalent development trends, it is expected that the number of land use conflicts and the conversion pressures will continue to increase.

The amount of land used for farming has declined by 6.7 percent since 2002. The future non-farm development that occurs in the Rural area needs to be minimized so that the rate of decline in agricultural use is less than in the recent past. These new, nonagricultural uses should be permitted only when: they are in or adjacent to one of the existing unincorporated communities in the Rural area; they do not detract significantly from continuing the primary agricultural activities; and they do not strain the existing infrastructure and services. Permitted land uses primarily should include farming and the facilities and services necessary to support this activity. Residential, industrial, commercial, and other activities not necessary for farming operations should be limited.

The Indiana State Department of Agriculture administers an award program called the Hoosier Homestead Award that recognizes families with farms that have been owned by the same family for more than 100 consecutive years and consist of more than 20 acres or produce more than \$1000 of agricultural products per year. In Vanderburgh County there are over three dozen family farm recipients of this award. This designation is sometimes referred to as Century Farms.

#### **RURAL ACTION PLAN**

#### GOAL

Maintain the viability of agriculture as a desired way of life and sector in the Vanderburgh County economy.

#### **OBJECTIVE**

Minimize the loss of high yield farm lands (on Figure 3-1 in Section 3) within the Rural area (see Descriptive Areas on Figure 4-2 in Section 4).

#### **POLICIES**

The conversion of moderate to high yield farm lands within the Rural area for urban development shall be discouraged, except in areas designated for other uses on the Future Land Use-2035 Map and in the existing Rural communities.

Growth and development in the Rural area shall not detract significantly from continuing the primary agricultural activities, while protecting their rural identity and character.

Rural character should be maintained or achieved through density and design.

Research the feasibility of creating a self-sustaining farmland preservation program that includes the purchase or transfer of development rights.

Pursue changes to the Zoning and Subdivision Ordinances that would require rezoning from Agricultural to Residential prior to platting major residential subdivisions.

Encourage compact development as a way to preserve/protect contiguous parcels of land supporting effective agricultural operations.

Land use development decisions should consider any compatibility impacts on existing farm lands, especially the "Hoosier Homestead Award" farm properties.

Encourage and recognize local food producers for their participation in and sales at local farmer's markets and in the regional food economy.



# SECTION 11: ECONOMIC DEVELOPMENT

The all

108

# **ECONOMIC DEVELOPMENT**

The nature and extent of future growth in the Evansville area will depend heavily upon the local economy and the availability of quality employment opportunities. The primary focus of economic development efforts is to encourage existing businesses to expand and attract new ventures. These efforts will be critical for our community to have the type of economy and job opportunities that can support growth. Economic development provides the community with a variety of benefits, from expanding the manufacturing base to retaining more area college graduates as professional and technical opportunities increase.

This section provides an action plan to identify how desirable economic development can be accomplished. However, many factors affecting private investment and location decisions are not within the control of the local government such as interest rates, economic markets, and regional migration of population and businesses. These factors complicate the economic development process.

Local strategies for economic development stem from realities of business expansion and relocation decisions, and our community's need to grow the economy, strengthen the tax base, and increase job opportunities. Economic development recruitment efforts should obviously emphasize the positive aspects of our community. The most commonly recognized attributes of the Evansville area are its:

- Central location within a short distance of markets in Indianapolis (176 miles), Louisville (126 miles), Nashville (156 miles) and St. Louis (174 miles);
- Good transportation access and intermodal capability provided by Interstates 64 and 69, and U.S. 41; the Ohio River with loading/unloading/warehousing at the Port of Evansville and the Port of Indiana - Mount Vernon; railroads such as CSX with its major terminal at Howell Yards; and the Evansville Regional Airport with 32 daily flights to and from 5 national hub-airports;
- The **Ohio River** is our most dominant physical feature especially for the aspects of history, recreation, community identity, sense of place, and other intangible values;

- **Skilled workforce** that consists of over 112,000 employees residing in the County and more than 28,800 employees commuting in all, known for their strong Midwestern work ethic and for taking great pride in their work;
- **Strong entrepreneurial climate** that is evident by the 1,018 additional business proprietors in Vanderburgh County between 2000 and 2010 contributing to an overall \$54,225,000 increase in proprietors' income (BEA 2000-2010);
- Friendly, family-oriented people;
- Excellent public and private **educational opportunities** provided by Ivy Tech State College, University of Southern Indiana, University of Evansville, and Indiana University School of Medicine;
- · Good mix of affordable and attractive housing;
- Low cost of living and doing business, both of which are below national averages from recent surveys;
- **Good health care** provided by two large, regional hospitals, Deaconess and St.Mary's, and other health facilities;
- Park and recreational opportunities with nearby National Forests and State Parks, and an extensive local park system including facilities such as Mesker Park Zoo, Wesselman Woods Nature Preserve, large soccer and baseball complexes, Swonder Ice Arena; and the Greenway;
- Low crime rate as compared to other urban counties in Indiana; and
- Generally a **moderate**, **4-season climate** with an average mean temperature of 32.5 F for January, and 78.0 F for July.

These attributes are appealing to both corporations and families seeking to relocate, and they represent valuable assets that provide marketing advantages the community should use in its approach to attracting new development.

#### SECTION 11 Evansville-Vanderburgh County Comprehensive Plan

#### **CURRENT AGENCIES AND PROGRAMS**

The many agencies that currently implement City/County economic development goals through a variety of programs include:

#### **FEDERAL DESIGNATION**

• Foreign Trade Zones (FTZ)

#### **STATE GOVERNMENT**

• Indiana WorkOne Southwest

#### REGIONAL

- The Southwest Indiana Development Council (SWIDC) representing nine counties in southwest Indiana.
- The Economic Development Coalition of Southwest Indiana MSA counties

#### LOCAL

- Chamber Of Commerce of Southwest Indiana
- The Southwestern Indiana Small Business Development Center (SBDC)
- Growth Alliance for Greater Evansville (GAGE)
- Evansville Urban Enterprise Association
- Tri-State World Trade Network (TSWTN)

#### **CITY AND COUNTY GOVERNMENT**

- Mayor, City Council and Board of County Commissioners
- Evansville Department of Metropolitan Development (DMD)
- Evansville Redevelopment Commission
- Area Plan Commission /Building Commission

#### **INDUSTRY**

• Tri-State Manufacturers' Alliance (TSMA)



## **ECONOMIC DEVELOPMENT**

#### **ECONOMIC ANALYSIS**

The following is a brief analysis of the Evansville/Vanderburgh County economy. It is not intended to be a complete economic base analysis, but to give a general economic overview with strategies for the future. Information used in this analysis includes labor force statistics, employment by type of establishment, and business index statistics.

#### **ECONOMIC AREA, MSA AND COUNTY**

Evansville is the center of both a Metropolitan Statistical Area (MSA) and a Media Market Area (MMA). Table 11-1 lists some of the key economic market data that describes the strengths of the MSA and MMA. The general concept for an MSA consists of a large central city (Evansville), and any nearby counties that have strong economic and social ties with that city. These outlying counties must have a specific level of commuting to the central county and meet certain requirements of metropolitan character. The Evansville MSA is comprised of the three counties in Indiana and one county in Kentucky shown on Figure 11-1, which had totals of over 311,000 population and over 285,000 employment in 2010 (see Table 11-1). The MSA is used by government agencies for planning public projects and programs and by universities and other research groups for doing regional economic studies.

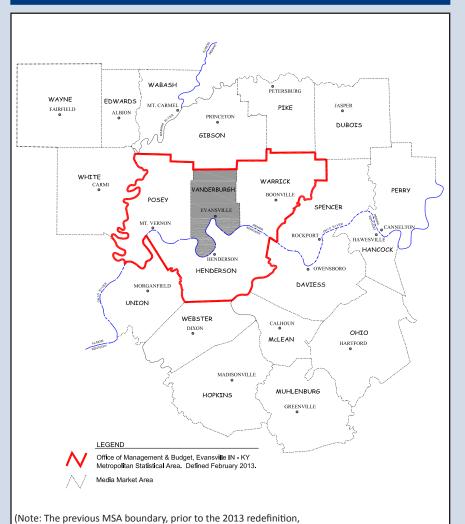
Table 11-1: Economic Market Areas					
	Vanderburgh County	MSA Metropolitan Statistical Area	MMA Media Market Area		
Population 2010	179,703	311,552	735,813		
Households 2010	74,454	125,835	294,000		
Median Income (acs) 2010	\$ 42,396*	\$ 50,680*	\$ 42,908*		
Business Establishments 2013	14,369	24,462	57,218		
Employment 2013	118,814	285,912	458,851		
Payroll (in \$ billions) (h) 2013	4.340	6.226	12.826		

Notes: (acs) = American Community Survey estimate of median household

(\*) = averaged

(h) = underestimated due to disclosure concerns of businesses.

Sources: 2010 Census, American Community Survey 2006-2010 (5 year estimates), 2013 County Business Patterns, 2013 Nonemployer Statistics



also included Gibson County, Indiana and Webster County, Kentucky.)

#### Figure 11-1: Regional Economic Areas

An MMA is defined as a geographic area that represents media markets. MMA data is used by universities and other research groups for analyzing regional economic activity, and by businesses for determining sales territories and doing marketing impact studies (see Table 11-1). Two examples of MMAs are:

- 1. Television Market Area (TMA) -- established by the Federal Communications Commission as a group of counties covered by a specific group of TV stations. The TMA for Evansville encompasses approximately 21 counties in Indiana, Illinois, and Kentucky as shown on Figure 11-1. This area had a 2010 population of over 730,000 and nearly 450,000 employed.
- 2. Nielsen Media Research Company -- similar designation for measuring the potential number of households that make up the TV viewing audience.



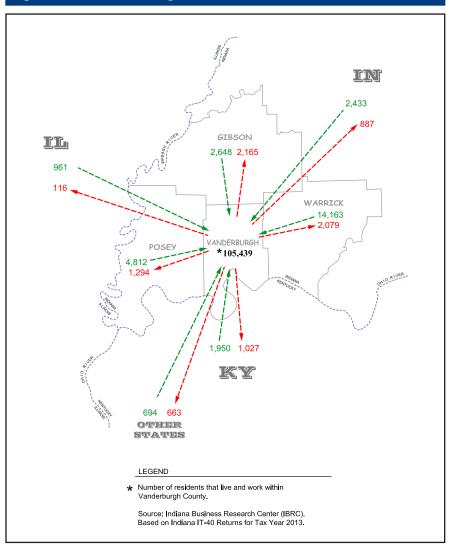
# **ECONOMIC DEVELOPMENT**

Figure 11-2 contains the commuting patterns from 2013 Indiana Tax return data for the MSA and Tri-State Area. The commuter flow on this map shows that 105,439 individuals live and work within Vanderburgh County, while 8,231 residents leave Vanderburgh County traveling to work outside the County ("Export") and 27,661 commuters travel into the County for work ("Import"). This means that for every employee leaving the County to work elsewhere, almost three employees travel into the County for work (or 79 percent of the County workforce consists of County residents and 21 percent come from outside the County). Workers from Warrick County (14,163) represent half of the incoming commuters. This commuting pattern heavily favoring Vanderburgh County confirms that it is the regional employment center. More detailed data is available in Appendix E.

It is rare for an urban county to contain a sufficient labor force to meet all of its employment needs. For cities that have substantial in-coming commuters, the roadway system must have the ability to accommodate this traffic flow. Understanding the point of origin for out-of-county commuters is essential for transportation planning and enhancing the potential labor force.

For example, transportation enhancement projects to alleviate road capacity issues can improve driving time from a neighboring county that supplies workers and make the County more attractive to potential employers. Understanding commuting patterns and coordinating transportation improvements based on this information could also assist in retaining employers that depend on workers from other counties.

#### Figure 11-2: Commuting Trends Profile 2013



#### SECTION 11 Evansville-Vanderburgh County Comprehensive Plan

#### LABOR FORCE

The labor force is defined by the Census Bureau as the population 16 years of age and over that work, persons that normally work but were temporarily absent from their jobs, and those persons who were unemployed, available for work and seeking employment.

According to the 2010 Census, the working age population (16 - 65) in the County was 113,911 persons and the County resident labor force was 85,610 persons (2010 ACS Commuting). Projected population and employment data for 2035 are shown in Table 11-2. The projected County employment is almost 150,000 employees, an increase of about 25,000 from the 2010 total.

#### Table 11-2: Population, Labor Force & Employment

	1990	2000	2010	2035 Projected
Census 16-65 Year Olds in County Population	103,668	110,342	113,911	114,100 (IBRC)
BEA Total Employment Working in County	110,650	128,276	122,937	na
EMPO Total Employment Working in County	na	na	124,867	149,566

Note: IBRC = Indiana Business Research Center BEA = Bureau of Economic Analysis EMPO = Evansville Metropolitan Planning Organization 2040 Plan



#### INDUSTRY MIX OVERVIEW

Vanderburgh County has a diversified economy that continues to evolve. Examination of Table 11-3 shows that Services employment is the most dominant and fastest growing sector of the economy. Employment in the Medical and Social Services category is also growing and has moved into second place. Retail trade and Manufacturing sectors have declined in employment share and are now the third and fourth sectors respectively.

	1990	2000	2010
Total Full and Part-Time employment	110,650	128,276	122,937
Farm	0.5%	0.3%	0.3%
Forestry, Fishing, & related	0.5%	0.7%	.na
Mining	1.0%	0.7%	na
Construction	6.0%	7.0%	6.7%
Manufacturing	16.9%	13.9%	10.0%
Transportation & Utilities	4.6%	5.0%	4.7%
Wholesale Trade	6.0%	5.3%	4.1%
Retail Trade	21.4%	20.8%	11.3%
Finance, Insurance and Real Estate	5.7%	7.0%	7.2%
Services – excluding Medical	18.5%	19.5%	31.1%
Medical & Social Services	11.0%	12.0%	15.7%
Government	8.3%	8.3%	8.9%

Table 11-3: Percent Share of Employment by Industry

Source: Bureau of Economic Analysis Note: na = not available to avoid disclosure The local data presented in Table 11-4 are fairly consistent with national and state trends, which all show significant movement toward a service based economy. This data also indicates that Vanderburgh County is more dependent on the services sector for employment than the state or the nation, and is less dependent on government.

# Table 11-4: 2010 Employment Percentage by Industry Comparedto the State and Nation

INDUSTRY	Vanderburgh	Indiana	US
Farm	0.3%	1.9%	1.6%
Forestry, Fishing & related	na	0.3%	0.5%
Mining	na	0.4%	0.8%
Construction	6.7%	5.1%	5.1%
Manufacturing	10.0%	13.1%	7.0%
Transportation & Utilities	4.7%	4.4%	3.5%
Wholesale Trade	4.1%	3.5%	3.5%
Retail Trade	11.3%	10.6%	10.2%
Finance, Insurance & Real Estate	7.2%	8.7%	11.7%
Services – excluding Medical	31.1%	28.1%	31.1%
Medical & Social Services	15.7%	11.3%	11.1%
Government	8.9%	13.1%	14.3%

Source: Bureau of Economic Analysis

Note: na = not available to avoid disclosure

#### SECTION 11 Evansville-Vanderburgh County Comprehensive Plan



Table 11-5 lists the major employers in the County and their type of industry. The list shows manufacturing employment concentrations in plastics and automotive.

#### Table 11-5: Major Employers in Vanderburgh County

COMPANY NAME	INDUSTRY
Ameriqual	Meals Ready to Eat (MRE)
Anchor Industries	Tents, Canopies, Canvas Accessories
Atlas Van Lines	Movers, Corporate & Household
AT&T	Customer Service – Call Center
Berry Plastics	Injection Molded Plastics
Catholic Diocese of Evansville	Religion & Education
City of Evansville	Government Services
Deaconess Health Systems	Health Care
Evana Tool & Engineering	Factory Automation Assembly Systems
Evansville Newspaper	Publishing
Evansville State Hospital	Health Care
Evansville/Vanderburgh School Corporation	Education
Federal Agencies	Government Services
Fifth Third Bank	Banking & Financial Services
Flanders Electric	Electric Motor Manufacturing & Repair
Guardian Industries / SRG Global	Plastics Manufacturing / Automotive Parts
Industrial Contractors / SKANSKA	Construction

<b>COMPANY NAME</b>	INDUSTRY
Ivy Tech Community College	Education
Koch Enterprises	Industrial & Automotive Manufacturing
Lewis Bakeries	Production & Distribution
Mead Johnson Nutritional	Nutritional
Mulzer Crushed Stone	Quarry & Distribution Sand and Gravel
Old National Bank	Banking & Financial Services
Pittsburgh Glass Works	Automotive Glass
Red Spot Paint and Varnish	Coatings for Automotive Plastics
St. Mary's Health Systems	Health Care
Shoe Carnival	Retail Sales
Springleaf Financial Services	Financial Services
T.J. Maxx	Distribution Center
Tropicana	Gaming Entertainment
University of Evansville	Education
University of Southern Indiana	Education
Vanderburgh County	Government Services
Vectren	Utility – Gas & Electric

#### SECTION 11 Evansville-Vanderburgh County Comprehensive Plan

Table 11-6 lists the major employers in surrounding counties and their type of industry.

#### Table 11-6: Major Employers in Surrounding Counties

COMPANY NAME	INDUSTRY
ALCOA Warrick; Newburgh, IN	Aluminum Sheet & Ingots
Alliance Resource; IN, KY & IL	Coal Mining
AstraZenca; Mt. Vernon, IN	Pharmaceutical
Big Rivers Electric; Henderson, KY	Electric Generating & Transmission
Century Aluminum; Sebree, KY	Aluminum Extrusion
Community Methodist Hospital; Henderson, KY	Health Care
CountryMark; Mt. Vernon, IN	Oil Refinery & Retail
Dana Corporation; Henderson, KY	Truck Axles & Brake Components
Duke/PSI Energy; Owensville, IN	Electric Generating & Transmission
Gibbs Die Cast; Henderson, KY	Aluminum & Magnesium Die Casting
Gibson General Hospital; Princeton, IN	Health Care
Hansen Corp.; Princeton, IN	Manufacture timing motors, clock movement
Henderson County Schools; Henderson, KY	Education
Peabody Energy Midwest; Gibson County, IN	Coal Mining
SABIC Innovative; Mt. Vernon, IN	Plastics, Lexan Sheet, & Valox
Toyota Motor Manufacturing Indiana; Princeton, IN	Automotive Assembly
Tyson Foods; Robards, KY	Food Processing & Packaging
Warrick County Schools; Boonville, IN	Education



# **ECONOMIC DEVELOPMENT**

#### **FUTURE OUTLOOK**

#### **ECONOMIC DEVELOPMENT PROBLEMS**

As reported in the 2006-2010 American Community Survey, the percentage of the labor force employed in professional occupations was 29.2 percent for Vanderburgh County, and 35.3 percent for the nation. This 6.1 percent difference highlights a need for more professional job opportunities in the local area. Many of our college graduates who would like to stay in the Evansville area have a difficult time finding employment in their field and are forced to look for other types of employment or look for work elsewhere. The inability to retain young college graduates is typically referred to as the "Brain Drain". This is not only a problem in the Evansville area, but is a statewide problem. Recruitment efforts to attract more professional jobs to the area should be an economic development priority.

The regional economic study identified several aspects of the region which ranked lower than the benchmark communities used in the study. Some of these aspects of concern include:

- high speed internet service that provides for fast uploads and downloads;
- availability of full service, attractive office and industrial sites; and
- Evansville's general appearance or curb appeal.





Another problem with the local economy is that a great percentage of manufacturing employment is with large national or multi-national companies that have Evansville facilities. As these large companies seek to become more competitive, they are continually seeking to eliminate excess capacity and to close down less efficient facilities. Unfortunately, a number of these employers have facilities in Evansville that are older plants, designed for much different technology and processes. It can be difficult to operate these facilities when the company is looking to maximize profits by eliminating excess and inefficient production capacity. Combined private and public investment is needed for retooling and modernization of these older plants.

Once old industrial facilities are closed, the community is left with the aging complexes, designed with limited energy efficiency and before the days of environmental and hazardous materials concerns. However, some older facilities still offer opportunities for economic development. While they often are too large to attract a single user, they can be modified to accommodate multiple users. The City of Evansville has taken this approach to reuse these complexes, along with selective demolition, renovation, and marketing, to attract major tenants. For example, the former Bucyrus Erie plant has been repurposed in what is now known as the River City Industrial Park. The Whirlpool plant on US 41 is another example.

#### ECONOMIC DEVELOPMENT EFFORTS AND POTENTIAL

The Evansville-Vanderburgh County area has considerable economic potential. Its geographic location, major highways, rail service, and port facilities provide excellent access to markets throughout the United States. The appealing quality of life, cost of living, the diversity of the local economy, and the educational opportunities offered by local universities are other significant assets of the Evansville area that enhance its regional economic potential. The community continues to benefit from aggressive business recruitment and retention programs, spearheaded by various economic development groups, including the City. The challenge for the future success of this effort will be building an economic development strategy based on the region's assets.

The proposed/ongoing projects which could have major positive impacts on future economic development efforts and on the overall Evansville area economy are:

#### Extension of I-69 from Indianapolis to Evansville and South to Houston, Texas

This extensive transportation project already spans Southwestern Indiana and when complete will provide a direct highway link from Indianapolis to Evansville. It eventually will be a segment of an interstate highway that connects Canada to Mexico. Considering our increasingly global economy, the highway is expected to be an important international trade route, and a catalyst for economic development within our region as a result of the improved north/south access.

#### I-69 Innovation Corridor

The I-69 Innovation Corridor is a collaboration led by the University of Southern Indiana with key civic and business stakeholders in 11 core Indiana counties and participants from 16 counties in Indiana and Kentucky who are committed to building a robust regional economy that focuses on the I-69 region in Southwest Indiana. The consortium was launched to explore products and programs under the following initiatives: Brainpower, Branding Experiences, Civic Collaborations, Innovation and Entrepreneurship Networks, and Quality Connected Places.

#### **Regional Technology Sharing Agreement**

In 2008, the Growth Alliance for Greater Evansville signed an innovative technology transfer agreement with Crane Naval Surface Warfare Center (a U.S. Navy lab located in Southwest Indiana) that holds tremendous potential for regional businesses. Through this agreement, Crane can offer access to a wide range of advanced technology and skilled personnel that will help companies in the region to develop new products and processes, thus expanding their economic viability.

Another tech-related project is an Applied Technology Park and Business Accelerator proposed in the 2040 Millennial Plan to be located along University Parkway. This park would attract innovators and entrepreneurs by providing the needed infrastructure and resources required for successful launching of tech-based businesses.

#### **Regional Economic Study**

The Economic Development Coalition of Southwest Indiana commissioned a study, The Blueprint for Success: A Master Plan for Economic Redevelopment, which was released in 2011 with recommendations to improve our region in three areas: product improvement; product marketing; and organization. The study also recommended target projects such as development of an Intermodal Logistics Park, upgrading internet service and wireless access, and facilitation of small business startups at Innovation Pointe and the old Whirlpool plant.

#### **Downtown Convention Hotel**

The need for a hotel adjacent to the Ford Center and Old National Events Plaza (Vanderburgh County Convention Centre) to make Evansville attractive and competitive for conventions has been recognized in our community for several years. Bringing visitors downtown for conventions, and the convenience of staying next to the Ford Center for events, would increase the potential patrons of downtown businesses and provide a significant boost to economic activity in the Central Business District.

#### Indiana University (IU) Medical School

The IU School of Medicine program is expanding from two to four years, in a new facility to be located downtown. Classes are scheduled to start in 2017. Other partners in this new Medical Education and Research Partnership facility include:

- University of Southern Indiana, shifting graduate-level health education and research to the new site by 2020;
- The University of Evansville launching a new physician assistant program and increased programs for health professions students within three years from the opening of the campus; and
- Ivy Tech Community College Southwest, relocating all existing health science programs, including the health science and nursing programs currently housed on the main First Avenue campus.

#### **Slackwater Port**

The proposed slackwater port would be located off the Ohio River near Howell Railyard CSX intermodal facility. A slackwater port contains a steady level of still water to allow barges to more easily load/unload cargo. There has been discussion about the possibility of creating a slackwater harbor to take advantage of the existing and potential growth of the multi-modal commercial trade and freight logistics facilities in Evansville and the Tri-state region. This proposal integrates freight, economic development, workforce development and environmental programs.

# **ECONOMIC DEVELOPMENT**

#### **REGIONAL CITIES PROJECTS**

The Regional Cities Program was established by state enabling legislation to incentivize transformational change within Indiana's regional cities through major State funding for appropriate projects. In 2016, the Evansville region was awarded this new funding, which will be used along with other funding sources, on certain construction projects identified in the Evansville Region Cities plan. The following are the proposed projects in Evansville that have been awarded Regional Cities funding:

#### **IU Medical School Research Facility**

In conjunction with the Indiana University School of Medicine downtown, this research facility would be an adjacent but separate structure on the Med School campus. It is anticipated to accommodate start-up companies that will create bridges between research and the marketplace. Focus areas for research activities would include mental health, geriatrics/aging and other areas in neuroscience.

#### **Urban Living Research Center**

This center would involve a new downtown housing project to be accomplished through a private sector partnership between Vectren, our local utility; Haier, a manufacturer of household appliances; and a real estate development company. The research aspect of this new housing would study the functioning of appliances to be equipped with sensors providing data to use in improving product design, efficiency and accuracy.

#### **Downtown YMCA Expansion**

This would involve both expanding and updating existing facilities to enhance the YMCA's role as an important attractor and activity anchor for the downtown. The improved fitness center would also help support healthy and active lifestyles. The proposed location for this project is the parking lot just to the north of the existing YMCA.



#### **Regional Connector Trails**

This would involve both the design and construction of five trails/cycle tracts/bike lanes improving connectivity within our community. Trails are essential resources for cities to attract new residents. These five projects, which will also involve place making activity, will link the following:

- Downtown to the new North Main Street;
- IU Med School to U of E;
- U of E to Roberts Park;
- IU Med School to West Franklin Street; and
- Haynies Corner Arts District to the Greenway on the riverfront.

#### **Signature School Science Center**

This educational facility improvement would be an expansion of the school's building near the corner of Main and Sixth Street. The expansion would house additional classrooms, labs and common areas that would increase the school's capacity by 90 students.

#### **Evansville Regional Airport Terminal Renovation**

This airport improvement would involve upgrades to both the physical appearance and functioning of the terminal. Specifically, it would involve improvements reconfiguring the TSA security screening area, increasing the utilization of jetways, and parking.



### FORECASTS OF ECONOMIC COMPONENTS

In the long term, the future outlook for employment in the Evansville area appears to be positive. The Evansville Metropolitan Planning Organization *Transportation Plan 2040* included a 2035 employment projection of 149,566 people in Vanderburgh County. This forecast of 16,344 additional employees from both new business establishments and continued expansion of existing businesses, shows Vanderburgh County will remain the dominant source of employment in the region, and predicts healthy growth for the Evansville economy in the future.

The type of new employment in the future will determine the amount of benefit that the community will receive from new job opportunities. Obviously, the community would receive more and better benefits from higher rather than lower paying (less than living wage) new jobs. In addition, professional jobs at competitive wages would provide opportunities for new college graduates and other qualified candidates that would encourage more of our young, bright residents to stay in the Evansville area.



#### ECONOMIC DEVELOPMENT ACTION PLAN

Source: Previous Overall Economic Development Program Annual Reports, COMMUNITY AND AREA PLAN COMMISSION

#### GOAL

• To improve the local economy through long-term growth and to upgrade the standard of living for all citizens of Evansville and Vanderburgh County.

#### **GENERAL OBJECTIVES**

- Develop an economic development strategy that is based upon the assets of the community and includes the concept of branding our area.
- Reduce unemployment and underemployment by: additional education and training efforts to create a more qualified workforce; and increasing the number of jobs paying a living wage.
- Provide incentives, including a sufficient number of shovel ready industrial and commercial sites in attractive locations, for expanding operations and new businesses to ensure an expanding economy and tax base.
- Upgrade and improve community facilities and services that enhance the community's growth potential and quality of life.
- Support the implementation of the regional economic study, The Blueprint for Success: A Master Plan for Economic Redevelopment, as the template for our coordinated, longrange economic development program.
- Take advantage of the increased globalization of the marketplace to attract foreign capital to the Evansville area.
- Intensify recruitment efforts that emphasize the community's positive attributes to retain and attract new professional and technical careers in the Evansville area.

- Target both a broad range of businesses and specialized industries (especially in areas where we have existing industrial concentrations, e.g. plastics) in these recruitment efforts.
- Support the City's efforts to establish land bank and land trust programs for redevelopment.

#### DOWNTOWN/COMMERCIAL OBJECTIVE

• Increase the number of business establishments, employees, and customers of businesses in the downtown to create a climate for economic success in a dynamic CBD.

#### POLICIES

- Continue to support Downtown development by providing incentives for using vacant and/or underutilized real estate for commercial/residential activities.
- Develop additional off-street parking in parking structures to encourage the renovation/expansion/occupancy of existing buildings and new development.
- Support the City's effort to implement the new Downtown Master Plan.

#### **SMALL BUSINESS OBJECTIVES**

- Facilitate the establishment of new business start-ups at facilities such as Innovation Pointe and at vacant or underutilized industrial facilities.
- Provide technical assistance, counseling and financing assistance to minority, woman-owned, and other small businesses.

#### **INDUSTRIAL OBJECTIVES**

• Retain and expand existing operations, and attract new industries.

#### POLICIES

- Promote clean industries and new technologies that minimize resource use and reduce waste in manufacturing processes.
- Provide adequate infrastructure to industrial parks and sites.
- Through public and private efforts, maintain an up-to-date inventory of available industrial buildings, parks, and shovel ready sites.
- Continue to support industrial recruitment, the Chamber of Commerce business expansion/retention efforts, and continued construction of speculative buildings.
- Support the Redevelopment Commission in continuing to evaluate other areas for redevelopment activities which might facilitate industrial expansion.

#### **INFRASTRUCTURE OBJECTIVE**

- Upgrade and expand infrastructure capacities as a means to direct growth and development.
- Establish a community wide effort to prioritize, address, and finance aging infrastructure replacement.
- Continue to develop the internet infrastructure to allow for faster high speed service and expanded coverage area including WIFI.

### **ECONOMIC DEVELOPMENT**

#### **NEIGHBORHOOD OBJECTIVE**

• Develop opportunities for neighborhood economic revitalization in the Urban Core including economic training and financing for businesses serving these neighborhoods.

#### POLICIES

- Encourage businesses to locate in the Enterprise Zone and to hire residents of the zone.
- Upgrade the condition of the existing substandard housing areas through redevelopment with a mix of housing types, and through rehabilitation to enhance the attractiveness of these areas for new residents and businesses.
- Expand the public/private relationship in housing rehabilitation services, and support the construction of affordable housing to continue providing options for low income residents of the Urban Core.

#### **TRANSPORTATION OBJECTIVE**

• Improve the transportation network within the City of Evansville and Vanderburgh County to facilitate regional, national and international trade and to provide a quick and safe transportation network throughout the community.

#### POLICIES

- Support improved access to Evansville and Vanderburgh County through the extension of I-69 to the south on a new bridge over the Ohio River.
- Support the implementation of the EMPO 2040 Recommended Transportation Plan.
- Develop a plan to prioritize and fund local road projects, such as intersection improvements, minor road widening and "Complete Street" upgrades.



#### TOURISM AND RECREATIONAL OBJECTIVE

• Continue upgrading and improving access to tourist attractions, and cultural and recreational facilities that promote Evansville and Vanderburgh County as a regional convention, sports and tourist center.

#### POLICIES

- Support completion of the Pigeon Creek Greenway to help make Evansville attractive as a recreation destination that complements tourism.
- Continue the development of a mixed use Art District and renovation of the Alhambra Theater to promote investment by new residents and businesses, and to attract visitors that will boost the economy of the Haynie's Corner area.
- Support historic preservation for its contributing role in attracting tourists to visit the historic sites and resources of the Evansville area.
- Support City and County park systems through continued upgrading of park facilities.



#### CITY/COUNTY/REGIONAL COOPERATION OBJECTIVE

 Strengthen and increase cooperative efforts between the City, County, regional entities and other stakeholders on economic development initiatives to maximize the potential for achieving success.

#### **EDUCATION OBJECTIVE**

• Provide appropriate education and skills training to meet the needs of current and future employers/residents.

#### POLICIES

- Support area school systems, trade and vocational schools, and colleges in their efforts to educate and train the local labor force.
- Encourage educational institutions to offer responsive continuing education services for both local employers and the community.
- Support the establishment of a University and/or Hospital partnership with the private sector for creating a research and development park that establishes new businesses and technologies possibly located on the University Parkway.



## SECTION 12: EDUCATION AND CULTURAL ENVIRONMENT

### **EDUCATION AND CULTURAL ENVIRONMENT**

Education is a key ingredient for the growth and quality of life in the Evansville-Vanderburgh County community. Having quality local and regional educational opportunities are essential for the effectiveness and competitiveness of the workforce. An educated workforce creates a better environment for economic development. Schools also impact land use as some of the location decisions for new homes and businesses are made to be near a school. In addition, cultural resources are an important quality of life factor that enhance the cultural vitality of our community and region.



### **EXISTING EDUCATIONAL FACILITIES**

Evansville and Vanderburgh County offer many diverse educational facilities and learning opportunities to the community and region. Quality college education in Evansville is available at two outstanding universities and a state college. Primary and secondary education is offered through the Evansville-Vanderburgh School Corporation, the Catholic Diocese of Evansville and other private schools. The Parochial, Charter and Independent schools not only offer additional choices and diversity, but also provide extra capacity for the educational system in our community. Table 12-2 lists the public, parochial, and private schools in Vanderburgh County. Figure 12-1 shows the location of these school facilities.

#### **EVANSVILLE-VANDERBURGH SCHOOL CORPORATION**

The Evansville-Vanderburgh School Corporation (EVSC) is fully accredited by the Indiana Department of Education for the 2014-2015 school year with an enrollment of 22,474. They emphasize their commitment to promote academic achievement, develop talents and encourage the attitudes and habits needed for lifelong learning. The EVSC offers a wide range of opportunities to learn within the following facilities/services:

- 5 Pre-K opportunities
- 17 Elementary Schools (K-5 & K-6)
- 4 K-8 Schools
- 7 Middle Schools
- 5 High Schools
- 2 Charter Schools (one K-8 & one 9-12)
- 1 Academy for Innovative Studies (6-12, non-traditional)
- 1- New Tech Institute (9-12)
- 1 Career and Technical Center
- 1 Virtual Academy

#### **PAROCHIAL SCHOOLS**

The Catholic Diocese of Evansville operates 12 elementary and two high schools in Vanderburgh County. All the schools are State-accredited. The 2014-2015 school year enrollment was 4,102.

#### **CHARTER SCHOOLS**

The two charter schools, Signature and Joshua Academy, are sponsored by the Evansville-Vanderburgh School Corporation's School Board. The Signature School opened in the 2002-2003 school year as Indiana's first charter high school. Located in the downtown, the Signature School's facility shares the same building as the Victory Theater. Joshua Academy became a charter school in 2004. Their combined 2014-2015 school year enrollment was 576.

#### **INDEPENDENT SCHOOLS**

There are four independent schools that offer other educational opportunities for children in our community. Their combined 2014-2015 enrollment was 1,263.



#### **PROJECTED SCHOOL AGE CHILDREN**

Table 12-1 displays the existing and forecasted total school age population by the age groups that closely correspond to the elementary, middle and high school levels. The Indiana Business Research Center projects that the overall school age population is expected to increase moderately through 2035 (+1,643 students), and that the middle school age group will increase the most (+782). Analyzing the forecasts of the school age population is important in determining the number of classrooms and teachers that will be needed in the future. Although an overall increase in students is expected, they will not be distributed evenly among the four types of school systems. The school aged population within the city is likely to decline some, while higher enrollment is expected in the unincorporated County from population shifts and growth.

#### Table 12-1: School Age Groups: 2010 Census and Projections

	Age Groups & Approximate School Level			
Data Source	5-9 Elementary	10-14 Middle	15-19 High	Total
2010 Census	11,126	10,670	12,676	34,472
IBRC Projections				
2025	11,480	11,560	13,218	36,258
2035	11,430	11,452	13,233	36,115

Source: Indiana Business Research Center

### EDUCATION AND CULTURAL ENVIRONMENT

### VANDERBURGH COUNTY SCHOOL SYSTEMS

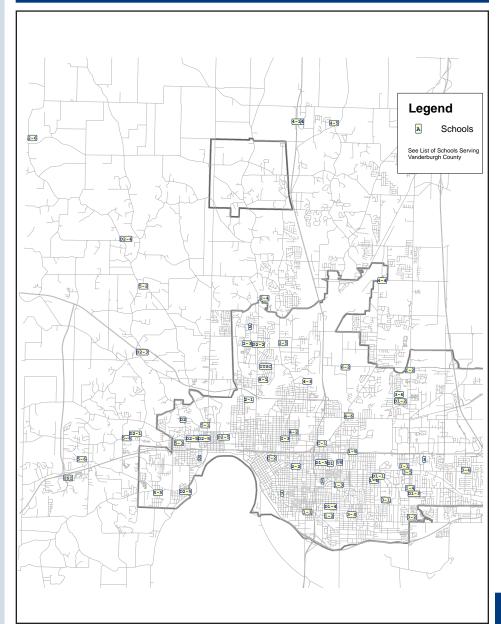
#### Table 12-2: Schools Serving Vanderburgh County

ID	School	Grades	Address	
Evansville-Vanderburgh School Corporation				
1	Bosse High School	9-12	1300 Washington Ave	
1-1	Glenwood Leadership Academy	K-8	901 Sweetser Ave	
1-2	Lodge Community	K-8	2000 Lodge Ave	
1-3	Washington Middle	6-8	1801 Washington Ave	
1-4	Dexter Elementary	K-5	917 S Dexter Ave	
1-5	Harper Elementary	K-5	21 S Alvord Blvd	
2	Central High School	9-12	5400 N 1st Ave	
2-1	Cedar Hall Community	РК-8	2100 N Fulton Ave	
2-2	Lincoln	K-8	635 Lincoln Ave	
2-3	Thompkins Middle	6-8	1300 W Mill Rd	
2-4	Highland Elementary	K-5	6701 Darmstadt Rd	
2-5	Stringtown Elementary	K-5	4720 Stringtown Rd	
3	Harrison High School	9-12	211 Fielding Rd	
3-1	McGary Middle	6-8	1535 S Joyce Ave	
3-2	Caze Elementary	PK-5	2013 S Green River Rd	
3-3	Fairlawn Elementary	K-5	2021 S Alvord Blvd	
3-4	Plaza Park International Prep Academy	6-8	7301 Lincoln Ave	
3-5	Hebron Elementary	K-5	4400 Bellemeade Ave	
3-6	Stockwell Elementary	K-5	2501 N Stockwell Rd	

ID	School	Grades	Address
4	North High School	9-12	15331 Hwy 41 North
4-1	North Junior High	7-8	15325 Hwy 41 North
4-2	Delaware	K-6	700 N Garvin St
4-3	Evans	PK-6	2727 N Evans Ave
4-4	Oak Hill	K-6	7700 Oak Hill Rd
4-5	Scott	K-6	14940 Old State Rd
4-6	Vogel	K-6	1500 Oak Hill Rd
5	Reitz High School	9-12	350 Dreier Blvd
5-1	Helfrich Park STEM Academy	6-8	2603 West Maryland St
5-2	Cynthia Heights Elementary	K-5	7225 Cynthiana Rd
5-3	Tekoppel Elementary	K-5	111 N Tekoppel Ave
5-4	Perry Heights Middle	6-8	5800 Hogue Rd
5-5	Daniel Wertz Elementary	РК-5	1701 S Red Bank Rd
5-6	West Terrace Elementary	K-5	8000 W Terrace Dr
	Innovative		
6-1	Academy for Innovative Studies	6-12	3013 N 1st Ave & 2319 Stringtown Rd
6-2	New Tech Institute at Southern Indiana Career and Technical Center	9-12	1901 Lynch Rd
	Pre-Kindergarten		
7	Culver Family Learning Center	РК	1301 Judson St

ID	School	Grades	Address	
Charter Schools				
C-1	Joshua Academy	РК-6	1230 E Illinois St	
C-2	Signature School	9-12	610 Main St	
Diocese of Evansville - East				
D1	Reitz Memorial High School 9		1500 Lincoln Avenue	
D 1-1	Christ the King	PK-8	3101 Bayard Park Dr	
D 1-2	Good Shepherd	PK-8	2301 N Stockwell Rd	
D 1-3	Holy Rosary	PK-8	1303 S Green River Rd	
D 1-4	Holy Spirit	РК-8	1760 S Lodge Avenue	
D 1-5	St. Benedict Cathedral	РК-8	530 S Harlan Avenue	
Dioces	se of Evansville - West			
D2	Mater Dei High School	9-12	1300 Harmony Way	
D 2-1	Corpus Christi	РК-8	5530 Hogue Rd	
D 2-2	Holy Redeemer	РК-8	918 W Mill Rd	
D 2-3	Resurrection	РК-8	5301 New Harmony Rd	
D 2-4	St. Joseph	РК-8	6130 W St Joseph Rd	
D 2-5	Westside Catholic			
	Sacred Heart Campus	РК	2735 W Franklin St	
	St. Agnes Campus	K-3	1620 Glendale Ave	
	St. Boniface Campus	4-8	2031 W Michigan St	
D 2-6	St. Wendel	РК-8	4725 St Wendel- Cynthiana Rd	
Independent Schools				
I-1	Evansville Christian School	РК-8	4400 Lincoln Ave	
I-2	Evansville Day School	PK-12	3400 N Green River Rd	
I-3	Evansville Lutheran School	K-8	120 E Michigan St	
1-4	Montessori Academy	PK-3	4611 Adams Ave	

#### Figure 12-1: Schools Serving Vanderburgh County



#### **HIGHER EDUCATION**

Descriptions of the four institutions of higher education located in Vanderburgh County are provided below. Besides the facilities listed, there are also several business and trade schools that offer additional educational options.

#### **IVY TECH STATE COLLEGE**

Ivy Tech State College, which serves as southwestern Indiana's 2-year Community College, is located in Evansville at 3501 First Avenue. It is accredited by the North Central Association of Colleges and Schools, and has many programs accredited by professional associations. It offers both transfer and occupational degrees in over 30 programs of study. In addition to serving Evansville area residents, Ivy Tech – Southwest provides opportunities at its Princeton and Tell City Centers and distance education programs. The College's Corporate and Continuing Education Services offers custom business training, continuing education, apprenticeship programs and certificate training and testing. The 2014-2015 school year enrollment was 5,539.

#### **UNIVERSITY OF SOUTHERN INDIANA**

The University of Southern Indiana was established in 1965 as Indiana State University Evansville. Since that time, it has grown rapidly and changed dramatically. The USI campus, located in western Vanderburgh County on State Highway 62, occupies 330 acres with 900 additional acres for future expansion. The University is accredited by the North Central Association of Colleges and Schools and by fourteen other accrediting associations. More than half of the students are now from outside of the region. There are 60 academic majors in baccalaureate programs, ten master's degree programs, and one doctoral program offered. USI also offers a variety of community service and non-credit programs. The 2014-2015 school year enrollment was 9,364.

Approximately 2,800 students live on campus in both apartment type housing and in freshman residence halls.

#### **UNIVERSITY OF EVANSVILLE**

The University of Evansville, founded in 1854, is a private university affiliated with the United Methodist Church. The campus is located on the east side of Evansville on approximately 75 acres. Once known as Evansville College, it has a long proud history in the City. Accreditation is by the North Central Association of Colleges and Schools and 14 other accrediting associations. Over 80 undergraduate and graduate areas of study are offered. The 2014-2015 school year enrollment was 2,486, which included students representing 43 states and 49 foreign countries. A high percentage of the students (90%) live on or within walking distance of the campus. The University also includes an overseas campus in Harlaxton, England. An extensive continuing education program is available offering opportunities for both individual interests and professional growth.

#### INDIANA UNIVERSITY SCHOOL OF MEDICINE -EVANSVILLE

Established in 1972, Indiana University School of Medicine - Evansville is one of eight regional campuses within the State of Indiana that together constitute the Indiana University School of Medicine, the largest school of Indiana University. Currently the classes are located at University of Southern Indiana. Anticipated in 2017, the IU School of Medicine – Evansville will move into a new downtown multi-institutional academic health science education campus, and expand to a four-year program as well as graduate medical education programs from the University of Evansville, University of Southern Indiana and IU School of Dentistry. Ivy Tech Community College of Southwest Indiana plans to relocate all existing and planned health science programs to this new campus.

#### **CULTURAL ENVIRONMENT**

Arts and entertainment resources are abundant in the Evansville-Vanderburgh County area. Included in these resources are the following local organizations that help to pursue and advance culture in the community and the region.

#### ORGANIZATIONS

#### **The Vanderburgh Community Foundation**

• They are a Regional Arts Partner of the Indiana Arts Commission. In that role, the Foundation facilitates grant and funding opportunities for area artists and arts-related nonprofit groups, and promotes access to the arts for all. The Foundation serves the MSA counties and seven other Southwestern Indiana counties.

#### The Arts Council of Southwestern Indiana

• Their mission is:

Enhancing quality of life and supporting economic development through advocacy and promotion of the arts, arts education and arts organizations in Southwest Indiana.

- The Arts Council of Southwestern Indiana serves the communities in the MSA counties and four other Southwestern Indiana counties through artistic and cultural endeavors.
- The Council is an umbrella organization for over fifty cultural organizations and also partners with the Indiana Arts Commission to provide grants and services to this region.

**THEATER:** Evansville Civic Theater, Repertory People of Evansville, Tales and Scales, New Harmony, University of Southern Indiana, University of Evansville, and Public High Schools.

DANCE: Children's Center for Dance Education

**MUSIC:** The Evansville Philharmonic Orchestra, Evansville Symphonic Band, University of Southern Indiana, and University of Evansville.



### **EDUCATION AND CULTURAL ENVIRONMENT**

#### **PERFORMING ARTS FACILITIES**

The following facilities are shown on Figure 12-2 with the identifying letter(s) on the Map. (D = Downtown)

#### The Ford Center (D) 10,000 seats

This multi-purpose facility is located at Main Street and Martin Luther King, Jr. Boulevard.

#### The historic Victory Theater (D) 1,950 seats

The Evansville Philharmonic is the principal tenant of the renovated Victory Theater, located at the corner of Main Street and 6th Street.

#### The Aiken Theatre (D) 2,500 seats

This facility is located in the Old National Events Plaza at the corner of Martin Luther King, Jr. Boulevard and Locust Street.

#### Mesker Amphitheater (M)

Although not currently in use (awaiting renovation), this unique outdoor venue is located on Mesker Park Drive.

### The Teaching Theater (T) 350 seats & Mallette Studio Theatre about 100 seats

Located on the USI Campus.

#### Murphy Auditorium (off Map) 350 seats

Located in New Harmony, Indiana, each summer this facility houses The New Harmony Theatre produced by USI.

#### Lincoln Amphitheatre 1,500 seats (off Map)

An outdoor seasonal theater located in Lincoln State Park.

#### Shanklin Theatre (S) 482 seats, and May Studio

Located on the University of Evansville campus.

#### **Evansville Civic Theater (C) 222 seats**

This converted movie theater is located at Fulton Avenue and Columbia Street.

#### McCormick Hall (off Map) 981 seats

137

This facility is located in the Henderson (KY) Fine Arts Center on the Henderson Community College campus.

#### **MUSEUMS**

#### Evansville Museum of Arts, History, and Science (D)

Founded in 1906, this museum has a comprehensive collection of art, history, anthropology, and science featuring permanent and changing exhibits. Also on site is the EMTRAC Transportation Center and the Koch Planetarium.

#### **Reitz Home Museum (D)**

This historic home is noted as one of the country's finest examples of French Second Empire architecture featuring Victorian period furnishings and décor.

#### The Evansville African American Museum (AA)

This facility is located In the last remaining building of the former Lincoln Gardens housing development, which was the second federal housing project created by Franklin D. Roosevelt administration's New Deal in 1938. The museum celebrates the struggles, successes and experiences of the African American culture in Evansville.

#### Koch Family Children's Museum of Evansville (cMoe) (D)

The mission of this museum is to spark the curious minds and imaginations of children and their families through dynamic exhibits, programs and activities. It is located in the former Downtown Central Library building.

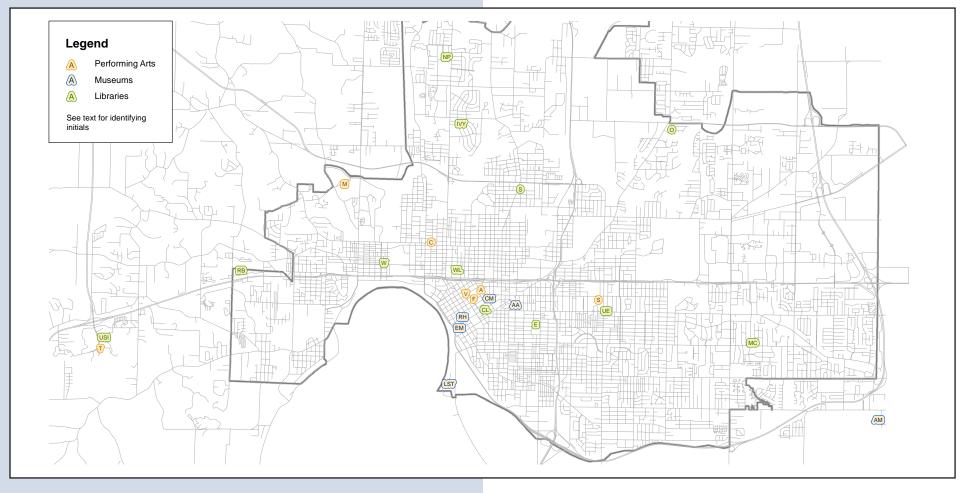
#### The USS LST 325 Ship Memorial WW2 (LST)

A Landing Ship Tank is an amphibious vessel designed to land battleready tanks, troops, and supplies directly onto enemy shores. It is the last navigable LST in operation today, and is moored on the Ohio River in Evansville.

#### Angel Mounds State Historic Site (AM)

This prehistoric Indian settlement of the Middle Mississippian Indians from 1100 to 1450 A.D. built along the Ohio River is one of the best preserved of its kind in the country.

#### Figure 12-2: Cultural Facilities



#### John J. Audubon Museum (off Map)

Located at Audubon State Park in Henderson, Kentucky, this site features the Museum and Nature Center interpreting the life of John Audubon through his original works and personal memorabilia. He was an artist known for his renderings of birds in nature.

#### Historic New Harmony (off map)

This small Indiana town was the site of two utopian community efforts dating from the early 1800's in Posey County. A partnership between the University of Southern Indiana and the Indiana State Museum and Historic Sites encourages cultural and educational programs, while maintaining and preserving many of the historic properties in the Town. The award-winning Athenaeum is the New Harmony Visitors Center.

### **EDUCATION AND CULTURAL ENVIRONMENT**

#### **LIBRARIES**

#### Evansville-Vanderburgh County Public Library System

The mission of our library system is to:

• Promote and support reading, lifelong learning, economic vitality and cultural initiatives through its resources, services, programs and partnerships.

Founded in 1911, this system is composed of a central library and seven branches, as shown in Table 12-3. The collection includes a document depository for U.S. Federal Government Publications (selected), Indiana State Government (selected), and Foundation Center.

#### Table 12-3: Library Locations

Branch Name	Address	
Central (D)	200 S.E. Martin Luther King, Jr. Blvd	
East (Carnegie) (E)	840 E. Chandler Ave	
McCollough (MC)	5115 Washington Ave	
North Park (NP)	960 Koehler Dr	
Oaklyn (O)	3001 Oaklyn Dr	
Red Bank Road (RB)	120 S. Red Bank Rd	
Stringtown (S)	2100 Stringtown Rd	
West (Carnegie) (W)	2000 W. Franklin St	

#### Willard Library (WL)

Willard Library opened in 1885 in what is now the oldest public library building in Indiana. The Library is on the National Register of Historic Places. The Library's major holdings include the Thrall Art Book Collection (art literature), Genealogy, local government archives and special collections of regional history.

#### **Other Libraries**

Other libraries open to the public are at the University of Southern Indiana, Ivy Tech State College, and University of Evansville.



#### EDUCATIONAL AND CULTURAL ACTION PLAN

#### GOAL

• Foster educational opportunities that provide all citizens choices for quality, life-long learning as a means of preparing to build a marketable workforce with adaptable skills.

#### **OBJECTIVE**

• Increase enrollment of residents from both the County and the region in area colleges, continuing education and workforce development programs.

#### POLICIES

- Support existing and new innovative programs that prepare high school students for college and improve job skills of college graduates.
- Expand the development of partnerships that stress to elementary school students the importance of education for both personal development and as a necessity for entry into the workforce.

#### GOAL

• Foster a healthy cultural arts environment that is supported by the community and enhances the quality of life.

#### **OBJECTIVE**

• To increase the awareness and accessibility of the arts through a broad range of public programs.

#### POLICIES

- Business, educational institutions, government and non-profit organizations should work cooperatively in supporting the cultural arts across the board.
- Work to make Evansville a regional showcase for artistic talent and cultural events.
- Encourage the public/private partnership and community commitment to the improvement of the Arts District, and establish an arts center to become the focal point of the District.
- Research funding sources and possible criteria for the placement of art in public places in cooperation with the Arts Council of Southwestern Indiana.





# SECTION 13: ENVIRONMENTAL QUALITY



### **ENVIRONMENTAL QUALITY**

For a community to have a healthy and appealing environment, it first must realize the value of its natural resources, and understand that activities disturbing those resources can have multiple environmental impacts. Public policy has evolved as a result of increased environmental awareness to emphasize protection of our natural resources. The existing environmental regulations, monitoring and enforcement of standards are a result of this policy's emphasis, which have laid the groundwork for the general improvement of environmental conditions over the last 40 years.

The local policy for the future development of our community is established in this Plan. Development of new industry or development proposed in or near a natural area could impact our environment. These impacts can be a source of concern for local residents, and should be considered in the review process for proper mitigation. This section discusses air and water quality, along with other issues, and strategies that are recommended to achieve the environmental quality desired.

> "The (recommended) land ethic simply enlarges the boundaries of the community to include soils, waters, plants and animals, or collectively: the land....

In short, the land ethic (should) change our role of conqueror of the land-community to plain member and citizen of it; implying respect for our fellow members, and for the community."

- Aldo Leopold

#### **AIR QUALITY**

The US Environmental Protection Agency (EPA) has set National Ambient Air Quality Standards (NAAQS) for the following common air pollutants:

- Carbon Monoxide (CO)
- Nitrogen Dioxide (NO2)
- Ozone (O3)
- Fine Particulate Matter (PM2.5)
- Sulfur Dioxide (SO2)
- Lead (Pb)

The NAAQS are often referred to as the federal health standards for outdoor air. These standards protect public health, especially the "sensitive" populations including children, the elderly and those with respiratory conditions. The Indiana Department of Environmental Management (IDEM) operates air quality monitors located in Vanderburgh and surrounding counties that record levels of the pollutants below in addition to others:

- Nitric Oxide (NO)
- Oxides of Nitrogen (NOX)
- Hydrogen Sulfide (H2S)
- Ozone (O3)

The status of an area in relation to compliance with these Federal air quality regulations is typically described as being in "attainment" or "non-attainment" (of the NAAQS). Based upon the data from the air quality monitors, Vanderburgh County's "attainment" status is as follows:

- 8 hour Average Ozone Attainment effective 04/2012
- Annual PM2.5 Attainment effective 10/2011 with a Maintenance Plan

The maintenance plan for the particulate standard must consider projected growth and demonstrate continued compliance for a period of ten years. Attainment or Non-Attainment status of an area can be very important for the success of local economic development efforts in attracting new industry.

#### OZONE

Ozone is a poisonous form of oxygen created in harmful concentrations at ground-level by the combination of the reaction between air pollutants, stagnant air and sunlight. Motor vehicle exhaust and industrial emissions, gasoline vapors, chemical solvents, as well as natural sources help produce these pollutants. Ground-level ozone is the primary constituent of smog, which is known as a summertime air pollutant.

The impacts of ground-level ozone can cause:

- Problems for the sensitive populations; and
- Damages to plants and trees that can make them more susceptible to disease and insects, and can reduce crop yields.

The State of Indiana has two ozone monitors in Vanderburgh County. Ozone alerts are issued as a service to protect public health when the level of ozone in the air is expected to be potentially hazardous to sensitive residents. These alerts warn residents to avoid specific activities that release fumes such as unnecessary driving, idling and refueling; and use of gas powered lawn equipment. Ozone warnings for area residents should be continued.



#### **PARTICULATE MATTER**

Particulates are measured as "fine" particles of 2.5 microns or less (PM2.5). They include dust, soot, and smoke. The concern about PM2.5 is that they are more difficult for filters to catch. Particles are derived from many different sources including industrial and residential combustion activities (wood burning), and vehicle exhaust. Noncombustive sources include construction sites, tilled fields, unpaved roads, and stone crushing. Particulate matter is another source of smog.

The impacts of particulate matter can cause:

- Health problems similar to those associated with ozone; and
- Reduced visibility and haze.

The maps of the air quality monitoring stations in Indiana are provided in Appendix F.

#### LIGHTING AND NIGHT SKY QUALITY

As new development occurs, light pollution can increase and be a source of conflict between neighbors and businesses. This problem can grow to the point where improper lighting reduces visibility in the night sky, wastes energy and affects our quality of life.

The term "light pollution" includes the following negative effects of lighting:

- **Glare** when a light source shines or reflects a harsh, uncomfortably bright light (it feels like it is hurting your eyes).
- Light trespass when light from one property shines or "spills" unwanted over a property line onto another property.
- Sky glow when light from many sources is directed or reflected upwards causing the effect of obscuring the night sky.

The development of a strategy to promote sensible outdoor lighting would help to reduce light pollution and lessen the impact on night skies. One of the guiding principles of good exterior lighting is to illuminate only what is desired to be seen.

### **ENVIRONMENTAL QUALITY**

#### WATER QUALITY

#### SURFACE WATER AND WETLANDS

Vanderburgh County contains significant surface water resources such as the Ohio River, Pigeon Creek and tributaries within the watershed of these two dominant natural features, along with numerous wetlands and lakes.

For purposes of regulation under the Clean Water Act, wetlands are defined as:

Those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support vegetation adapted for life in saturated soil conditions.

In the past, wetlands were considered to have little value. Wetlands were drained or filled for other uses that were perceived to be more beneficial. As the benefits of wetlands became more evident, efforts to drain or fill have been replaced by protection measures and mitigation. The best available study of wetland designation and acreage was the National Wetland Inventory done in the 1980s, which reported that wetlands covered approximately 6.7 square miles of Vanderburgh County.

Wetlands have both direct and indirect benefits and perform important roles that contribute to our quality of life. Wetlands are valuable and beneficial for:

- Floodwater Storage
- Habitat
- Recreation and Education
- Aesthetics
- Water Quality
- Shoreline Erosion Control

The quality and functions of these water resources can be seriously degraded by pollution, especially in densely urbanized areas. Sources of pollution which threaten the quality of surface water in Vanderburgh County fall into one of two categories:

- **Point-sources** are direct discharge from a single, specific location, typically a pipe discharging into a water body such as the combined sewer overflows and discharges from industries and private septic systems.
- **Nonpoint-sources** are runoff which generally cannot be linked to a specific point of discharge, such as from parking lots or from agricultural land.

Control of these and all other pollution sources is essential to bring about an improvement in water quality. Research has noted that poor water quality severely inhibits species diversity. It also has been documented that wooded stream corridors promote species diversity by maintaining a cooler water temperature, providing insect life to support fish populations and by reducing erosion and sedimentation. A multi-facetted approach for wetlands protection should be used to minimize these pollutants including assessment of and addressing potential wetland impacts in the development review process for sites in or near wetland areas.

Since our surface water resources are presently being used by the community in many ways (such as potable water and recreational use of the Ohio River), and increased use is expected, it is obvious that high water quality should be maintained to protect these important resources. Appropriate pollution control and preservation actions help to maintain high water quality and maximize the many benefits of wetlands.

> "Water is the most essential element for life, and the future of humanity depends on our capacity to protect it and share it."

- Pope Francis, 2015

#### WATERSHED EFFORTS

To most effectively deal with water quality issues in a stream or creek, the sources of problems must be examined over the entire watershed. The primary watershed in the City and County involves Pigeon Creek. The Pigeon-Highland Watershed covers portions of Warrick, Gibson, Vanderburgh and Posey Counties. Multiple studies of Pigeon Creek have found it to be impaired from nonpoint pollution sources such as chemicals on agricultural lands and pastures, land application of manure and urban and rural run-off; as well as point sources from pipe discharges, septic systems and combined sewer overflow outlets.

A notable program available through the Soil and Water Conservation is the Conservation Reserve and Enhancement Program (CREP). The benefits of the CREP are to help alleviate some of the problems associated with non-point source sediment, nutrient and pesticide losses from agricultural lands by restoring vegetation buffers and wetlands in critical areas to improve water quality. In Indiana, this program is a partnership between the U.S. Department of Agriculture and the State of Indiana.



#### **GROUND WATER**

Water that has penetrated below the surface of the soil and/or rock and is trapped in subsurface strata is known as an aquifer. There are two types of local aquifers:

- Unconsolidated Aquifers found in sand and gravel sediments (such as those in the Ohio River floodplain), and have greater potential water volumes than any of the bedrock aquifers in the County.
- Bedrock Aquifers consist primarily of sandstone and shale bedrock, and have varying degrees of water yield and recharge potential. The underground coal mines located in this aquifer have potential for substantial water storage.

Two factors limit our ability to make use of ground water resources:

- Availability which is governed by permeability, fracturing (the capacity for water movement), depth to the aquifer, and the demand placed on the aquifer. When water is taken faster than the aquifer can replace its volume, the aquifer water level will drop.
- Contamination by a pollutant making the water unsuitable for use.

Within Vanderburgh County there are only a few documented cases of ground water contamination. This could be a function of the small number of existing observation points for groundwater monitoring, as most properties in the City and County get their potable water from the City Water Utility's extensive water distribution system (includes the German Township system). Since there is a lack of data, it is not known whether ground water contamination has ever been an extensive problem in the County.

### **ENVIRONMENTAL QUALITY**

#### **URBAN TREES & FOREST RESOURCES**

Urban trees are perhaps as important as our large forested areas discussed in Section 3. They not only enhance environmental conditions where the population density is the highest, but they also influence how our community is perceived. Trees in forests and those scattered throughout the City form the area under tree canopy, which is almost 25 percent of the County. Our trees in general should be viewed and treated as an important natural resource to be factored into land use planning because of the following benefits they provide:

- reducing the heat island effects of temperature and reducing energy costs by providing shade;
- improving air quality by producing needed oxygen, absorbing carbon and filtering air pollutants;
- improving water quality by reducing soil erosion and storm water runoff;
- supplying both habitat and food for wildlife;
- economic contributions through use of hardwoods for many products;
- enhancing the aesthetics of our surroundings;
- offering recreational opportunities; and
- generating feelings of serenity and well being.

Some of the local efforts that recognize the importance of urban trees are:

- Protection in the City Tree Ordinance and Zoning Code requirements for plantings in parking lots for new development.
- Evansville continues to maintain its designation as a Tree City USA; and
- Vectren has been recognized as a Tree Line USA utility.

In looking at trees as a resource, saving existing trees when possible and/ or installing new plantings after construction should be considerations in the development process. Alternatives to accomplish this on forested land include low density uses or cluster development. Alternatives for forest preservation include purchasing forest land for new park sites and acquiring conservation/open space easements. Local forest land owners should also be encouraged to participate in the State's Classified Forests Program, which provides tax incentives and free forest management services if land owners keep their woodlands forested. An aggressive tree planting program could also significantly increase the total area under tree canopy in the City and County.

#### BROWNFIELDS

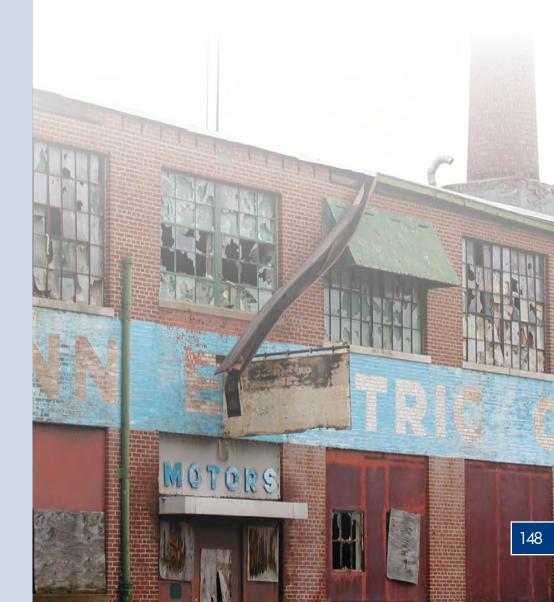
The State offers the Indiana Brownfields Program, which provides assistance to facilitate sustainable brownfields redevelopment. Indiana defines a brownfield site as:

Real estate that is abandoned or inactive and which expansion or redevelopment is complicated because of the presence or potential presence of a hazardous substance or contaminant that could pose a risk to human health or the environment.

Brownfield sites are not always old industrial eyesores. Sometimes they can be open fields that look pristine, but have been contaminated by a former commercial or industrial use. These problems can be real, or be an unfounded public perception. When fear of known or suspected contamination is hindering transfer, reuse or redevelopment of a property, the site can be considered a brownfield.

Liability is one of the many challenges associated with brownfield redevelopment. Because the potential environmental liability at these properties is unknown with possible clean-up costs extensively high, prospective purchasers are often unwilling to assume the associated risk. Thus, the properties can remain idle. However, they usually are not without positive features as well – since most are centrally located; often having buildings, infrastructure, and access to transportation that offer efficiencies to developers that outlying properties might lack.

The redevelopment of brownfield sites benefits the community by converting them to productive uses, rejuvenating neighborhoods, increasing the tax base, mitigating threats to human health and the environment, and reducing blight. Successful strategies involve identifying opportunities and embracing partnerships. One example is the Indiana Brownfields Program, which can work as a partner with communities and other stakeholders to explore available state and federal assistance, and to address liability and funding issues in the redevelopment process. Handled appropriately, brownfields can become assets rather than liabilities. In summary, although conditions are better now than in the past, there is still room for further improvement in the local environmental quality. In particular, a close watch on our air quality will be needed so that we maintain our attainment status, while also complying with the particulates maintenance plan.



### **ENVIRONMENTAL QUALITY**

#### **ENVIRONMENTAL QUALITY ACTION PLAN**

#### **GENERAL GOAL**

• Provide a quality environment which is ecologically sound, healthful, safe, and aesthetically pleasing achieved through resource management, planning and enforcement of existing environmental regulations.

#### **OBJECTIVE**

- Preserve those natural physical features and open space in both urban and rural areas which are important for maintaining environmental quality.
- Increase the tree canopy to exceed 25 percent of the County land area.

#### POLICIES

- Encourage appropriate public and private organizations to: survey the local natural features such as wooded areas, stream corridors, wetlands, etc.; identify those resources that should be preserved due to their value; and pursue their protection through purchase of title, development rights or easements.
- Ensure in the subdivision and site planning process that natural areas (wooded areas, stream corridors, wetlands, etc.) are preserved and/or minimize the impacts on these resources.
- Encourage natural resource corridor protection to improve and preserve water quality of streams, wildlife habitat and rural character.

- Acquire scenic or conservation easements to protect natural and man-made environmental resources.
- Support the establishment of a land trust for conservation and open space.
- Utilize all available measures and programs to reduce soil erosion and sedimentation, in order to improve water quality.
- Evaluate any natural areas identified for preservation for potential use as recreational sites where appropriate.
- When purchasing/preserving natural areas (wooded areas, stream corridors, wetlands, etc.), ensure fair compensation to the landowners.
- Use the recommended best management practices that minimize damage to and loss of existing trees, especially in forested areas, in the development process.
- Promote replacement planting for trees lost through the development process either on-site or at an off-site mitigation location.
- Investigate changes to the Subdivision and Zoning Ordinances to establish landscaping incentives/requirements in the development process.
- Encourage the use of floodplain land for open space, recreation or agriculture.
- Ensure public property in parks, streetscape, etc. have adequate tree canopy to create attractive, shaded space that is inviting to, and valued by, the public.
- Establish an aggressive, continuous City/County tree planting program with participation by the private sector through tree donations and planting teams.

#### **OBJECTIVE**

• Provide an environment with minimal adverse visual and health effects from air, land, light, noise, and water pollution.

#### POLICIES

- Support the consolidation of the City Environmental Protection Agency into a City-County agency with responsibility to address environmental concerns.
- Support education for industrial personnel as to the procedures and equipment available to reduce pollution, and educate residents on conservation practices to minimize pollution.
- Support coordinated efforts, legislation and programs that will continue to bring about workable solutions for resource and pollution problems at the local, state, and federal levels.
- Require adequate buffering by both distance and landscaping (i.e. trees) between residential areas and any new uses expected to generate nuisance and pollution such as certain agricultural uses, commercial/industrial uses and major transportation facilities.
- Maintain strong controls and adequate enforcement procedures for control of signs, billboards, litter, weeds and abandoned automobiles to improve the quality of roadside and neighborhood appearance.
- Regulate development within the approach zones of the airport through federal, state and local rules and regulations.
- Continue to identify, seek funding for, and mitigate Brownfield properties.
- Encourage future industrial development that will maintain or improve the City and County's compliance with existing environmental standards.

#### OBJECTIVE

• Through education, create an awareness of the characteristics and problems of air, soil, water and wildlife resources and the importance of resource use, management and planning.



### **ENVIRONMENTAL QUALITY**

#### **AIR QUALITY GOAL**

• Maintain and improve air quality in the community to protect the public health and welfare from the harmful effects of air pollution.

#### **OBJECTIVE**

• Strive to stay in attainment of air quality regulations and avoid exceeding pollutant standards.

#### POLICIES

- Continue the air surveillance monitoring system to assess air quality in the Evansville area.
- Continue ozone alert awareness warnings to protect public health on days where high ozone levels are expected.
- Encourage the use of bicycles, car pools, the public transportation system, and alternative fuels for transportation to reduce traffic volumes and pollutants.
- Encourage continued enforcement of local, state, and federal regulations on emissions and fuel standards to maintain and improve air quality.

#### SURFACE WATER QUALITY GOAL

• Improve the surface water quality for a healthy Vanderburgh County.

#### **OBJECTIVE**

• Ensure that surface water quality meets the standards in the Clean Water Act.

#### POLICIES

- Support the watershed management and planning efforts for the Ohio River and Pigeon Creek to include working with our state legislators and the Indiana Department of Natural Resources to gain final determination of Navigability status for Pigeon Creek and funding for maintenance of the creek.
- Investigate techniques, such as overlay zoning, stream buffer zones, or conservation easements, to protect Pigeon Creek and other major creeks as beneficial community resources.
- Encourage the restoration and/or the creation of man-made wetlands to act as filters and settling traps for surface water runoff.
- Encourage continued enforcement of erosion control, drainage and water quality regulations at all levels of government to protect surface water resources.
- Encourage the development of a Wetlands Land Bank and payment-in-lieu programs in order to increase the quality of wetlands, eliminate small constructed isolated wetlands and allow for quicker development by providing developers an alternative to construction of on-site wetlands.

#### **GROUND WATER QUALITY GOAL**

• Ensure the availability of a continuous and safe supply of quality ground water for the residents of Vanderburgh County.

#### **OBJECTIVE**

• Ensure that our ground water is free of contaminants.

#### POLICIES

- Encourage the development of a ground water monitoring system.
- Discourage the use of septic systems as a means of waste disposal when sewer is available nearby.

#### LIGHTING AND NIGHT SKY GOAL

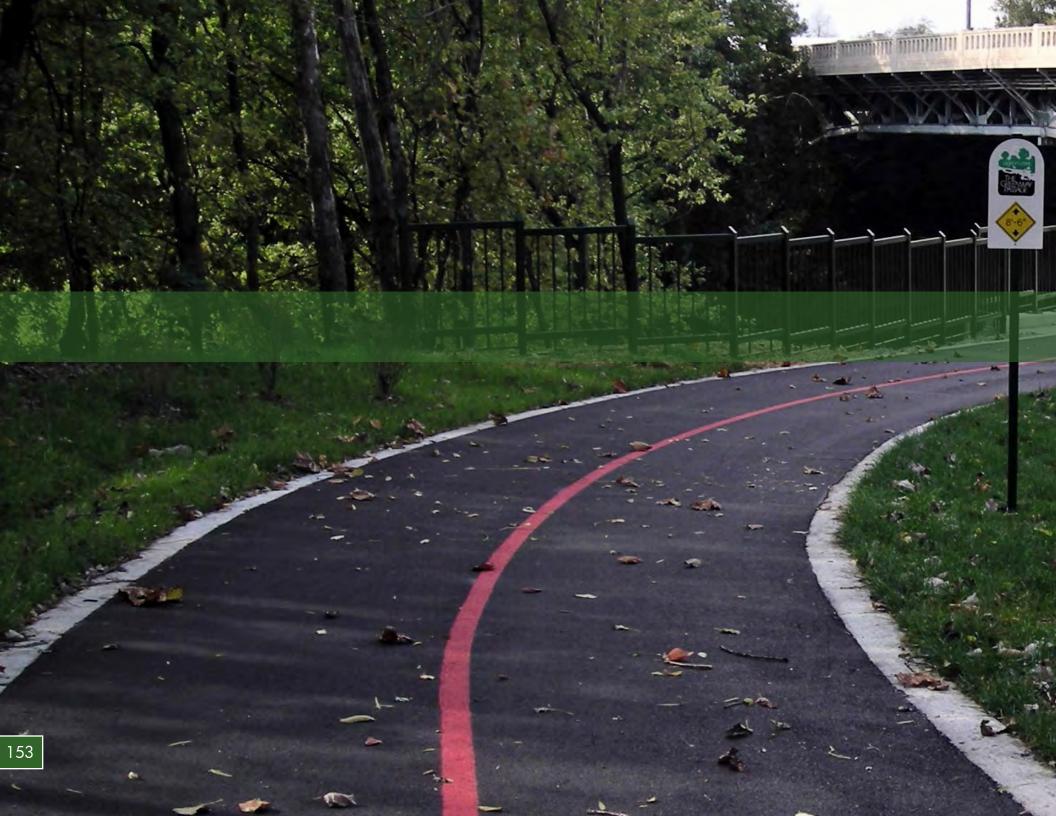
• Protect and preserve the quality of the nighttime environment including the night sky.

#### **OBJECTIVES**

- Reduce light pollution caused by up-lighting, excessive over lighting, glare and light trespass.
- Promote energy efficient lighting (including street lighting), thereby conserving private and public funds, while providing adequate lighting for the task.

#### POLICY

• Investigate amending the Zoning Ordinance to incorporate and implement "Dark Sky" regulations that control new and replacement lighting.



## **SECTION 14: PARKS AND RECREATION**

Seat.

we himed

154

### PARKS AND RECREATION

Parks and open space have perhaps the strongest association with livability than any other type of community facility. Current research indicates that viewing or experiencing open, green spaces and exercising outdoors have numerous physical and emotional health benefits. Therefore, recreational opportunities and natural areas are important amenities that are a measure of and enhance our quality of life. Parks may in fact be more strongly associated with livability than any other type of community facility.

In Vanderburgh County, park facilities represent an extensive land use footprint, as over 3,300 acres are developed and preserved for recreational use. Nearly half of this land is within the City limits of Evansville. In addition to the existing park land, other recreational sites are provided through the private sector and schools. These existing facilities are described below.

#### **STATE FACILITIES**

In the Evansville Metropolitan Statistical Area, there are several statelevel facilities including two state parks and three fish and wildlife areas. These facilities are:

#### **Blue Grass State Fish and Wildlife Area**

Located in Warrick County along its border with Vanderburgh County, this 2,500-acre (including about 600 acres of water) public fish and wildlife area is on a reclaimed surface coal mine. The recreational opportunities provided are hunting, fishing and viewing wildlife.

#### **Harmonie State Park**

Located in Posey County along the Wabash River, this area was established as a state park in 1966 and contains 3,465 acres. Activities and facilities available include trails, 200 camp sites, 11 family cabins, picnic areas and shelters, Olympic-size swimming pool, a boat launch, and interpretive programs.

#### Hovey Lake State Fish and Wildlife Area

This natural area is located in Posey County in the Ohio and Wabash River floodplains. It covers approximately 7,404 acres and features a 1,400-acre oxbow lake, other smaller sloughs, marshes and extensive bottomland hardwood forests.

#### John James Audubon State Park

Named after John James Audubon, the naturalist and artist famous for his watercolors, oils and engravings of our wild birds, this state park is located in Henderson County, Kentucky and contains 692 acres. Activities and facilities available include 69 camp sites, 6 cottages, picnic shelters, trails, challenge course, 9-hole golf course, museum and nature center, and interpretive programs. The museum features a collection of Audubon's works and personal memorabilia.

#### **Sloughs Wildlife Management Area**

Located in Henderson and Union County, Kentucky, these wetlands cover approximately 10,000 acres and are contained within several different tracts. The Sloughs was designated as a National Natural Landmark in 1974 due to its significance as one of the largest wetland areas remaining in Kentucky. It provides outdoor recreation opportunities for various species of game within a mix of habitats characterized by ridges, sloughs, wetlands, woodlands, and crop lands.

#### **Twin Swamps Nature Preserve**

This 598-acre Indiana Department of Natural Resource (INDNR) property in Posey County consists of two different swamp communities with lowland flatwood in between. This preserve is one of the few existing remnants of such communities which once occurred over large portions of the Ohio and Wabash River Valleys. INDNR has several other Nature Preserve properties in both Posey and Gibson Counties. One of these properties, Hemmer Woods in Gibson County, is a registered National Natural Landmark.

#### **COUNTY PARKS**

#### **Burdette Park**

Burdette is the only park owned and operated by Vanderburgh County. Established in 1928, this 170-acre facility offers a wide variety of recreational opportunities, some of which are an Olympic-size swimming pool with water slides, camping area, overnight rental chalets and a dirt bike racing track. Also available are special event facilities that include: an open air pavilion (1,000 person capacity) and the Discovery Lodge (650-person capacity).

### PARKS AND RECREATION

#### **CITY PARKS**

The City of Evansville's Department of Parks & Recreation mission is to:

Create quality of life opportunities by providing safe environments and affordable programs to enhance fun, fitness, and education for residents of all ages in our community.

The City park system contains a wide variety of recreation facilities. While built to serve City residents, several of the facilities attract users from the entire Tri-State area. The Evansville Department of Parks and Recreation (DPR) provides nearly 2,500 acres (current parks Master Plan) of public parks. The park and open space system inside the City limits is based on the Original City Plan of 1926 by Harland Bartholomew which provided the core concept of Evansville as a "City in a Park".

The extensive properties the DPR manages and maintains and other recreation sites are listed by their addresses, acreage and attributes on Table 14-1 and shown on Figure 14-1. The park locations are classified by function, size, and facilities.



#### **11 Mini-Parks**

Typically less than 1 acre

#### 21 Neighborhood Parks

Described as the basic unit of the park system, these smaller parks are the recreational and social focus of a neighborhood. They often create a 'sense of place' that unites the unique character of the site and neighborhood. Ease of access and a reasonable walking distance from adjacent residents are critical factors in locating a neighborhood park. Given the importance of location, new neighborhood park sites should be integral to the development process and connected to other system components.

#### **5 Community Parks**

Defined as having several amenities allowing visitors to spend at least a half-day. Typically, community parks are strategically located to have good access from major streets, and are ideally linked together by a greenway/trails network. They allow recreational opportunities for groups and often serve several neighborhoods.



#### **5** Regional Parks

Defined as facilities that offer visitors the opportunity to spend an entire day or weekend enjoying a variety of activities/amenities. A typical regional park would be located within an hour's drive and often serves adjacent communities.

#### **6 Public Golf Courses**

There are 3, 18-hole; 1, 9-hole; and 2, par-3 courses.

Golf courses provide specialized, recreation facilities and open space. However, the space is not unusable for everyone. The City courses are in comparable condition to the private ones, and fees are competitive. In addition to the public courses, there are two private 18-hole courses and a private par-3 course open to the public; and two private members only 18-hole courses.



#### **3 NATURE PRESERVES**

#### Wesselman Woods Nature Preserve

This 230 plus acre urban forest was designated as a National Natural Landmark in 1973 reflecting that it is considered as the finest remaining large tract of pre-settlement lowland mixed forest in Indiana. It is also a State Nature Preserve. The site contains a number of exceptionally large trees and is unusual in that sweet gum and tulip trees are the dominant species. This facility offers six miles of marked nature trails through hardwood forest and successional fields. It also contains a nature center, operated by Wesselman Woods Nature Preserve Society, which offers a variety of nature-related activities.

#### **Howell Wetlands**

This is a 35-acre urban wetland adjacent to Howell Community Park. There are over two miles of hiking trails through a diversity of wetland habitats including a marsh, a cypress slough, an oxbow channel, the surrounding prairie and bottomland hardwood forest. Howell Wetlands is one of only five urban wetlands parks in Indiana and is managed by the Wesselman Nature Society.

## Eagle Slough Natural Area (not part of the City parks system)

This nearly 127-acre wetland area is seasonally flooded depending on Ohio River water levels. It offers hiking opportunities on its main trail built on an abandoned railroad bed, and side trails that are only passable as floodwaters recede and the ground dries. The area is a result of a collaboration by the Vanderburgh Soil and Water Conservation District (SWCD), Four Rivers Resources Conservation and Development Area (RC&D), the Nature Conservancy, and Wesselman Woods Nature Society. The vegetation at Eagle Slough is typical for an Ohio River floodplain wetland, and is biologically significant due to the existence of bald cypress trees which are rarely found north of the Ohio River.

### PARKS AND RECREATION

#### **2 GREENWAYS**

#### **Pigeon Creek Greenway**

This greenway trail connects neighborhoods to Garvin and Lamasco Parks, and the downtown Evansville riverfront. It also provides access to Pigeon Creek for canoeing, fishing and wildlife observation. Part of the greenway system proposed for Evansville in the1993 Greenway Master Plan has been completed. When it is fully developed, it will provide over 40 miles of off-street paths, linkage trails and natural resource corridors encircling the City.

#### Burdette Park-USI Trail (not part of the City parks system)

This 3-mile paved trail connects Burdette Park to the University of Southern Indiana (USI) Campus. The setting for this trail is rolling forested terrain mostly on land owned by the University. Future plans call for this trail to be connected to the Pigeon Creek Greenway system.

Both are designated as a National Recreational Trail (NRT), a designation for trails of local and regional significance, that provide an array of benefits, including promotion, technical assistance, and access to trail funding. In addition, both are part of the route for the American Discovery Trail, a national trail extending east/west across the country from coast to coast.

#### **6 SPECIAL USE FACILITIES**

Unique offerings such as a boat launch, ice rink and a zoo considered as a major community asset as described below:

#### Mesker Park Zoo and Botanic Garden

Opened in 1928, the Mesker Zoo has the distinction of being both the oldest zoo in Indiana and the largest in land area with 55 acres. Called the "zoo with a view", this facility offers naturalistic wild animal exhibits with some 700 animals representing over 200 species. The Amazonia exhibit is the Zoo's most recent improvement displaying an impressive array of animals and plants from the Amazon basin, and an indoor waterfall. Mesker Zoo is accredited by the American Association of Zoological Parks and Aquariums. The Zoo has it's own Master Plan.

#### **PRIVATE-NON PUBLIC PROGRAM**

There are many examples of cooperation by the DPR with the private sector. Concession stands at activity centers within the parks system are operated privately. Concession rights are granted by bid and a percentage of the gross income is returned to the Department. Examples of other areas that are under contract to the private sector are golf courses, driving ranges, and batting cages.



#### Table 14-1: Inventory of Parks & Recreation Sites

ID	Park/Facility Name	Address	Acres	Court	Field	Playground	Pool
MINI	PARKS	· · · · · · · · · · · · · · · · · · ·				· · · · · · · · · · · · · · · · · · ·	
M 1	Casselberry	9th Ave. & W. Virginia St.	9th Ave. & W. Virginia St95			Х	
M 2	Goosetown Mini	Putnam St. & Jefferson St.	utnam St. & Jefferson St61				
M 3	Goosetown	Adams Ave & SE 2nd St	.86				
M 4	Homestead	Evergreen Ave. & Homestead Ave.	.88		Х	Х	
M 5	Howell Mini	S. Barker Ave & Emerson St.	.37			Х	
M 6	Jacobsville Mini	Baker Av. & W. Maryland St.	.44				
M 7	Line Street	Line St. & E. Gum St.	.57				
M 8	Fourth and Main*	Fourth Ave. & Main St	.58				
M 9	Little Westside Nut Club	11th Ave. & W. Indiana St.	.81	Х		X	
M 10	Vectren Treescape / Olmstead	Heidelbach Ave. & Olmstead Ave	istead Ave .56		Х		
M 11	Sixth Ave.	6th Ave. & W. Virginia St.	ia St57		Х		
M 12	Stevenson	E. Cherry St. & S. Morton Ave72		X			
NEIGH	IBORHOOD PARKS						
N 1	Armstrong Recreation Center*	Big Cynthiana Rd. & Baseline Rd.	4.75 X				
N 2	Akin	Parkside Dr. & Taylor Ave.	9.72 X X		X		
N 3	Anthony Oates & Pool	Sunburst Blvd. & Beech Dr.	6.75 X X		X	Х	
N 4	Bayard	S. Kentucky Ave. & Bayard Park Dr.	10.73			X	
N 5	Bellemeade & Rochelle Pool	S. Morton Ave. & Lincoln Ave	7.05	Х	Х	X	Х
N 6	Caldwell	S. Governor St. & Sweetser Ave.	weetser Ave. 1.03 X X		Х		
N 7	Diamond Valley	N. 4th Ave. & Fulton Parkway	way 6.23 X X		X		
N 8	Eleventh Ave.	11th Ave. & W. Virginia St.	1.74 X X		X		
N 9	Fulton	Fulton Ave. & W. Franklin St.	1.84 X X		Х		
N 10	Helfrich & Pool	St. Joseph Ave. & Maryland St.	6.51 X X		Х	Х	
N 11	Westside Nub Club / Lamasco Skate	7th Ave. & Delaware St.	9.35 X X		Х		
N 12	Lorraine & Pool	S. Boeke Rd. & Adams Ave.	3.32		Х	X	Х
N 13	Sheridan	Sheridan Rd.	1.51				

## PARKS AND RECREATION

ID	Park/Facility Name	Address	Address Acres Court Field		Playground	Pool	
NEIGH	BORHOOD PARKS (continued)					· ·	
N 14	Stockwell	Stockwell Rd. 9.29		X	Х	Х	
N 15	Stringtown Community Club*	Skydeal Rd.	12.46		Х		
N 16	Sunrise / Kid's Kingdom	Waterworks Rd & Riverside Dr	8.30			Х	
N 17	Sunset East	Riverside Dr. & Shawnee Dr.	13.08	X		X	
N 18	Tepe / Mary C. Kixmiller	S. Garvin St. & Monroe Ave.	1.23			Х	Х
N 19	Vann	Vann Ave. & Bayard Park Dr.	3.96			Х	
N 20	Vann-Pollack	Vann Ave. & Pollack Ave.	9.43	Х	Х		
N 21	Westside Library	W. Franklin St. & Wabash Ave.	2.82	2.82			
N 22	Willard Library	1st Ave. & Division St. 4.63					
COMN	MUNITY PARKS						
C 1	Garvin & Pool	N. Main St. & Morgan Ave.	40.64	40.64 X X		Х	Х
C 2	German TWP Booster Club*	Big Cynthiana Road	9.51	9.51 X			
C 3	Golfmoor	Golfmoor Rd.	28.75	28.75 X			
C 4	Igleheart & Lloyd Indoor Pool	N. 1st Ave. & Campground Rd.	46.88	X	Х	Х	Х
C 5	Lakeview Optimist Club*	Division St. & Stockwell Rd	32.37		Х		
C 6	McCutchanville Community Assoc.*	Petersburg Rd.	i. 49.05 X		x		
C 7	Moutoux*	St. Joe Ave.	104.25 X				
C 8	James Price	Covert Ave. & Season's Ridge Blvd.	24.21 X		Х		
C 9	Scott Civic Club*	Radio Ave	16.15 X X X		Х		
C 10	Scott Township*	Schlensker Rd.	33.71				
C 11	State Hospital Grounds	Vann Ave. & Lincoln Ave.	53.10 X X				

ID	Park/Facility Name	Address	Acres	Court	Field	Playground	Pool
REGIC	ONAL PARKS						
R 1	Burdette – County Park*	Nurrenbern Road	126.63	Х	Х	X	Х
R 2	Howell & Pool	Barker Ave. & Broadway Ave.	93.23	Х	Х	X	Х
R 3	4-H Center*	W. Boonville New Harmony Rd.	171.84	Х	Х	X	
R 4	Goebel Soccer Complex	N. Green River Rd	81.88		Х		
R 5	Kleymeyer	N. 1st Ave. & Diamond Ave.	72.35		Х	X	
R 6	Mesker	Mesker Park Dr.	50.20			X	
R 7	Deaconess Sports Park*	Heckel Road	93.74		Х		
R 8	Wesselman	N. Boeke Rd.	99.20	Х	Х	X	Х
GOLF	COURSES						
GC 1	Cambridge -18 holes*	Volkman Rd.	166.49				
GC 2	Eagle Valley - 18 holes*	Petersburg Rd.	135.09				
GC 3	Fendrick -18 holes	Diamond Ave.	125.33				
GC 4	Helfrich -18 holes	Mesker Park Dr.	179.50				
R 2	Howell - 9 holes-par 3 (part of Howell Regional Park)	Barker Ave.					
GC 5	McDonald - 9 holes	E. Morgan Ave	90.36				
GC 6	TeeTime - 9 holes-par 3*	E. Morgan Ave.	28.00				
GC 7	Thunderbolt Pass - 18 holes*	Petersburg Rd.	222.04				
R 8	Wesselman - 18 holes-par 3 (part of Wesselman Regional Park)	N. Boeke Rd					
NATU	RE AND CULTURAL PRESERVES						
P 1	Angel Mounds State Historic Site*	Pollack Ave	473.75				
P 2	Clem Frank*	Western Hills Ave.	2.00				
Р3	Eagle Slough*	Waterworks Rd.	126.90				
R 2	Howell Wetlands (part of Howell Regional Park)	Tekoppel Ave. & Broadway Ave.	Ave.				
P 5	Wesselman Woods	N. Boeke Rd. 232.42					

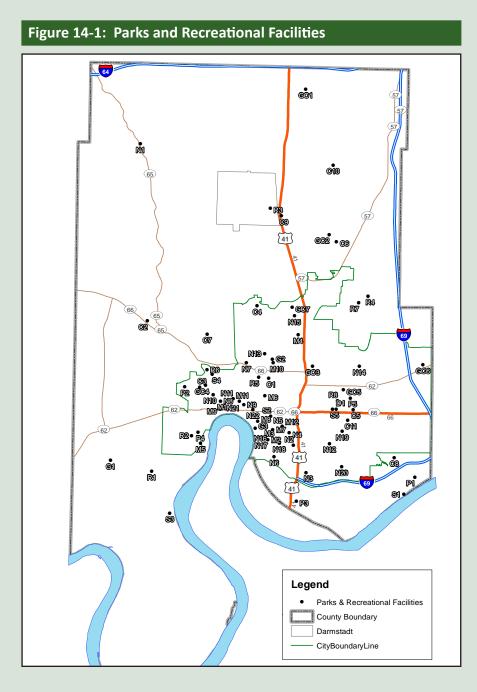
## PARKS AND RECREATION

ID	Park/Facility Name	Address	Acres	Court	Field	Playground	Pool	
GREE	GREENWAYS							
G 1	Burdette-USI Trail*	Burdette Park to USI Campus	7 13 miles					
G 2	Pigeon Creek Greenway & Canoe Launch	Pigeon Creek at Heidelbach along levee to Sunrise Park	13 6.75 miles					
G 3	Riverfront	Riverside Dr.	4.91 1.5 miles					
SPECI	AL FEATURES							
S 1	Angel Mound Boat Launch	Lynn Rd.	29.00					
S 2	C.K. Newsome Community Center	Heidelbach Ave. & Walnut St.	3.66			X		
S 3	Dogtown Boat Launch	Old Henderson Road	22.73					
S 4	Mesker Zoo	Mesker Park Dr.	55.19					
S 5	Swonder Ice Rink & Hartke Pool	Division St. & Boeke Rd.	12.60					
TO BE	DEVELOPED							
D 1	Roberts	Boeke Rd.& Division St.	28.00					
TOTAL ACRES								
	City Acreage		1,430.59					
	Unincorporated Acreage		1,891.98					
	Total Acreage		3,329.31					

Note: \* Not a City Parks and Recreation Facility



#### SECTION 14 Evansville-Vanderburgh County Comprehensive Plan





## PARKS AND RECREATION

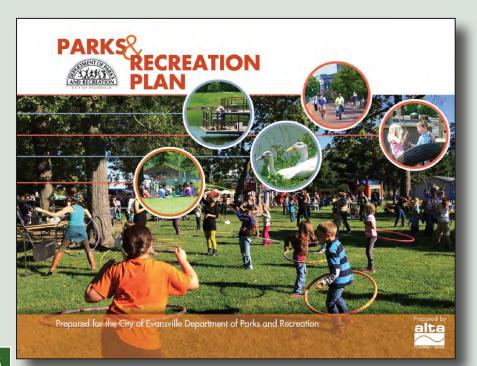
#### **2015 DRAFT PARK'S PLAN HIGHLIGHTS**

(From the Executive Summary of the Plan which is in a draft stage awaiting approval)

#### TOP NEEDS DETERMINED BY PUBLIC INPUT

The following needs surfaced as critical needs and desires from citizen survey, Mayor's Traveling City Hall, and National Night Out:

- Increase facilities that promote walking and bicycling, such as greenways, bike lanes, and improve crossings at intersections.
- Connect recreation, residential, and commercial centers with active recreation facilities.
- Improve the safety and maintenance of park facilities, such as lighting improvement, and general infrastructure.



#### TOP NEEDS DETERMINED BY DEMOGRAPHICS, SUPPLY AND DEMAND ANALYSIS

Reviewing Census data, GIS modeling, and service areas, the following needs emerged:

- The analysis revealed a relatively even distribution of the youth population (18 and under).
- The 65 and older population is concentrated in select areas; parks near these high concentrations should include activities and facilities appropriate to this age group.
- There is not enough supply to meet the high demand at North Park, the southeast corner of the city near Newburgh Road, and along Oak Hill Road. Future park facilities should be considered in these areas to serve the high demand.

## NEEDS BASED ON PARKS DEPARTMENT OBSERVATION AND EXPERIENCE

Discussions with department staff revealed the need to:

- Continue to build the greenway system; and
- Re-evaluate the performance of golf courses.

# PARK ACREAGE ASSESSMENT AND PROJECTED NEEDS

An entire chapter of the City's Parks Master Plan addresses the analysis and need for additional park acreage within the City. The results revealed a lack of parks in the east, central, and north sections of the City. The Plan contains a map identifying and labeling three Land Acquisition Areas based upon residential density, which can be generally described as:

- East East of Burkhardt Road and south of the Lloyd Expressway
- Central Oak Hill Road between Lynch Road and Pigeon Creek
- North First Avenue between Mill Road and Buena Vista Road

The analysis did not include land outside of the City parks that is used for recreation such as the playgrounds at the public or private schools, the athletic fields of the universities, or the open space along the levee system. There is an agreement between the Parks Department and Evansville-Vanderburgh School Corporation that allows joint use of school facilities for after hours and for summer recreational use.

Since the focus of the Parks Plan was only to address the City's needs, the Area Plan Commission did an analysis of the unincorporated portion of the County. The Park's Plan analysis references the Indiana Department of Natural Resources (IDNR) 2011-2015 Statewide Comprehensive Outdoor Recreation Plan that recommends the following Level of Service recreation acreage standard -- 20 acres of parks/open space should be provided per 1,000 population. Using this standard, Table 14-2 shows that the County has sufficient park space for both the existing (2010) and projected (2035) general population totals.

The results of this analysis are misleading due to the types of facilities included, and the amount of recreation acreage contained in just a few large sites. In the unincorporated area, over half of the existing open space is within the Angel Mounds State Historic Site, and in three golf courses. Angel Mounds is a very large cultural site, and the golf courses are not facilities that are useable by everyone for recreation. Without these large sites included, the County would be woefully short in recreation space.

There are just a few typical park facilities in the County, with Burdette Park, a large, regional recreation center, as the County's primary recreational facility. Although much smaller, the other recreation sites, including McCutchanville Community Park, Scott Township Park and the playground at the 4-H Center, help provide at least some general recreation space. However, several more strategically located neighborhood parks are needed to provide public recreation opportunities and open space within reasonable distance from the higher density residential areas. It should be acknowledged that the need for new parks must be balanced with budget concerns and having the resources to maintain existing facilities.

## Table 14-2: IDNR Recommended Acreage Open Space Standard(20 acres per 1,000 population)

	RecommendedExistingby IDNRAcreagefor 2010Population		2010 Difference	Needed for 2035 Population	
Unincorporated *	1,898.72	1,245.8	+652.92	1,535.9ª	
Vanderburgh County	4,080.00	3,594.1	+264.75	3,845.4 <sup>i</sup>	

Note: \* - includes Town of Darmstadt

a - based upon APC estimate

i - based upon IBRC projection

### PARKS AND RECREATION

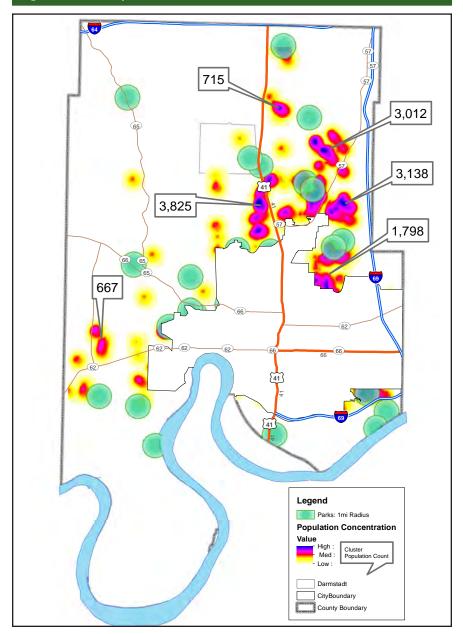
The Area Plan Commission used GIS data to analyze the population density of those residents living more than a half mile from an existing community/neighborhood park in the unincorporated area of the County. These results are illustrated on Map 14-2, which shows green, one-mile diameter circles for the areas served by existing parks, and the areas of concentrated population. The three largest population clusters, each having over 3,000 residents, represent existing need areas for neighborhood park acquisition:

**Northwest Center Township** – Generally the area north of the City between Old State Road and U.S. Highway 41 (includes Highland and large subdivisions along Old State Road).

**Northeast Center Township** – Generally east of State Road 57 extending from Millersburg Road on the south to beyond Kansas Road on the north (includes the large subdivisions at or near the Kansas/Green River Road intersection).

**Southern Scott Township** – Generally west of State Road 57 extending from the south Township line north to Schlensker Road / Ruston Lane (includes subdivisions along Boonville-New Harmony Road and Petersburgh Road corridors).

Any new park serving one of these density clusters should be located within or as close to the cluster as possible. Since the County has no Parks Department, funding and maintenance issues would have to be addressed. Land acquisition grants, private funding and maintenance by a subdivision homeowners association or other volunteers are potential options.



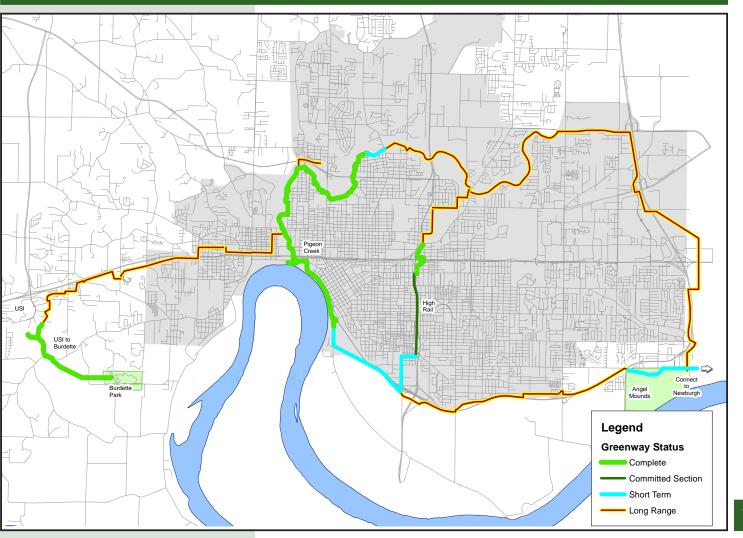
#### Figure 14-2: Population Clusters and Parks

#### GREENWAYS

In 1980, the U.S. Army Corps of Engineers developed a plan for a Pigeon Creek Greenbelt Park. It proposed a linear park, including a paved bicycle/pedestrian trail located along the Ohio River and Pigeon Creek Continued development of the Greenway will provide an extensive trail for public use. The project is planned to connect with an extension of the Newburgh Trail at Angel Mounds, which will create a regional recreation and transportation route from downtown Evansville through the Town of Newburgh in Warrick County.

levee system to be developed in conjunction with the levee flood protection project. This plan was never implemented. A new plan was developed in 1993, known as the Evansville Greenway Passage Master Plan, which expanded the original Army Corps concept to create a 40-mile trail system within the City of Evansville, including linkage trails extending to nearby facilities and neighborhoods. The existing and future greenway routes are shown in Figure 14-3.

#### Figure 14-3: Existing and Future Greenway Route



## PARKS AND RECREATION

#### **NEW PARK PROJECTS**

There are three projects, not listed in the Parks Master Plan, that have been recently announced:

- Bicentennial Park located across NW Second Street from the historic Old Post Office, this park is to commemorate the City's Bicentennial.
- Roberts Park proposed for the old Roberts Stadium site, this new park will expand the public open space adjacent to Wesselman Park.
- Sculpture Garden and green space proposed by Keep Evansville Beautiful, these improvements will be located at the site of the old Dress Regional Airport terminal parking lot on US Hwy. 41.

#### FUTURE RECREATIONAL DESIGNATION

There is another potential project to be considered, that of designating Pigeon Creek as a blueway. Water trails and blueways are used synonymously referring to river and stream corridors that are accessible to paddlers providing for active recreation and environmental education opportunities. Accessibility can be measured in least two ways; put-in and takeout locations, and consistent water level. There are currently two hard surfaced put-in and takeout locations available on Pigeon Creek – at Green River Road and Heidelbach Avenue. There is also an unimproved ramp near the Lloyd Expressway.

#### SECTION 14 Evansville-Vanderburgh County Comprehensive Plan



## PARKS AND RECREATION

#### **RECREATION ACTION PLAN**

Source: 2015 Evansville Parks and Recreation Plan

#### GOALS

- The City of Evansville is dedicated to preserving and enhancing quality of life by providing beautiful green spaces, healthy outdoor activities, and engaging programs that enrich the health and wellness of all people.
- **Connectivity** weave the community together with a network of trails that provide access to green spaces.
- **Sustainability** promote sustainability through park development, maintenance, and public education.
- **Safety** design spaces that foster a sense of comfort and safety for users of all ages.
- Human & Social Health create spaces that encourage healthful living, social interaction, and a sense of ownership for all citizens.
- **Diversity** generate a variety of offerings throughout park spaces and within programming that stimulates personal and community growth.

#### PARK FACILITIES ACTION STEPS

- Incorporate guidance and standards in line with the Crime Prevention Through Environmental Design initiative.
- Re-evaluate a selective golf course(s) to consider using this land for other outdoor recreational purposes.
- Update signage and develop a wayfinding package for the park and greenway system.
- As new facilities are acquired and existing facilities are modified, the City should ensure adequate passive and unprogrammed spaces are included. This supports the NRPA pillar of conservation and will expand opportunities.
- Improve the bicycle and pedestrian access within a quarter-mile radius around all parks.
- Land acquisition for park space should be considered in the three areas of the City as recommended.
- Expand recreational opportunities for all age groups and abilities as indicated by the Plan's equity analysis.

#### **GREENWAYS AND CONNECTIVITY ACTION STEPS**

- Explore new funding sources, and develop private and nonprofit funding sources to supplement greenway and parks funding.
- Integrate greenway connections into all future planning studies with the intent to connect places where people live, work, play, and learn.
- Update the Pigeon Creek Master Plan of 1994.

#### **PROGRAMS ACTION STEPS**

• Establish a program to implement community gardens in applicable park facilities to promote and encourage healthy eating habits.

#### **POLICIES ACTION STEPS**

• Review the sustainability policy and create action steps by which the Parks and Recreation Department will comply with the policy.

#### **MANAGEMENT ACTION STEPS**

- Work with the Area Plan Commission to update data allowing the Parks Department to utilize the PRORAGIS (Park and Recreation Operating Ratio & Geographic Information System) benchmarking software to track national trends in similar communities.
- Adopt a planning process to provide direction when new facilities are being considered.



Source: Community/Area Plan Commission

#### GOAL

• Foster a healthy outdoor recreational environment that is supported by the community and enhances the quality of life through nature.

- Encourage/coordinate with neighborhood associations, other civic groups and businesses to assist in park maintenance.
- Develop incentives that would encourage easements for trails and greenways, where appropriate, to be granted in new developments.
- Investigate the feasibility of and support the co-location of trails within wide overhead transmission line easements.
- Maintain an adequate, well-equipped and accessible playground adjoining each school for use by the surrounding neighborhood when school is not in session.
- Provide exercise facilities in most parks for people of all ages and abilities.
- Investigate the financial feasibility of building a new indoor aquatic center.
- Investigate with the State of Kentucky the establishment of a natural area/park along the Ohio River in Union Township possibly at the old Dam #48 site.
- Investigate the feasibility of applying to designate Pigeon Creek as a blueway.
- Investigate alternative funding sources for bringing all facilities in our parks up to date and conforming to code requirements for continued public use.
- Support a proactive approach to acquisition of existing and potential abandoned railways that can be converted to rails-to-trails.



## **SECTION 15: PUBLIC SAFETY AND HEALTH**



The health and safety community services can significantly impact the quality of life in our area. This section discusses these services including disaster preparedness, criminal justice, fire protection, and health care.

#### **DISASTER PREPAREDNESS**

Evansville and Vanderburgh County have shown a strong commitment over the years to disaster preparedness. This commitment is evident in the steady improvement of local planning and mitigation efforts resulting in recognition by national entities such as the Federal Emergency Management Agency (FEMA) and the Institute of Business and Home Safety; the involvement of more groups and individuals in this community-wide effort; and renewed focus of local disaster planning on hazard mitigation strategies and preventative actions to reduce losses and accelerate recovery of the community. The local entity primarily responsible for disaster preparedness is the City/County Emergency Management Agency.



The purpose of natural hazard information in the Comprehensive Plan is to educate the public, and to emphasize that development decisions impact the ability to create a more resilient/sustainable community. Just knowing about the types of natural hazards that are present in southwestern Indiana is not enough to adequately prepare for them.

A NATURAL HAZARD occurs when natural phenomena have the potential to cause fatalities, injuries, and property damage. The natural hazards common in this region can be grouped into the following categories: Atmospheric (e.g. tornadoes and ice storms); Hydrologic (e.g. flooding); and Seismic (e.g. earthquakes). These are further discussed in Appendix C.

A DISASTER is the impact from a hazard upon a region affecting the population and its built environment, as well as the economic, natural, and social environments.

A RESILIENT COMMUNITY is the ability of its residents, institutions, businesses and systems to survive, adapt, and grow no matter what kinds of chronic stresses and acute shocks they experience. Chronic stresses weaken the fabric of the community on a day-to-day or cyclical basis. Acute shocks are sudden, sharp events that threaten the community including earthquakes, floods, and tornadoes.

Man cannot prevent natural hazards from occurring. However, predisaster planning can help minimize the extent of damage from future hazard events. The location and construction of new development should adequately take into account the vulnerability to natural hazards so that they do not become disasters.

#### COMMUNITY EMERGENCY RESPONSE TEAM (CERT)

When a major emergency overwhelms the available resources, response delays of hours or even days may occur. In these circumstances, someone with "basic skills training" can immediately assist those in distress before experts arrive. To provide this basic help in a disaster, CERT training is offered to citizen volunteers with the goal of enhancing their ability to prepare for, respond to, recover from and mitigate against a major emergency or disaster situation. This training for local residents is vital for a community to be well-prepared. It is organized by the City/County Emergency Management Agency. Many of Evansville's neighborhoods have trained CERT teams.

POLICE

1501

#### **CRIMINAL JUSTICE**

#### **EVANSVILLE POLICE DEPARTMENT**

According to the City's website, the mission of the Evansville Police Department (EPD) is to partner with the community to:

improve the quality of life by reducing the fear and incidence of crime, to recognize and resolve problems, and to fulfill the law enforcement needs of the citizens of Evansville, Indiana.

The EPD employs over 330 sworn and civilian personnel divided into five divisions with the Patrol and Criminal Investigations divisions being the most prominent. The Department is accredited by the National Commission for the Accreditation of Law Enforcement Agencies.

The EDP has offices in four locations: the main office in the Civic Center; and an office in each of the City's three patrol sectors. The sector offices provide another police presence out in the community and spaces for the EPD to meet with residents including citizen support and neighborhood groups. The EPD office locations are shown on Figure 15-1.

#### SHERIFF'S DEPARTMENT

The Vanderburgh County Sheriff's Department has served Vanderburgh County residents since 1818. The legal jurisdiction includes all of Vanderburgh County, with its primary enforcement area being unincorporated Vanderburgh County and the Town of Darmstadt. Currently, the Sheriff's Department employs more than 270 people. The office consists of sworn deputies, confinement officers and civilian support personnel.

The Sheriff's Department operates from two separate facilities. The Administration Division operates from its office located in the Vanderburgh County Detention Center, which also houses up to 512 inmates. The Operations Division, which includes the Motor Patrol and Criminal Investigations, is located in the Command Post on the northeast side. These Sheriff Department facility locations are shown on Figure 15-1.

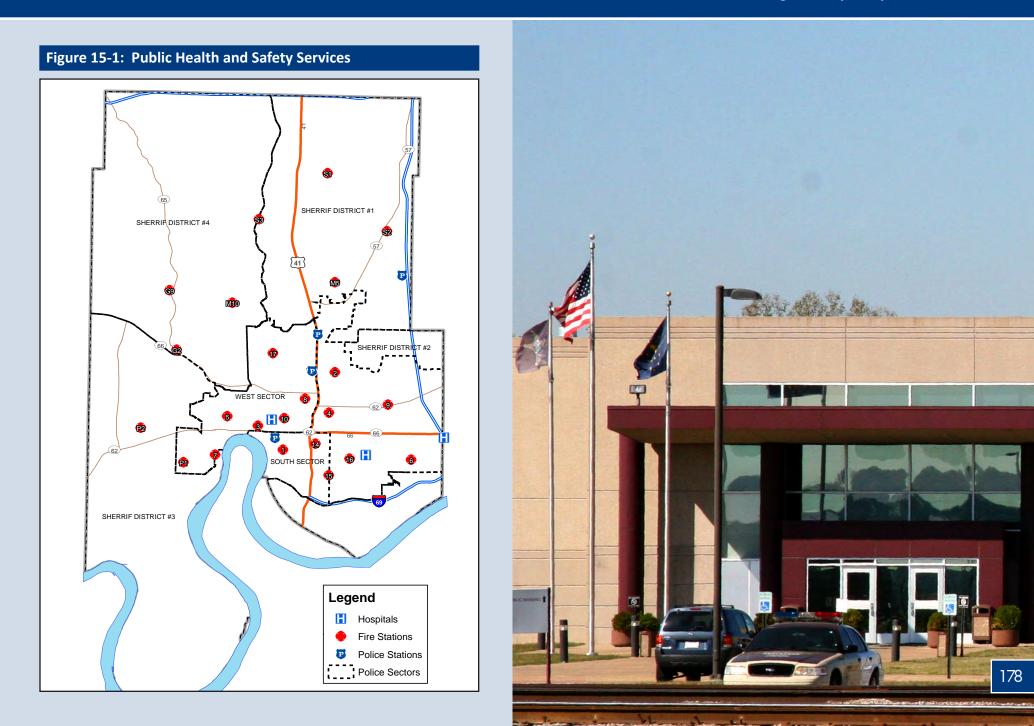
#### VANDERBURGH COUNTY COURT SYSTEM

Vanderburgh County has both a Circuit Court and Superior Court that have county-wide jurisdictions. Circuit Courts are mandated by the State Constitution, while Superior Courts are created by the State Legislature. In Vanderburgh County, the Circuit Court has one Judge and one Magistrate. The Superior Court has seven (7) elected Judges and five (5) appointed Magistrates. There also is a Senior Judge position that was created by the State Legislature to handle the overflow of cases from both Courts.

#### **CENTRAL DISPATCH**

Central Dispatch is a joint emergency dispatch system that combines the dispatch of all City and County emergency response agencies. The dispatch facility is equipped with state-of-the-art equipment including a powerful radio system and a computer aided dispatch system.





#### **FIRE PROTECTION**

#### **EVANSVILLE FIRE DEPARTMENT**

The mission of the Evansville Fire Department (EFD) as stated in the City's website is:

a professional organization striving to protect our community minimizing loss of life and property resulting from fires, medical emergencies, and other hazards.

The EFD maintains a force of 273 fire fighters plus civilians. The Fire Suppression Division has fourteen fire stations strategically located throughout the City ensuring 85% response coverage of the City within 5 minutes. The station addresses are listed in Table 15-1, and their locations are shown on Figure 15-1.

The Insurance Service Organization (ISO), which rates fire departments nationwide on all aspects of fire fighting using a 10 point scale with one being the best, rates EFD as a Class Three. This rating has a direct impact on insurance rates within the community. The EFD now meets most of the National Fire Protection Association's recommended standards for response, manpower, equipment, etc.. The Department's goal is to continue meeting these standards.

#### Table 15-1: Fire Stations in the City of Evansville

Station #	Address	
1	750 S.E. Eighth Street	
2	3601 Maxx Road	
3	310 N. Fourth Avenue	
4	1200 Oak Hill Road	
5	2413 W. Maryland Street	
6	6521 Washington Avenue	
7 1050 S. Barker Avenue		
8	2003 N. Kentucky Avenue	
9 2020 Keystone Drive		
10	120 E. Columbia Street	
14	545 S. Willow Road	
15 1711 S. Weinbach Avenue		
16	2801 Washington Avenue	
17 425 W. Mill Road		



#### **VOLUNTEER FIRE DEPARTMENTS**

There are three volunteer fire departments: German Township, McCutchanville, and Perry Township; and one combination (paid and volunteer) fire department, Scott Township, that serves the residents and businesses in the unincorporated County. They operate out of stations that are strategically located throughout the unincorporated area and are staffed with approximately 250 men and women who have completed the Indiana State Mandatory Training Requirements. The station addresses are listed in Table 15-2 and their locations are shown on Figure 15-1.

There are written mutual aid agreements with all surrounding departments in Gibson, Warrick, and Posey Counties, as well as the City of Evansville. The suburban fire departments meet or exceed the requirements for fire protection of the areas outside the City limits as shown by their Class Six insurance rating given by the ISO.

## Table 15-2: Fire Stations in Vanderburgh County

Department	Station #	Address
German	8	5520 Kasson Drive
Township	9	8410 St. Wendell Road
McCutchanvilla	5	9219 Petersburg Road
McCutchanville	10	7707 St. Joseph Avenue
	1	1506 Johnson Lane
Perry Township	2	11 S. Williams Road
	3	1700 King Road (Union Township)
	1	11540 E. Baseline Road
Scott Township	2	12425 N. Green River Road
	3	12949 Darmstadt Road

#### **EMERGENCY MEDICAL TRANSPORTATION**

Evansville and Vanderburgh County are served by Advanced Life Support (ALS) Ambulances. Paramedic service has been established as the level of care for all 911 medical calls. The Scott Township Fire Department has its own ALS ambulances. Due to its location and distances to the hospitals, Scott Township provides its own paramedic ambulance service, which enhances the ALS capabilities in the northern part of the County.

#### AIR AMBULANCE SERVICES

This service provides ALS care to critically ill or trauma patients for the most expedient transport times. There are two major providers: Air Evac Lifeteam serving Deaconess Hospital and St. Mary's LifeFlight. Both are accredited by the Commission on Accreditation of Medical Transport Systems.



#### **HEALTH CARE**

Evansville serves as the Tri-State regional medical center with two major hospitals and numerous other health care providers. The two hospitals are major employers that have met the health care needs of the region over the years by continuing to expand and improve their capabilities and services. Besides health care delivery, they also provide medical education, and research and development in the community.

#### **DEACONESS HEALTH SYSTEMS**

Deaconess Health Systems is a provider of health care services in a 26-county area of southwestern Indiana, southeastern Illinois, and northwestern Kentucky. Their system includes:

#### **Deaconess Hospital**

A 365-bed acute/tertiary care facility established in 1893, Deaconess is centrally located just north of Downtown Evansville. Major services provided are: trauma (certified as a Level 2 Trauma Center), heart, cancer, neuro, orthopedic, surgical care and many other related medical, surgical and diagnostic services. Deaconess is a teaching hospital with a residency in family practice and has several ancillary, clinical education programs.

#### **Deaconess Gateway Hospital**

A 117-bed facility is located in Warrick County east of the I-164/ Lloyd Expressway interchange. It provides a full range of acute care services, including emergency medicine, cardiac, surgical services and comprehensive pediatric services -- provided through a partnership with Riley Hospital for Children. This campus also includes the Women's Hospital with over 71 specialized beds serving family-centered health care for women and infants. The Deaconess Health System has several other locations that include:

- **Cross Pointe** A 60-bed facility that provides a full range of mental health services and psychiatric care through outpatient and inpatient programs;
- Health South Tri-State Rehabilitation Hospital An 80bed, acute care, specialty facility, that offers both inpatient and outpatient rehabilitation services;
- A Physician Practice Group with 14 Doctor offices;
- Two Urgent Care Facilities located at Gateway and on the north side; and
- **Deaconess Health Plans**, a preferred provider organization with a regional network of over 900 physicians, 16 hospitals, and specialized medical facilities.



#### ST. MARY'S HEALTH SYSTEM

#### St. Mary's Medical Center

A 498-bed, acute/tertiary care center, St. Mary's was Evansville's first hospital established in 1872. It is a member of Ascension Health, the nation's largest Catholic-sponsored, not-for-profit health system. Specialties include: heart care, women's and maternity services, newborn and pediatric services/intensive care, adult intensive care, laser/advanced surgical services, emergency medical services (certified as a Level 2 Trauma Center), cancer care, long-term and continuing care. They also offer a Pediatric Residency. The Breast and Cancer Centers, and Home Health Services are located on the St. Mary's Campus; while the Ronald McDonald House is adjacent.

Other facilities and services of the St. Mary's Health System include:

- St. Mary's Hospital for Women & Children;
- St. Mary's Rehabilitation Institute and the Seton Health Corporation of Southern Indiana, a for-profit entity that includes the St. Mary's Breast Center, St. Mary's SurgiCare, and St. Mary's Home Health Services; and
- St. Mary's Convenient Care located in Newburgh, IN and on the west side.

#### **OTHER PROVIDERS**

- The Veterans Administration outpatient clinic
- The Evansville State Hospital (long term custodial care)
- Southwestern Indiana Mental Health Center (counseling services)
- Evansville Psychiatric Children's Center (treatment of emotional disorders in children)
- The Evansville-Vanderburgh County Health Department (addresses all public and environmental health issues, birth and death records, etc.)

A variety of health services education programs are offered at Ivy Tech State College, the University of Southern Indiana, University of Evansville, and the Evansville-Vanderburgh County Health Department.



#### CONSIDERING LOCAL PUBLIC HEALTH IN PLANNING/URBAN DESIGN

Extensive data is available on public health at the national, state and local levels. Depending on what health factor indices and data are focused on, the conclusions drawn in the analysis of this data and in the frequently published health ratings (some of which have portrayed our local health in a negative light) can vary greatly. Although we should not ignore new health data or ratings, we also should view the data in total to accurately assess the bigger picture.

The most recent local assessment of our region is the 2015 Tri-State Health Survey by the Welborn Baptist Foundation. The data from this effort shows both positive and negative results. For example, it shows that we have higher instances of certain diseases such as arthritis, high blood pressure and mental health issues; while also having higher rates than the state and nation for some risky behaviors such as poor nutrition, smoking and unhealthy weight. On the positive side, we ranked higher than the state and nation for the rate of cancer screenings, routine primary medical care, and vision care. Although somewhat mixed, this survey highlights the areas where we need improvement. From the standpoint of our major facilities and providers, the health related needs of the regional population are being served well. However, as discussed in Section 4, a look at smaller geographic areas shows that much of the Urban Core is considered to be medically underserved.

#### **DESIGNING FOR HEALTH**

Since the Comprehensive Plan recommends policies for community growth and illustrates the desired future land use pattern, its implementation impacts both private development and community facilities (parks and streets), and thus our built environment. There is growing interest in and understanding of the link between the built environment and health. As a result, there is a new emphasis in urban planning on incorporating health concepts into the types of plans that impact the built environment. Studies of the many communities using this approach show that a built environment providing healthy urban design and community facilities encouraging active living can have long-term effects on health outcomes. **Active Living Communities** is a prevalent term on this topic that describes the use of urban design to provide opportunities for people of all ages and abilities to incorporate physical activity into their daily routines.

Urban design is practiced at two different levels via plans, policies and land development regulations/standards:

- **Community-scale** -- involving the arrangement of land uses with residential areas near stores, jobs, schools, parks, etc.; connected and complete streets accommodating transit and active travel, and improved appearance and safety.
- Street-scale -- involving improved street lighting, landscaping and safety of pedestrian crossings using traffic calming measures such as speed humps, as well as provisions for multiple modes of travel.

Studies show that incorporating health concepts into planning and urban design can be very effective in improving the level of physical activity (measured by the number of walkers and bicyclists). According to the Center for Disease Control, using these approaches in plans and policy can result in many community benefits that go beyond increased physical activity. These benefits include:

- Reversing obesity
- Reducing risk of heart disease, high blood pressure and diabetes
- Improving air quality
- Reducing traffic injuries
- Providing safer streets for all modes of travel
- Providing for a stronger more enjoyable community and
- Reducing safety hazards and crime.

OAK HILL

CEMETERY

184

As we learn more by observing the changes in communities with healthy design, it is becoming clearer as to how the built environment affects physical activity and promotes active living. The available literature indicates that there are many other links between health and the built environment, ranging from air quality to food access. The communities that invest in and are committed to health can be transformed through many strategies dealing with walkable development, multi-modal street standards, building design standards, street trees, transit service, neighborhood centers, infill development, and careful siting of public facilities. The resulting changes have also helped these communities to be more sustainable, attractive, and desirable.

The future outlook for medical services in the region is positive. In particular, the current research and development occurring in the local health care industry has the potential to significantly expand through new partnerships with the universities and the proposed IU Medical School. The excellent medical facilities and services based in Evansville and Vanderburgh County meet the present health care needs of the Tri-State region and are expected to meet our future needs as well.

#### CEMETERIES

There are numerous public and private cemeteries throughout Evansville and Vanderburgh County. The two public cemeteries owned by the City of Evansville are Oak Hill and Locust Hill. The private cemeteries include Alexander Memorial Park, St. Joseph, Sunset Memorial Park, Park Lawn, Rose Hill, and Mt. Carmel. There are also several small historic cemeteries.

#### HAZARD MITIGATION ACTION PLAN

Source: Federal Emergency Management Agency

#### **GOAL:**

• Mitigation is sustained actions taken to reduce or eliminate long-term risk to people and property from hazards and their effects.

#### **OBJECTIVES**

- To protect people and structures.
- To minimize the cost of disaster response and recovery.



#### Source: 2012 City-County Multi-Hazard Mitigation Plan

#### **GOAL 1**

• Implement a comprehensive Public Education and Preparedness campaign regarding the hazards posing significant risk to Evansville and Vanderburgh County.

#### **OBJECTIVES**

- Promote awareness of Hazards and Vulnerability among citizens, business, industry, school systems, and government.
- Provide information on Hazard Mitigation alternatives and their respective costs, benefit, and impacts.
- Ensure that the information provided is accurate and consistent.
- Promote hazard mitigation as a public value in recognition of its importance to the health, safety, and welfare of the population.
- Strengthen communication and coordination between public agencies, citizens, non-profit organizations, business, industry, and school systems to create a widespread interest in hazard mitigation.

#### GOAL 2

• Reduce exposure to hazard related losses, before and after disaster strikes

#### **OBJECTIVES**

- Implement a Pre-Disaster Mitigation Program.
- Implement a Post-Disaster Mitigation Program.

#### GOAL 3

• Utilize latest technology and data in hazard mitigation activities.

#### **OBJECTIVE**

• Maximize "Lead-Time" provided by an all-hazards warning system.

- Develop a County-Wide Stormwater Master Plan to provide relief from run-off and flooding resulting from rainfall events.
- Develop a Property Acquisition Plan and associated policies to acquire prioritized properties in the repetitive loss areas.
- Coordinate City of Evansville design requirements for Detention/Retention Ponds with requirements of Vanderburgh County.
- Expand warning siren coverage into new areas as development and housing expand.
- Continue coordination to select locations for tornado safe rooms. Potential sites are located throughout Vanderburgh County, including the City of Evansville, the Town of Darmstadt, and Red Cross, private and public sector.
- Pursue alternative funding sources for structural retrofits to critical facilities.
- Investigate financial incentives for property owners to make seismic retrofits to existing buildings, particularly un-reinforced masonry structures, located within the earthquake hazard area. Pursue alternative funding sources for structural retrofits for critical facilities.

#### Source: Area Plan Commission

#### **PRIMARY GOAL**

• To minimize/mitigate fatalities, injury, property damage and disruption to businesses and the community that result from natural and man-made hazards.

#### **SECONDARY GOAL**

• Facilitate effective and timely recovery and reconstruction following a natural or man-made disaster to create a safer, more resilient/sustainable community.

#### **GENERAL POLICIES**

- Local land use planning, development review and decision-making shall take into consideration natural hazard risks and mitigation.
- Continue to implement the Recommended Actions of the Multi-Hazard Mitigation Plan and update the Plan as scheduled to comply with CRS standards.
- Investigate the development of incentives to promote more disaster resistant new construction and retrofitting of existing buildings.
- Support continued risk assessment studies and mitigation measures to enhance pre- and post-disaster planning, response, recovery and reconstruction.
- Investigate alternative notification systems (Reverse 911) and the feasibility of acquiring this system to cover the entire community.

#### **EARTHQUAKE OBJECTIVE**

 Improve modeling for and mapping of seismic hazards; increase the number of structures (e.g. essential facilities, high occupancy buildings, utilities and bridges) that are earthquake retrofitted; and increase community awareness of earthquake risks and the protective actions that lead to survivability.

- Reduce the potential of fatalities, injury and property damage resulting from an earthquake through a public safety education campaign.
- Identify seismically vulnerable structures and define the level of vulnerability and mitigation the community is willing to accept in dealing with them.
- Periodically review and update the Building Codes to reflect the State seismic requirements as approved by the Indiana Department of Fire and Building Services, to minimize potential seismic damage.
- Investigate the availability of mitigation funds for property owners to make seismic retrofits to their buildings, particularly un-reinforced masonry structures.
- Expand the local efforts in retrofitting essential facilities, public and high occupancy buildings, utilities and bridges.

#### **FLOODPLAIN OBJECTIVE**

• Reduce property damage from flooding, the number of structures subject to repetitive losses, and reduce loss of floodplain storage capacity.

#### POLICIES

- Recognize the value of floodplains in their natural condition which maintain natural watershed functions for the storage (e.g. wetlands) and free flow of floodwaters.
- The floodway, or the area needed for the conveyance of water during a base (100-year) flood, should be reserved primarily for wetlands, open space, wooded areas, agriculture and recreational uses.
- Where possible, site design and development of bridges, roads, and subdivisions should ensure that natural contours and drainage are preserved.
- Where possible, new structures should be located on the highest elevation on a lot within the floodplain to minimize fill and avoid impacting adjacent areas that do not normally flood.
- Update the Subdivision Ordinance so that new roads are designed to provide safe passage during a base flood event.

#### NATIONAL FLOOD INSURANCE PROGRAM (NFIP) OBJECTIVE

• Maintain the City and County's eligibility and continued participation in the NFIP.

#### POLICY

• Continue to review and amend the Floodplain Management Ordinance to remain compliant with NFIP requirements, and to reflect the community's desire to minimize potential flood damage through improved mitigation requirements.

#### **COMMUNITY RATING SYSTEM (CRS) OBJECTIVE**

• Continue to improve the City and County's CRS class rating to attain further reduction of flood insurance premiums.

#### POLICIES

- Elevate, relocate or acquire and remove buildings in the regulatory floodplain, designated as repetitive loss properties, to end the expensive cycle of repeated flood damage and rebuilding.
- Encourage the State to consider improving the Building Code Effectiveness Grading Schedule (BCEGS) ratings allowing Indiana communities to qualify for and attain higher CRS ratings.

#### **TORNADO/ WIND OBJECTIVES**

- Reduce the potential damages caused by tornadoes and high winds; and
- Increase community awareness of the tornado risks and the protective actions that lead to survivability.

- Periodically review and update the Building Codes to reflect the State wind load requirements, as approved by the Indiana Department of Fire and Building Services, to minimize potential wind damage.
- Periodically review and update the Building Codes to reflect the State mobile home safety requirements, as approved by the Indiana Department of Fire and Building Services, to minimize potential wind damage.

#### PUBLIC SAFETY ACTION PLAN

#### **GOAL - EVANSVILLE POLICE DEPARTMENT**

• To provide a secure environment by providing efficient and effective services for the citizens of Evansville.

#### **OBJECTIVE**

• To continue to pursue reductions in all crime categories.

#### POLICIES

- Improve responsiveness to the community by continuing to survey the public assessing the level of satisfaction to enhance delivery of services.
- Nurture relationships with new and existing neighborhood associations.
- Expand partnerships within the community by creating a Citizens Advisory Board for each of the patrol sectors.

#### **GOAL - EVANSVILLE FIRE DEPARTMENT**

• To safeguard our Community's lives and property from the threat of fires, explosions, medical emergencies and other dangerous conditions.

#### **OBJECTIVE**

• Reduce the preventable occurrence of property loss or the loss of life through fire prevention, fire education and intervention.

#### POLICIES

- Enhance the professional image of the Department through pursuing accreditation by the Commission on Fire Department Accreditation International.
- Utilize technology to effectively and efficiently provide services to the community.
- Implement a maintenance and replacement plan for apparatus, vehicles, necessary tools and equipment.
- Continue to cooperate and strengthen relationships with the four Vanderburgh County Suburban Fire Departments through mutual aid agreements.

#### **GOAL - VOLUNTEER FIRE DEPARTMENTS**

• Reduce loss of life and property damage.

#### **OBJECTIVES**

- Further reduce response time.
- Improve public education concerned with fire safety.

#### **HEALTH ACTION PLAN**

Source: Area Plan Commission and Welborn Baptist Foundation's Movement Initiative's Blueprint

#### GOAL

• Endorse lifestyles, programs and initiatives that bring lasting changes toward becoming an "Active Living Community" and a "Healthy Community."

#### **OBJECTIVE**

• Improve physical activity through creating a more attractive, safe and convenient built environment with walkable development and facilities for active modes of transportation.

- Facilitate increased accessibility to health care services for all regional residents, especially the uninsured, underinsured, and medically underserved.
- Continue to meet future health care needs of the Tri-State region by providing quality medical facilities and services.
- Encourage public education and participation in lifestyle modification programs that promote physical activity and/or improved fitness.
- Connect strategies for active transportation (bike and walk) to public health programs and service.
- Support the completion and increased usage of the Pigeon Creek Greenway as a means to achieve community-wide fitness.
- Support addressing food access and nutritional issues by creating new and unique opportunities for residents. Endorse new full service grocery stores in neighborhoods without access to healthy food choices.
- Support creating "Healthy Community" demonstrations to evaluate the effects of broad range health-promoting policies and programs.
- Encourage and support establishing farmer's markets and community gardens.



# **SECTION 16: TRANSPORTATION**

N.



### TRANSPORTATION

This section addresses the existing and future transportation system in the Evansville-Vanderburgh County area. Modes of transportation that are discussed include:

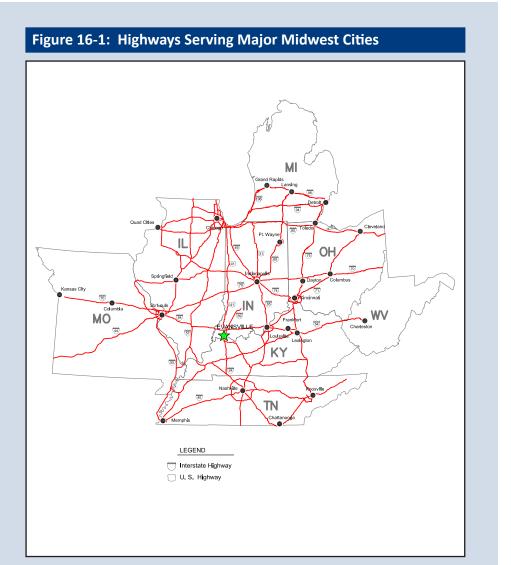
- **Ground** roads, transit, rail, bicycle and pedestrian
- Air passenger
- Water barge

The transportation system of an urban area is interrelated with and affects many different elements of community life, including land use patterns. These interrelationships must be considered in land use and transportation planning. A common example of how transportation facilities impact development decisions is the importance of transportation facilities as site selection factors used by the private sector in making decisions about where to locate a new development or manufacturing plant. High visibility and accessibility to highways, major airports, and other transportation facilities are prominently important to most businesses. For manufacturing uses, proximity to a railroad and/or a water port can also be important in the site selection process.

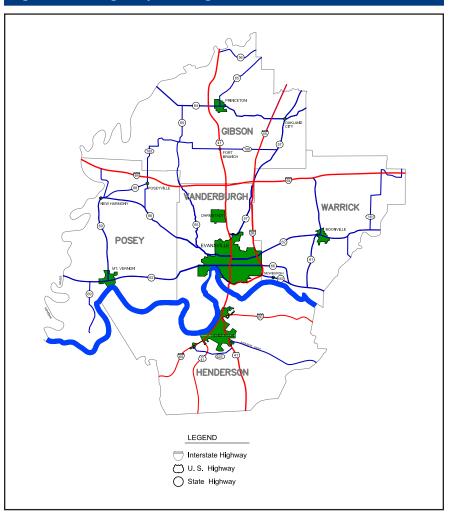
As in other metropolitan areas, Vanderburgh County has many roads and intersections that experience a variety of transportation problems due to an increasing number of vehicles on the road network, lack of road capacity, outward development patterns, and financial limitations for needed improvements. Solving these problems requires having a transportation plan, implementing the plan, and continually updating it to adequately address present and future needs for an efficient transportation system that provides the desired movement of people and goods among all modes of travel. At the most basic level, the transportation planning process involves inventorying current facilities, collecting data, forecasting future land use, population and vehicle trips, and assigning vehicles on the future transportation network. The analysis of future transportation needs is based on an identification of current and potential problem areas, development and evaluation of alternatives to remedy the problems, and recommendations for a preferred course of action (road improvements) consistent with the community's goals, financial resources, and future land use plan.

The review of our road system should start with how the system fits into the bigger picture. The interstate and U.S. highway systems provide Evansville with reasonably good access to major urban areas such as Chicago, Indianapolis, Louisville, Nashville and St. Louis (see Highways Serving Major Midwest Cities, Figure 16-1). Narrowing the focus to the regional level, the Evansville Metropolitan Statistical Area (MSA) is served by the network of federal and state highways shown on Figure 16-2.





#### Figure 16-2: Highways Serving the Evansville MSA



### TRANSPORTATION

#### **EXISTING TRANSPORTATION SYSTEM**

#### **ROAD FUNCTIONAL CLASSIFICATION**

The transportation network in the Evansville area includes approximately 554 miles of roads in the City and 536 miles of accepted County roads. Within this road network, several categories or roadway segments can be identified by function and fulfill a similar role in the movement of traffic. A standard functional classification system has been established in Vanderburgh County, which distinguishes these road categories based upon the type of traffic they serve and their design characteristics. The Federal Highway Administration and the Indiana Department of Transportation have approved a functional classification map for Evansville and Vanderburgh County. Figure 16-3 shows this functional classification system, which includes the categories described below (except that local roads are not included on the map).

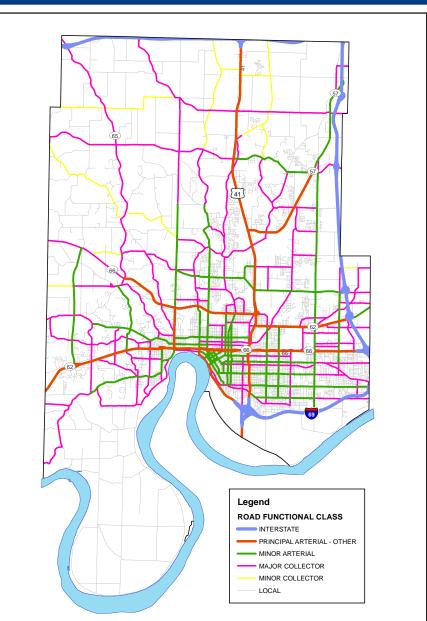
**Interstates** – Provide a limited access, divided highway network that links the major U.S. urban areas offering the highest level of mobility for long-distance travel; are designated by the Secretary of Transportation; and include all Dwight D. Eisenhower National System of Interstate and Defense Highways.

**Other Principal Arterials** - Provide for traffic mobility to serve major activity centers and the longest trip demands within urban areas, while offering some access to abutting land.

**Minor Arterials** - Serve trips of moderate length to smaller geographic areas at a slightly lower level of traffic mobility than Principal Arterials.

**Major Collectors** - Distribute and channel trips between the lower systems and the Arterials, while serving more traffic at higher speeds than Minor Collectors.

**Minor Collectors** - Distribute and channel trips as specified above at a lower level of traffic mobility and better access to abutting land than Major Collectors.



#### Figure 16-3: Road Functional Classification

#### **BICYCLE AND PEDESTRIAN**

Sometimes called alternative or active modes, walking or bicycling can be the only means of travel for some people. The design of the built environment has a major impact on the safety, efficiency, and comfort of pedestrians and bicyclists. Design elements that facilitate walking and cycling include, but are not limited to, straight and interconnected streets, bike lanes, sidewalks, crosswalks, shallow building setbacks, short blocks, trees and landscaping, public spaces, and mixed-use and cluster developments.

Sidewalks provide a measure of safety, and encourage residents to walk in their neighborhoods. The City's sidewalk inventory totals 505 miles and shows that there are gaps in the sidewalk network. The existing sidewalk requirements, including the sidewalk waiver process, are in the Subdivision Ordinance. Sidewalks are currently not required for new developments located on unplatted land (lots of record or parcelizations).

There are many funding sources, federal, state and others, that are available through grants to fund bicycle/pedestrian projects. Most bicycle/pedestrian programs were created to make walking and bicycling a safe and routine activity by improving the alternative mode access to schools, parks and other trip attractors.

When new roads are constructed, existing roads are reconstructed, overlaid, or other maintenance is scheduled, it is important to capitalize on the opportunity to review bicycle/pedestrian accommodation possibilities. In fact, considering such accommodations in planning and design of road projects is required by MAP21 and the Clean Air Act. Over the last 10 years, support for multi-use paths and bike routes has grown substantially with the installation of these improvements in the Evansville community.

The City has a Bicycle and Pedestrian Connectivity Master Plan, which was adopted November, 2015 by the Evansville Metropolitan Planning

Organization (EMPO) Policy Committee. The following vision statement has been developed for this Draft Plan:

Evansville's trail and roadway system will comfortably, safely and efficiently facilitate bicycle and pedestrian transportation for users of all ages and abilities.

The linking of local and regional attractions will make the City a Tri-State destination for bicycle & pedestrian activities. Walking and bicycling will become a common, enjoyable and viable transportation and recreation choice that will lead to healthier lives, smarter community investments, a better environment and a brighter future for Evansville and its residents.

The plan's recommended projects were prioritized using criteria that were based on the plan's goals and objectives, input from the community, and feedback from the Steering Committee. The prioritization criteria includes:

- Safety,
- Connectivity to existing and proposed facilities,
- Proximity to schools and parks,
- Ease of implementation.



# EVANSVILLE MPO COMPLETE STREETS POLICY (ADOPTED IN 2012)

The Evansville Metropolitan Planning Organization developed a Complete Streets policy in 2012 to use in their activities involving future road improvements, and as a recommendation for the local governments in their planning area to follow. The desired outcome of the Complete Streets Policy (CSP) is to create an equitable, balanced, and effective transportation system where every roadway user can travel safely and comfortably and where sustainable transportation options are available to everyone.

A simple definition of Complete Streets is:

Where roadways are designed and constructed to safely and comfortably accommodate all users. "All users" include people of all ages and abilities and all types of motorists.

Pertinent facts about the Evansville MPO Complete Streets Policy are that it:

- 1. Applies to federally funded road construction and reconstruction projects;
- 2. Lists the circumstances for possible exemptions considering existing laws, topographic or natural constraints, and where projected traffic will be low;
- 3. Is intentionally flexible so that projects can be unique for every road type.

#### TRUCKING

Due to the increasing use of trucks for shipping cargo, trucking is now the predominant mode of freight transportation. Trucks provide more flexibility in the movement of goods and allow for industrial uses to be developed away from rail lines.

The Evansville area contains several major truck terminals that serve as staging areas for the loading of trucks and for warehousing of goods. There are many trucking firms and private haulers located in the Evansville area. Planning for this mode of freight transport must continue to address the impact of trucking on highway congestion, air pollution and roadway deterioration problems.

#### RAIL

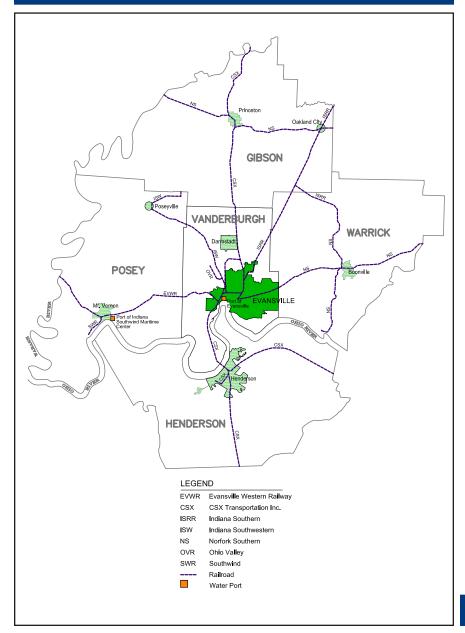
Throughout Evansville's history, the railroads have played an important role in the growth and development of the community. Since 1971, the rail lines serving Evansville have carried only freight, as passenger rail service to Evansville was discontinued.

Although the amount of rail freight has decreased with the popularity of trucking, the rail system in Evansville continues to be an important element of freight transportation. At present, the City of Evansville and Vanderburgh County are served by four railroad companies. These companies are:

- 1. **CSX Transportation (CSX)** consists of a mainline through Evansville, a major train yard and an intermodal facility located in the Howell area, and operates approximately 35 trains per day in Evansville carrying the most freight of all the railroads in this area.
- 2. Norfolk Southern (NS) line extends east from Evansville paralleling State Road 62/Morgan Avenue.
- 3. Indiana Southern (IS) line runs in a northeasterly direction, paralleling State Road 57.
- Evansville Western Railway (EVWR) line runs west from Evansville Howell Yard between Upper Mount Vernon Road and Hogue Road.

The railroad companies having tracks that serve the region are shown on Figure 16-4.

#### Figure 16-4: Regional Railroad Service and Water Ports



#### **PUBLIC TRANSPORTATION - METS**

The Metropolitan Evansville Transit System (METS) was established in 1971 to provide public transportation in the City. It currently operates a total of 48 revenue vehicles of which 38 are on the road in the peak hour. METS runs 18 fixed routes with some that offer service every half hour and the remainder providing hourly service. METS Mobility provides para-transit service for those with a documentable disability that limits their use of the METS regular route system within the City. Historical METS ridership figures are generally increasing as shown in Table 16-1.

#### Table 16-1: METS Ridership

Year	Ridership
1990	1,602,910
1995	1,333,356
2000	1,310,003
2005	1,661,303
2010	2,150,415
2013	1,926,472

Past ridership studies have shown that the majority of METS riders are transit dependent. Although it is critical to provide transportation for low income riders and to others who do not have a vehicle available to them, changes to the system are being considered to attract riders of choice by route modification for better efficiency, and by adding new connections to large employers. Service has been extended into northern Vanderburgh County along US 41, and a connection has been added with the Warrick Area Transit Service (WATS) near the east City/County line for intra-region trips. Public transportation is expected to be an increasingly valued mode of travel for area residents in the future.

There are also private providers of public transportation in the City of Evansville that are not associated with government programs, including taxi companies, charter bus service, and providers for the elderly and disabled. There are two commercial passenger bus lines serving Evansville: Greyhound with their national network; and Hoosier Ride by Miller Transportation, accessing Indiana and Kentucky cities.



#### **PUBLIC TRANSPORTATION - EVV**

The Evansville Vanderburgh Airport Authority District owns and operates the Evansville Regional Airport (EVV). The airport is considered a non-hub within the national airport system. Facilities on the airport site include a modern passenger terminal which has the capacity for 10 gates. EVV is currently served by the three remaining legacy air carriers: American, Delta, and United Airlines, providing flights to the top five major hubs. The flights to the major hubs are illustrated on Figure 16-5. Table 16-2 shows some history of passenger enplanements (or boarding) at EVV. Although the boarding numbers were decreasing, they dramatically increased in 2015 to over 208,000. Due to the constant changes in the airline industry, caution should be used in drawing conclusions from analyzing this data. However, it should be noted that EVV has the terminal and airfield capacity in place to handle an increased level of activity and should not be a constraint on future growth.

#### Table 16-2: Evansville Regional Airport Boardings

Year	Passengers	Source: Evansville Regio 2008 Master Pl
1990	235,408	
1995	205,986	Note: $p$ – preliminary fr f – forecast from
2000	260,604	Master Plan Upda
2005	245,216	
2010	171,575	
2015 p	208,296	
2024 f	329,130	

onal Airport Plan Update

rom EVV the 2008 ate

The primary runway at Evansville Regional Airport (EVV), Runway 4-22, was improved in 2014 in order to meet the Federal Aviation Administration's (FAA) Runway Safety Area (RSA) design standards and to enhance the operating safety conditions at the Airport. The improvement project removed the nonstandard runway safety area (RSA) and reclaimed the full use of the primary runway length meeting the design needs of the type of aircraft that currently operates at the Airport.

The airport also provides general aviation facilities that handle personal and business aircraft as well as cargo flights which carry high value and time sensitive materials in and out of the community.



#### Figure 16-5: Airlines Serving Evansville in 2015

An area at the airport is a designated Foreign Trade Zone, where companies can use special procedures that help encourage U.S. activity and provide cost savings – in competition with foreign alternatives – by allowing delayed or reduced duty payments on foreign merchandise, as well as other savings.

In addition to EVV, Skylane Airport, a privately owned, general aviation airport, is located off St. Joseph Avenue at Allens Lane. This facility serves small, single engine, general aviation aircraft.

#### WATER PORTS

Evansville is an official U.S. Customs Port of Entry that has numerous commercial dock facilities including: The Port of Evansville, Evansville Materials, Evansville Barge and Marine, Cargill Grain, Ashland Oil, Southern Indiana Dock, Howell Dock, and ConAgra Grain.

The Port of Evansville handles many types of cargo, from raw bulk material to finished products, for a variety of tri-state customers. This facility is intermodal in that it is served by barge, truck, and CSX railroad, and is open to reciprocal switching between all rail carriers serving the community. The Port of Evansville is operated by American Commercial Marine Service Company, which is an affiliated unit of CSX Transportation.

The state owned Port of Indiana – Mt. Vernon is in Posey County. This river port facility, which opened in 1977, primarily serves the tri-state agricultural and coal production industries, but also handles other commodities. Port of Indiana – Mt. Vernon is a designated Foreign Trade Zone. The Port of Evansville and Port of Indiana – Mt. Vernon are shown on Figure 16-4.

### **RECOMMENDED TRANSPORTATION SYSTEM**

It is difficult to predict with certainty what transportation improvements will be needed in the future. Technology is changing so rapidly that within the next 20 years it could bring about major changes in transportation and other aspects of our lives. Since the future is unknown, our planning must be based on current trends so that it helps us meet anticipated needs. The recommendations in the Comprehensive Plan address all travel modes, with an emphasis on the roadway improvements needed to maintain smooth traffic flow. However, if in the future trends indicate that major changes in transportation are occurring, our planning must be adjusted accordingly through Plan revisions.

The transportation planning process that is required to receive federal highway planning and improvement funds is conducted locally by the Evansville Metropolitan Planning Organization (EMPO) for our urbanized area. This regional area includes the City of Evansville, Vanderburgh County, Warrick County and Henderson County, Kentucky.

The Area Plan Commission, EMPO, and other community organizations work together to coordinate land use and transportation efforts for the City and County. The current transportation planning for our region is primarily incorporated into the following documents published by the EMPO and the Area Plan Commission:

- EMPO Year 2040 Transportation Plan,
- EMPO Transportation Improvement Program (TIP) 2016-2019,
- EMPO Access Management Manual,
- The current Comprehensive Plan,
- Growth management reports and corridor transportation plans.

### EMPO METROPOLITAN TRANSPORTATION PLAN 2040 (MTP 2040)

The EMPO MTP 2040 recommends the major transportation system improvements in the EMPO study area for the next 25 years. It was adopted in 2014. The Plan is a guide for the implementation of multimodal transportation improvements, policies, and programs in the Metropolitan Planning Area through the year 2040. The MTP 2040 encourages and recommends that all modes of transportation – vehicle, bicycle and pedestrian, transit, and freight - create a cohesive network. It also establishes a vision statement, and a set of transportation goals and objectives for the community and region, which are listed in the Action Plan at the end of this Section. The vision statement describes our area as:

The Evansville Urbanized Area is a flourishing region with a high quality of life for its residents. Our transportation system is safe, efficient, multimodal and accessible to all users. It supports economic vitality, respects environmental concerns and is supported by public consensus and efficient use of resources. The basis of the MTP 2040 is the socio-economic and land use projections for the area, which are input into a computer model to produce projected traffic volumes on the future road network. The socio-economic variables that influence the amount of travel in our area include population, households, number of vehicles, employment, income, location of employers and housing, journey-to-work and travel time.

New or improved facilities are proposed to address projected traffic where existing facilities will not have the capacity to handle the traffic volumes from the model. The recommended improvements in the MTP 2040 will accommodate the future demands at a cost within expected funding levels. The projects are listed into groups by time periods as to when they will be needed.

According to federal requirements, the projects proposed in the Plan must be constrained by the availability of funds. Given that federal and local funds for road improvements in our urban area are expected to be limited, and that construction costs for road projects (material, equipment and labor) will likely increase over time, it will be necessary for the City and County to investigate alternative funding sources.

#### **ROAD IMPROVEMENTS**

The EMPO transportation improvements are grouped into three categories - committed (short term), recommended (longer range) and illustrative needs projects.

**Committed Projects** - The committed improvements are those included in the EMPO 2016-2019 Transportation Improvement Program (TIP). These improvements, created through the federally mandated transportation planning process, are in some phase of development ranging from the environmental study to design, right-of-way acquisition and construction. These projects are initiated either by the City, County or INDOT and are programed for financing of construction primarily with federal funds. The committed projects that might have land use implications are listed below.

#### 1. Covert Avenue

• A road diet conversion (four lanes to three), including sidewalk upgrades from US 41 to I-69. Construction is programmed in FY 2019.

#### 2. Second Street

• Proposed improvements include a roundabout at the intersection of Second /Parrett Street/Jefferson Avenue, Second/Washington Avenue intersection improvements, and sidewalks. Construction is programmed in FY 2018.

#### 3. Weinbach Avenue

 A road diet conversion (four lanes to three), including sidewalk upgrades from Walnut Street to Pollack Avenue. Construction is programmed in FY 2018

#### 4. Pigeon Creek Greenway Phase 3D - Hi-Rail Corridor

• Construction of this multi-use trail along US Highway 41 from Walnut Street to Riverside Drive is programmed for construction in FY 2017.

#### 5. Green River Road

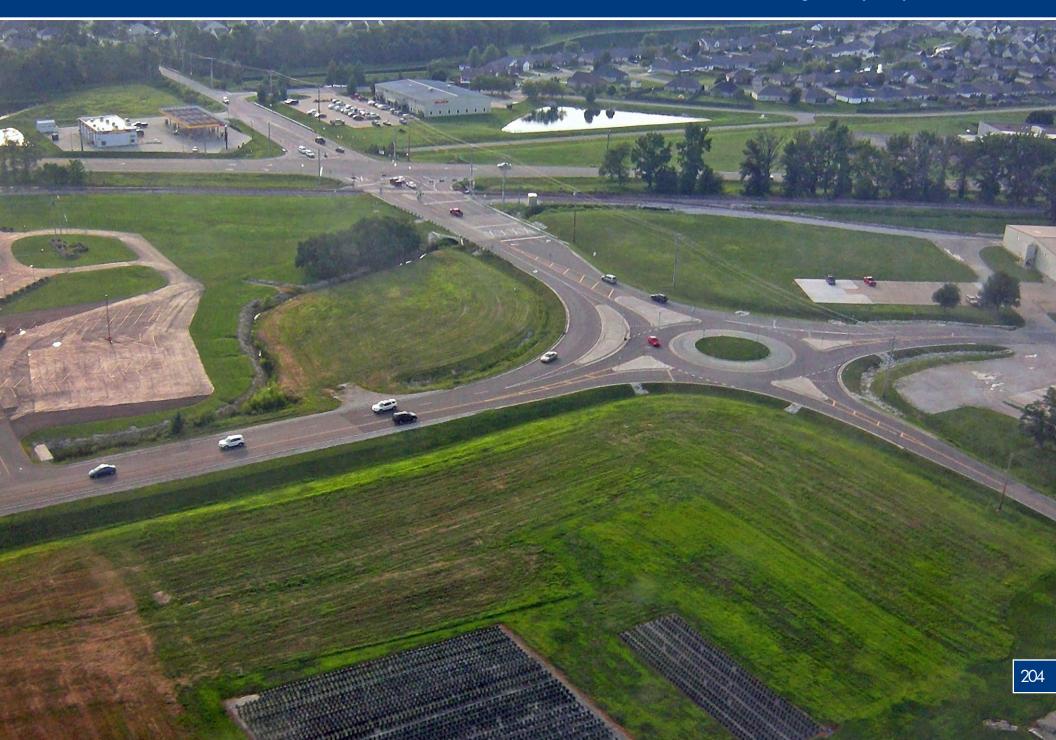
 A three-lane cross-section, bike lanes, and a sidewalk along the west side between Kansas Road and Boonville-New Harmony Road are programmed for construction in FY 2018.

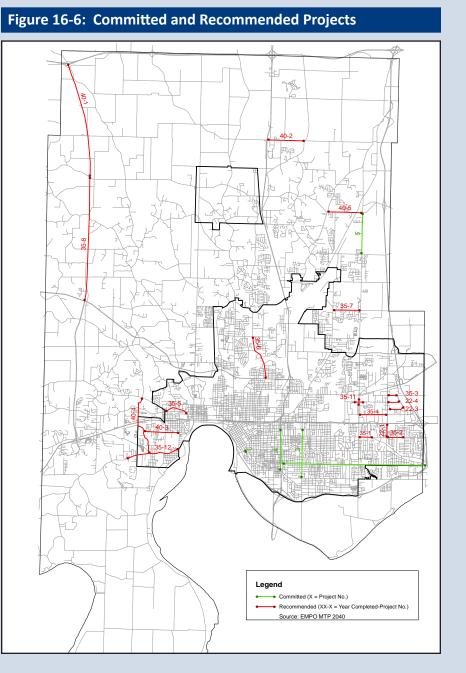
**Recommended Projects** - This category of proposed transportation improvements in the MTP 2040 are the recommended fiscally constrained and attainable projects, that have not yet progressed to the "committed" stage in the process. Decisions on which of these mid to long-range projects are scheduled for inclusion in the TIP four-year program are made considering the staging periods in the Plan, available funding, and current road improvement scheduling. The recommended or longerrange projects in the Plan were derived from an analysis of future needs that assumed full completion of all the funded improvements in the TIP. The recommended projects were selected for construction staging periods ending in 2022, 2035, and 2040, according to:

- Benefits to traffic flow (increasing capacity and reducing congestion);
- Need (addressing existing and future problems such as capacity and safety);
- Their position as links in the overall transportation network (providing cross town connections and alternative routes);
- Fiscal constraints (federal, state, and local funding availability); and
- The input of local officials and the public (public input).

These long-range projects are illustrated on Figure 16-6 on the next page. The project numbers on the map begin with the two-digit year in which the Plan schedules them for completion.

### SECTION 16 Evansville-Vanderburgh County Comprehensive Plan





#### Table 16-3: Projects to be Completed by the Year 2022

Project Number	Road, Extent of Project	Project Type
22-1	Burkhardt Rd, Lincoln Ave to Lloyd Expressway	Widen to 5 lanes
22-3	Columbia St, Hirschland Rd to Cross Pointe Blvd	New
22-4	Vogel Rd, Burkhardt Rd to Cross Pointe Blvd	New 3 lanes

205

#### Table 16-4: Projects to be Completed by the Year 2035

Project Number	Road, Extent of Project	Project Type
35-1	Lincoln Ave, Green River Rd to Newburgh Rd	Widen to 3 lanes
35-2	Lincoln Ave, Burkhardt Rd to Martin Ln	Widen to 3 lanes
35-3	Oak Grove Rd, Burkhardt Rd to Cross Pointe Blvd	Widen to 5 lanes
35-4	Virginia St, Green River Rd to Burkhardt Rd	Widen to 3 lanes
35-5	Mt. Vernon Ave, Franklin St to Tekoppel Ave	Intersection Improvements & Widen to 3 lanes
35-6	Stringtown Rd, Diamond Ave to Mill Rd	Upgrade/Widen
35-7	Heckel Rd, Oak Hill Rd to Green River Rd	Widen to 3 lanes
35-8	University Parkway, SR 66/Diamond Ave to Boonville-New Harmony Rd	New 4 lanes
35-11	Green River Rd & Vogel Rd Intersection	Reconstruct
35-12	Broadway Ave, Felstead Rd to Barker Ave	Reconstruct

#### Table 16-5: Projects to be Completed by the Year 2040

Project Number	Road, Extent of Project	Project Type
40-1	University Parkway, Boonville-New Harmony Rd to I-64	New 4 lanes
40-2	Baseline Rd, US 41 to Old State Rd	Widen to 3 lanes
40-3	Claremont Ave, Red Bank Rd to Barker Ave	Reconstruct
40-4	Red Bank Rd, Broadway Ave to Upper Mt. Vernon Rd	Reconstruct
40-5	Boonville-New Harmony Rd, Petersburg Rd to Green River Rd	Upgrade

**Illustrative Needs Projects** - The EMPO 2040 Plan also identifies projects addressing unmet transportation needs that could be pursued in the event sufficient federal, state and local funding becomes available through Year 2040. The Illustrative Needs projects (fiscally unconstrained) that might have land use implications are listed in Table 16-6.



#### Table 16-6: Illustrative Needs Projects

Project Number	Road, Extent of Project	Project Type
IL-1	Oak Hill Rd, Lynch Rd to Millersburg Rd	Widen to 3 lanes
IL-2	Lynch Rd Extension, US 41 to Diamond Ave	New 4 lane
IL-3	SR 66/Lloyd Expressway & Burkhardt Rd Intersection (including Wal-Mart entrance)	Upgrade to Interchange
IL-4	SR 62/Lloyd Expressway, Rosenberger Ave to Pigeon Creek Bridge	New/Widen to 6 lanes
IL-5	US 41, Diamond Ave to St George Rd	Widen to 6 lanes
IL-6	SR 62/Lloyd Expressway, Boehne Camp Rd to Rosenberger Ave	New/Widen to 6 lanes
IL-7	SR 62/Lloyd Expressway & University Parkway Interchange	Reconstruct
IL-8	US 41, St George Rd to SR 57	Widen to 6 lanes
IL-9	I-69 Ohio River Bridge, I-69 to E.T. Breathitt Parkway	New
IL-10	Boonville-New Harmony Rd, University Parkway to SR 61 (in Warrick County)	Reconstruct
IL-11	Baseline Rd, SR65/Big Cynthiana Rd to SR 61 (in Warrick County)	New 4 lanes
IL-12	SR 57 Extension – West, US 41 to SR 65	New
IL-16	I-69 Airport Access Alternative	New

#### **BICYCLE AND PEDESTRIAN RECOMMENDATIONS**

To continue expanding the bicycle and pedestrian transportation opportunities in the City and County, the MTP 2040 recommends the following:

- Create connections between the existing Pigeon Creek Greenway and the USI-Burdette Park Nature Trail, as well as expanding the Pigeon Creek Greenway to the north and south to incorporate more neighborhoods and destinations;
- Designate additional on-street bicycle connections to expand the network, especially on the west and north sides of Evansville;
- Improve bicycle and pedestrian connectivity on a local level;
- Ensure new roadway projects accommodate bicycle and pedestrians;
- Continue to expand the bicycle and pedestrian network; and
- Implement the EMPO City of Evansville Bicycle and Pedestrian Connectivity Master Plan.

#### **PUBLIC TRANSPORTATION RECOMMENDATIONS**

The MTP 2040 recommends evaluating the need for expanded coverage beyond the Evansville city limits. Residential and commercial development in the unincorporated parts of Vanderburgh County have increased the need for public transportation in areas currently not served. Where there is now no public transportation, some employers report that transportation is the single largest obstacle to hiring and retaining employees.

The MTP 2040 recommends that public transportation providers examine the feasibility of regional expansion. Projects specifically recommended in the MTP 2040 are a connection between METS and HART to link the cities of Evansville and Henderson, and an East-West Express route from Evansville's East Side to as far west as the University of Southern Indiana, and transit coverage extending up the U.S. Highway 41 North Corridor from Evansville to Princeton in Gibson County.

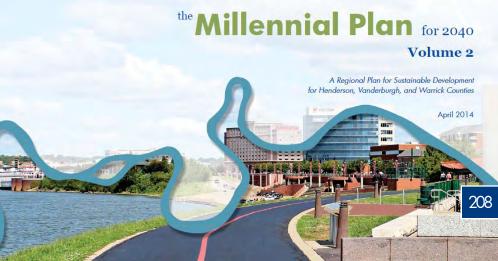
### FROM THE MILLENNIAL PLAN FOR 2040 PREPARED FOR THE SUSTAINABLE EVANSVILLE AREA COALITION

#### SLACKWATER HARBOR AND MULTI-MODAL FACILITIES

There has been discussion about the possibility of creating a slackwater harbor to take advantage of the existing and potential growth of the multi-modal commercial trade and freight logistics facilities in Evansville and the Tri-state region. The proposed slackwater port would be located adjacent to the Ohio River near Howell Railyard. A slackwater port contains a steady level of still water to allow barges to more easily load/unload cargo. Slackwater ports are common along the Ohio and Mississippi Rivers. Successful ports are located near both rail and highway networks, and they include large storage facilities.

This proposal would integrate freight, economic development, and work force development in the community. Evansville serves as one of the northernmost destinations of barge traffic from the Gulf of Mexico with connections to CSX and Norfolk Southern rail lines, providing subsequent overland movement of containers for both domestic and international trade. CSX Railroad operates its intermodal facility out of the Howell Railyard.





### NEEDS OF EXISTING RURAL ROADS

As growth occurs in the Transitional and Rural areas of the County, it continues to highlight the problem that these areas have underdeveloped and inadequate local road systems. Existing roads are typically too narrow to support major development, and they often have hills and curves that further restrict their capacity. The typical level of funding in the County's Road and Street Fund is insufficient to make substantial improvements. Therefore, there have generally been no major improvements made to these roads for many years. This has not been a major problem in the past since these roads have historically been sparsely traveled. One of the changes occurring on these roadways due to the more recent growth is that traffic volumes are continuing to increase. To address these issues, the Area Plan Commission recommends that:

- The County should examine and develop alternative mechanism(s) to fund improvements to the local road system;
- A priority list for improving existing local roads in growing areas should be created to address the existing deficiencies, in case funding does become available in the future; and
- Planning should continue for development of a network of new local roads in areas expected to grow.

### **TRANSPORTATION ACTION PLAN**

Source: EMPO MTP 2040

(includes those Goals, Objective and Policies that have land use implications)

#### GOALS

#### **QUALITY OF LIFE**

• Create sustainable neighborhoods by encouraging redevelopment and infill, while providing a variety of accessible recreational and cultural activities for all ages.

#### **ENVIRONMENT**

• Support an environment that encourages healthy lifestyles, enhances the quality of life, preserves natural resources, and maintains a high level of air and water quality.

#### **ECONOMIC DEVELOPMENT**

• Promote development that contributes to the local economy while expanding and retaining existing businesses and improving the region's standard of living.

#### **POLICY AND PARTNERSHIP**

• Expand partnerships and encourage communication between and among public and private entities to ensure the region is capitalizing on its resources.

#### SAFETY, SECURITY, AND HEALTH

• Increase the safety and security of the transportation system by building redundancies and increasing access to active transportation choices.

#### **OBJECTIVES**

#### SUSTAINABLE DEVELOPMENT

- Ensure local shopping opportunities have adequate access for all modes of transportation.
- Create attractive, walkable streetscapes by including landscaping and other streetscape amenities.
- Encourage jurisdictions to update their zoning and other ordinances to include more walkable and transit-oriented designs.
- Educate the public and elected officials on the importance of regional, community, and corridor planning.

#### **ROADWAY NETWORK**

- Advance roadway projects that provide safe and secure travel.
- Improve the roadway network and traffic flow by repairing grid connectivity.
- Improve travel times for all roadway users.
- Improve ease of travel by providing well-designed and signed access roads.
- Ensure interchanges and intersections are sufficient for current and future travel demands.
- Advance the interstate system within the region with an I-69 bridge across the Ohio River between Evansville and Henderson, Kentucky.

#### TRANSIT

- Consider expanding the transit service area within each jurisdiction to reach more people and connect to more destinations.
- Consider upgrading bus stops by providing amenities, such as shelters.

#### **BICYCLE AND PEDESTRIAN FACILITIES**

- Continue to expand the bicycle and pedestrian network by improving bicycle connectivity both on a regional and local level.
- Promote Complete Streets Policy.



SOURCE: EMPO DRAFT Bicycle & Pedestrian Connectivity Master Plan (includes those Goals, and Objectives that have land use implications)

#### GOAL

• The Evansville bicycle and pedestrian network will connect residents and visitors to one another and to the places they want to go.

#### **OBJECTIVES**

- Make improvements to better connect residents and visitors to the Five Cultural Districts, the Pigeon Creek Greenway, Downtown, parks, shopping, schools, and other community destinations.
- Enhance connectivity between bicycling, walking, transit, and other modes of transportation.
- Integrate transportation and land use policies to foster sustainable growth that encourages walking, bicycling and transit.
- Put Evansville on the map as a walk- and bike-friendly destination in the region, and nationally.

#### GOAL

• Bicycling and walking will be safe and accessible forms of transportation and recreation for people of all ages and abilities.

#### **OBJECTIVES**

- Work with partners to ensure that outreach efforts educate community members on safe and courteous walking, bicycling and driving.
- Utilize national best practices in network planning, infrastructure design, project development and maintenance procedures to ensure that facilities provide a safe and functional transportation environment for all roadway users.
- Institute bicycle and pedestrian safety improvements in regular roadway construction and maintenance by adopting a strong City of Evansville Complete Streets Policy.

#### GOAL

• Bicycling and walking will support healthy and active lifestyles, increase transportation equity, and enrich quality of life for all Evansville residents.

#### **OBJECTIVES**

- Educate people on the benefits of walking and bicycling and encourage them to walk and bike, instilling these values at an early age through school and other educational programs.
- Implement infrastructure and non-infrastructure improvements equitably, so that people of all walks of life benefit.

#### GOAL

• Community leaders and local agencies will value bicycling and walking and integrate these forms of transportation into planning, policy, and capital improvement decision-making.

#### **OBJECTIVES**

- Identify tangible, dedicated funding sources to support implementation.
- Utilize the "5 E's" (Engineering, Education, Enforcement, Encouragement, Evaluation) approach to successful walkand bike-friendly communities so that cultural acceptance of walking and bicycling occurs in tandem with infrastructure changes.
- Work across jurisdictions, departments, and organizations to achieve coordination on short-, medium-, and long-term transportation-related goals and plans.
- Identify non-profit and private sector partners to lead community-based education and encouragement programs.

#### GOAL

• Local agencies will support bicycling and walking through continual monitoring, evaluation and planning.

#### **OBJECTIVES**

- Maintain up-to-date GIS inventories of pedestrian, bicycling, and transit facilities including ADA improvements.
- Achieve Bicycle-friendly Community Status.
- Achieve Walk-friendly Community Status.



SOURCE: EMPO Complete Streets Policy

#### GOALS

- To create a comprehensive, integrated, and connected transportation network that supports compact, sustainable development and provides a livable community.
- To ensure safety, ease of use, and ease of transfer between modes for all users of the transportation system.
- To provide flexibility for different types of neighborhoods, streets, and users.

#### **OBJECTIVES**

- For measures of success, expand the existing system to add:
  - Total miles of on-street bicycle routes that are clearly marked or signed;
  - Linear feet of new pedestrian accommodations; and
  - New curb ramps installed at street intersections and driveways.

#### SOURCE: Community/Area Plan Commission

#### GOAL

• Develop a balanced, equitable, and efficient transportation system that provides a range of transportation choices; reinforces the livability of neighborhoods; supports a strong and diverse economy; reduces air, noise, and water pollution; and lessens reliance on the automobile while maintaining accessibility.

#### GOAL

• Ensure orderly development that is connected with the transportation system in a manner that maximizes access and minimizes traffic congestion and the potential for user conflicts.

#### **OBJECTIVE**

• Professionally recognized standards should be used and consistently applied in design and review of all proposed development to ensure a functional transportation system.

- Review proposed development access and internal circulation plans for adherence to the EMPO Access Management Manual, and make recommendations to mitigate development generated congestion and conflicts.
- Support the construction of frontage roads to serve development along major arterials (per the EMPO Access Management Manual, and Subdivision Code).
- Limit the number of curb cuts allowed, especially on collectors and higher classified roads, and limit the use of mid-block median crossovers to avoid creating additional vehicle conflict points.
- Where possible, design access for new development via side streets.
- Where possible, consolidate access points for independent commercial uses.
- Update the EMPO Access Management Manual to reflect the current professionally recognized standards in transportation planning, and investigate adding the most important standards into the Zoning Code.
- Review the thoroughfare setback requirements regularly, and revise this portion of the Zoning Code as warranted.
- Adopt procedures for requiring the use of traffic impact analysis to determine the effect of large-scale new developments on the transportation system.

- Identify the transportation system improvements necessary to accommodate the traffic generated by new development and ensure that these improvements are in place when needed to mitigate development impacts.
- Strive to maintain a minimum level of service (LOS) "D" in the peak hour for streets and intersections as the desired LOS standard for providing safe and efficient traffic flow on all roads within the City and County, except in the CBD area identified in this Plan.
- Develop a plan to improve existing local roads in growing areas, establish priorities for addressing the existing deficiencies, and seek funding for these improvements.
- Initiate proactive planning for development of a future local road network in areas that are expected to grow and that lack the needed local roads, and seek funding for these improvements.
- Encourage the Evansville Metropolitan Planning Organization, the City of Evansville and Vanderburgh County to implement a Complete Streets Policy in their planning and budgeting for new and reconstructed road projects.
- Investigate amending the City and County Subdivision Ordinances to update the road layout and design standards for safe movement of school busses, public maintenance vehicles, and safety/emergency vehicles such as police cars, ambulances, and fire trucks.

#### **OBJECTIVE - BIKEWAYS AND PEDESTRIAN WALKWAYS**

 Improve access to local destinations by providing interconnected systems of sidewalks, bike routes, bike lanes, multi-use paths and greenway trails for convenient and safe movement of non-motorized traffic.

#### **OBJECTIVE**

• Obtain both the Bicycle and Walk Friendly Community designations.

- Promote a Complete Streets Policy adoption by the Area Plan Commission, City and County.
- Update the Pigeon Creek Greenway Master Plan.
- Ensure that new and replacement sidewalks have the appropriate cross slope, include sidewalk curb ramps at intersections and driveways, and otherwise meet all current Americans with Disabilities Act standards.
- Review and amend the Subdivision Code to clarify the criteria for approval of sidewalk waiver requests and to create consistency in the application of sidewalk requirements.
- Identify the priority sidewalk links that are currently missing, and explore the possible options and funding sources that could be used in connecting the gaps in the existing sidewalk network.

- Encourage local groups to lobby for a greater percentage of federal, state, and local transportation funding for pedestrian and bicycle facilities and programs.
- Promote and improve the connectivity between the places where we live, work, and play.
- Encourage the City and County to require sidewalks and street interconnections in proposed subdivisions or cul-de-sacs linked with bicycle/pedestrian facilities.
- Achieve the recommended bike and pedestrian ways as planned for in the Pigeon Creek Greenway Master Plan, the EMPO City of Evansville Bicycle and Pedestrian Connectivity Master Plan, and the Burkhardt Road + US 41 TIF Districts Bicycle + Pedestrian System Plan.
- Continue to support all efforts to raise funds for bicycle and pedestrian facilities in the City and County.
- Amend the Zoning Ordinance to address bicycle parking/ storage options.
- Encourage the City and County to adopt a Complete Streets Policy/ordinance consistent with the Evansville MPO's that improves pedestrian access, safety and convenience.
- Encourage and support community-wide awareness, education, and promotion of active modes of travel, such as the Safe Routes to School program, and bike/walk to work.

#### **GOAL - PUBLIC TRANSPORTATION**

• Improve the public transit system to continue meeting the need for a sustainable alternative to auto travel.

#### **OBJECTIVE**

• Increase METS ridership, particularly those riders not transitdependent.

- Encourage use of public transit by expanding educational programs/promotional efforts, and continuing to improve routing, scheduling and equipment within the METS system in response to changing public needs and demands.
- Expand scheduling to include limited Sunday service on selected routes.
- Study the expansion of certain METS routes to connect residential areas with major employment, shopping centers, health care and human services, and to connect with the Henderson Area Rapid Transit System (HARTS).
- Investigate the feasibility of creating a Regional Transit Authority providing greater access between southwestern Indiana communities and counties.
- Encourage transportation services that enable community mobility for older adults, those with disabilities, and those that do not have a car.





# **SECTION 17: PUBLIC UTILITIES**





# **PUBLIC UTILITIES**

The public utilities addressed in this section are water, sanitary sewer, storm sewer/ drainage, and solid waste. The other utilities that serve the community such as cable (television and internet), electric, trash collection, natural gas, and telephone (land and cell) are private. The location and availability of water and sewer utilities are essential in order for land development to occur. Therefore, the capacity and extension of public utilities are effective tools to allow for and guide growth.

The Evansville Water & Sewer Utility mission is:

To provide the Evansville metro area with high quality, safe, dependable water and sewer service at rates which encourage economic development. The Utility will manage land and water resources to ensure quality for future generations.

#### WATER

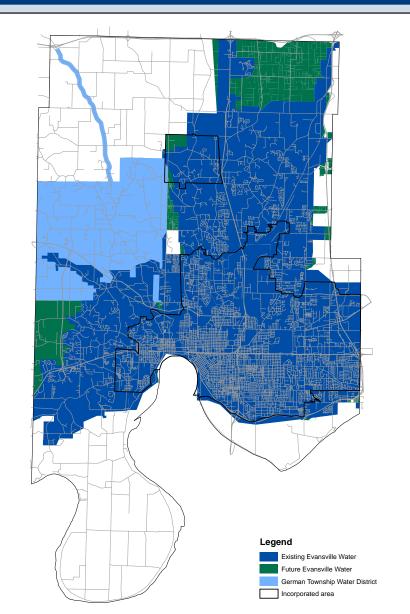
The Evansville Water Utility has a service area of approximately 100 square miles. Figure 17-1 shows the Evansville Utility Direct Water Service Area. Water is provided to approximately 93 percent of the residents within Vanderburgh County. The population served is approximately 163,000, and the Water Utility has a total of 60,000+ residential and commercial customers. It also has four wholesale customers: the German Township Water District in Vanderburgh County and three others in Gibson and Warrick Counties. The German Township Water District also serves Armstrong Township and some of Posey County.

#### **EXISTING FACILITIES**

The source of water for the system is the Ohio River. The intake water is treated to potable standards in a treatment plant located just southeast of and upriver from downtown Evansville. The Evansville Water Treatment Plant first supplied treated water to the City in 1912. Since then, the plant has been expanded and modernized several times. The treatment processes must comply with the federal standards and requirements of the Safe Drinking Water Act. This plant has a filtering capacity of 60 million gallons per day (MGD). The average daily amount of water processed and treated is 35 MGD, while the average pumped to customers is 29 MGD. In 2014, it had a one day maximum of 45.4 MGD of water filtered. The plant's seven existing raw water supply pumps have an 80 MGD capacity, greatly exceeding projected needs.

The distribution system includes approximately 1,000 miles of water mains, seven existing pumping stations of varying capacity, and approximately 6,000 fire hydrants. The Evansville water system contains eight water storage facilities ranging in size from 500,000 gallons to 20 MG. The total system storage capacity is 37 MG.

One of the major challenges the Utility faces is its aging infrastructure and equipment. This, in fact, is a national challenge facing most communities across the United States. The Evansville water system was constructed in the early 1900s. Most of the water lines are cast iron, which are at the end of their life and increasingly require maintenance and expensive repairs to stay operational. Line breaks often cause collapse of the street. These necessary repairs continue to increase the Utility operating costs. The state of the system is due to years of under investment and lack of a long term capital plan for system-wide older water line replacement.



#### Figure 17-1: Water Service Area (approximate)

#### **FUTURE CAPACITY**

Table 17-1 illustrates the projected amount of water that will be required on a daily basis to meet future demands on the Evansville water system. The 10-year projection from the 2009 Water Master Plan was based on the areas designated for future growth in the 2004 Evansville-Vanderburgh County Comprehensive Plan. The 2035 projected water demand will need to accommodate the areas planned for development on the Future Land Use Map in Appendix I. The projected rate of population growth of about seven percent through 2035 should be a good indicator of future water needs. The table below shows that the 2035 daily water use is projected to increase by 4 MGD from the 2014 level to a total of 33.8 MGD.

# Table 17-1: Projected Average Day User Demand in MGD (Million Gallons per Day)

Existing Filtering Capacity	2014	2018 Projected	2035 Projected*
60	29.7	31.5	33.8

Note: \* Projection from Water Master Plan extended at same growth rate to 2035

# **PUBLIC UTILITIES**

#### **RECOMMENDED WATER SYSTEM IMPROVEMENTS**

The primary responsibility of the Evansville Water Utility is to provide customers with an adequate supply of high quality water at acceptable pressures. In order to evaluate whether the system is accomplishing this responsibility, periodic hydraulic analyses are conducted. These identify deficiencies in the distribution system and facilitate the establishment of an improvement program designed to reinforce the existing system, keep pace with growth, assure high quality water service, and provide a reliable base for commercial and industrial development.

A Capital Improvement Projects (CIP) list was developed to address the improvement needs through Year 2018. The total cost of the capital water projects proposed to 2018 is \$90 million dollars. With the current and projected demands, the CIP developed for the water filtration plant and the distribution system will keep the system at least 20 percent ahead of demand through Year 2018. The 2035 projected daily user demand of 33.8 MGD is well below the existing 52.5 MGD filtering capacity at the Water Plant. Therefore, unless water demand is much higher than currently anticipated, there should be adequate excess water capacity in 2035. A new 30-year Water Master Plan will be completed in 2016 which will explore and make recommendations for plant capacity and distribution system improvements.

### SEWER

The area where sewer service is currently available includes the City of Evansville and the portions of Vanderburgh County shown on Figure 17-2. This area contains approximately 60 square miles. Buildings in the portions of the County located outside of the existing sewer service area are on individual septic systems. The Town of Darmstadt's pressurized sewer system connects to and discharges sewage through the Evansville wastewater collection and treatment system.

#### **EXISTING TREATMENT FACILITIES**

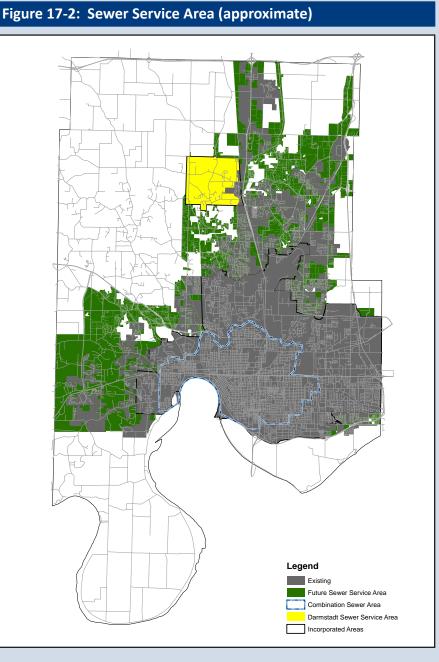
The Water and Sewer Utility owns, operates, and maintains the City sewer system including two wastewater treatment plants (WWTP) referred to as the East and West Plants. Built in 1954 and 1956 respectively, the WWTP's have undergone several improvement and upgrade projects over the years. Table 17-2 describes the two plants' capabilities.

# Table 17-2:Treatment Plant Statisticsin MGD (Million Gallons per Day)

Plant	Treatment	Design Capacity	2014 Process Average Flows
East	Secondary	22.5	12
West	Secondary	30.6	12

#### COLLECTION

The collection system contains approximately 890 miles of sewer collector lines and 93 lift stations. Some of these collectors carry separated wastewater and some carry combined wastewater and storm water. The construction of separate systems has been required for all new development since the mid 1970's.



#### SECTION 17 Evansville-Vanderburgh County Comprehensive Plan

#### **COMBINED SEWERS**

The first wastewater collectors to be installed were the combination storm water and sanitary sewers. These combined sewers were made of brick and many of them were built over 100 years ago. There are over 500 miles of combination sewer lines in the system. The majority of the older areas of the City (south of Pigeon Creek, roughly west of Vann Avenue and east of Tekoppel Avenue) are served by the combined collectors. This area is shown in the Sewer Service Area Map in Figure 17-2.

During heavy rainfall, Evansville residents are all too familiar with the problems associated with the combined system. These problems include local street flooding, reduced capacity and efficiency of the treatment plant operations caused by treating storm water, sewers backing up into basements, and direct sewage overflow discharge. When the amount of storm water in the system exceeds plant capacity, the overflow gates open to allow the contents of the combined sewers to discharge directly into the Ohio River and Pigeon Creek. These gates and discharges are known as combination sewer overflows (CSOs). There are a total of 22 permitted CSO outfalls in the collection system -- nine discharge into the Ohio River, nine into Pigeon Creek and four into Bee Slough. To provide a quantitative figure on the magnitude of this problem, the Utility estimates that 2 billion gallons of sewer overflow are discharged on an average annual basis.

The City has made progress over the years to separate the sewer systems. In conjunction with major road widening projects, the City has separated the storm and sanitary sewers along corridors such as St. Joseph Avenue, Weinbach Avenue, Fulton Avenue, Diamond Avenue, and Vann Avenue. Areas that will benefit from future separation projects include both sides of Diamond Avenue, the State Hospital, and around Akin Park.

# **PUBLIC UTILITIES**

More than a thousand cities throughout the United States have or have had combined systems similar to Evansville's. To meet U.S. Clean Water Act standards, these cities must eventually eliminate combination sewers, and many of them are currently going through the process of making system changes to comply with this mandate. The list includes cities in Indiana such as Indianapolis, Fort Wayne and South Bend.

To this end, the City of Evansville Water and Sewer Utility entered into a Consent Decree with the federal government and the State of Indiana in February, 2011 on a plan to address the combination sewer overflow volumes through remedial actions. Consent Decree modifications were agreed to by the parties in February, 2016 in final negotiations that resulted in additional projects being included in the CSO plan at an estimated total cost of \$729 million to be phased in over the next 24.5 years. The effort to comply with the Consent Decree and the specific mandates of the agreement with state and federal regulators is known as "Renew Evansville". In accordance with the agreement, the Utility developed an integrated set of specific planning documents creating:

- An overall capital improvements plan for the Combined Sewer and Sanitary Sewer Systems, referred to as an Integrated Overflow Control Plan (IOCP), which proposes to remedy the capacity, operation and maintenance deficiencies in the Sewer Systems and the East and West Treatment Plants. The IOCP contains two distinct parts: the Sanitary Sewer Remedial Measures Plan (SSRMP); and the Long Term Control Plan (LTCP).
  - The SSRMP is a prioritized set of projects focused on identifying and addressing any recurring capacity-related sanitary sewer overflows, system defects, and deficiencies that could potentially cause or contribute to overflows; and
  - The new LTCP identifies strategies to reduce the frequency and duration of overflows from the combined sewer system.

#### Major IOCP Projects and Consolidated Cost Estimates (in millions)

•	Work at CSO Locations	\$284.06
•	Treatment Plant Improvements	\$107.00
•	Seventh Avenue Lift Station	\$110.79
•	Wetland at Bee Slough	\$151.20
•	Downtown Green Infrastructure	\$ 18.03
•	Sanitary Sewer Upgrades	\$ 53.56

Under the new modified terms of the Consent Decree, 98 percent of the sewage overflow that currently goes into the Ohio River will be captured, allowing Evansville to comply with the Clean Water Act. Additionally, EWSU will create one of the largest wetland treatment systems in the U.S., replacing Bee Slough with a sustainable, green infrastructure solution. Other upgrades include the addition of several storage facilities, improvements to the wastewater treatment facilities, and the separation of combined storm water and sanitary sewers.

The City will use a combination of options to eliminate sanitary sewer and combination sewer overflows by: continuing to separate storm sewers from the combined sewers; reducing the amount of storm water entering the system; increasing storage prior to treatment; increasing treatment plant capacity; and adding satellite treatment. As part of the last option mentioned, the Utility's strategy will also involve a Green Infrastructure (GI) component. The GI initiative will include ways to eliminate storm water from entering the combined sewers by increasing infiltration (green areas allowing percolation of water into the soil), interception/ absorption by new trees and other plantings; and storm water reuse. Implementation of the GI initiative will likely involve policy and ordinance changes.

Given the importance of the Consent Decree, complying will be a major emphasis of the Water and Sewer Department for the foreseeable future. The City's goal is to accomplish compliance in a manner that minimizes sewer rate increases needed to fund system improvements. Achieving this goal, however, will be complicated by the fact that Renew Evansville will be the most extensive and costly capital improvements initiative ever undertaken by the City.

#### **RECOMMENDED WASTEWATER IMPROVEMENTS**

A system-wide wastewater plan was prepared for the City in 2009 by a consultant. This Plan addressed existing deficiencies and future needs by identifying a list of recommended long-range capital improvement projects to be implemented. This plan will expire in 2018 and a new master plan effort is underway to run parallel with the Consent Decree. A new 30-year Wastewater Master Plan will be completed in 2016 which will explore and make recommendations for non-Consent Decree projects including lift station rehabilitation, waste treatment plant modification for pending additional regulations, collection system rehabilitation, and collection system expansion for projected growth.

There are several projects related to CSOs currently underway or in the planning stage involving the addition of green infrastructure, underground storage and infiltration of storm water, inflow and infiltration reduction projects in the sanitary sewer system, large interceptor cleaning, and the addition of inlets in Bee Slough. Aside from these current projects, the final approved IOCP, along with the non-IOCP project list, will contain a well defined project list of improvements for the City to work from. Implementation of these improvements by the City will fulfill the federal mandate.

Extensions of the existing sewer service area are expected to occur in the future to serve new development. Figure 17-2 shows the recommended 2035 future service area. This area is based upon past growth patterns, the results of the land use model and the Area Plan Commission 2035 growth projections.

The areas recommended for sewer service extension are:

- The remaining un-served pockets in the City;
- The remaining un-served portions of unincorporated Center Township;
- The areas around the Boonville-New Harmony/I-69 and S.R. 57/I-69 interchanges due to growth expected from the I-69 project; and
- Western unincorporated Perry Township including the area around the University Parkway south of Upper Mt. Vernon Road.

Sanitary sewer improvements must be in place for extensive development to occur. Proper utility planning is needed to guide utility extensions to serve these growth areas.



### **PUBLIC UTILITIES**

### STORM WATER DRAINAGE

Evansville's terrain, soil characteristics, proximity to the Ohio River, and existing drainage system contribute to making surface water drainage a complex problem. This is especially true for the City's east side, since much of this area is very flat.

Currently, surface water drainage is controlled through a variety of conveyance facilities. As previously discussed, the older parts of the City are served by combined sewers. During heavy rainfall, these sewers can become overloaded which results in localized flooding and, potentially, adverse health issues. Newer developments are generally constructed with separate storm sewers that normally discharge into drainage basins where the water can be stored and slowly released. Depending on the circumstances, sometimes storm water is directed into nearby water features or continues through the separate storm sewers and into the combined sewer system. The rural area and some portions of the City are served by a system of streams, legal drains and ditches.

In 1997, an engineering consultant prepared a long range Storm Water Master Plan for the City to identify improvements needed to resolve localized flooding and storm water drainage problems. Work was done to implement projects recommended, and in 2007, the City updated the Storm Water Master Plan to reflect the work performed and plan future improvements.

In both the Master Plan and the 2007 update, various solutions were studied and identified for their ability to reduce, mitigate, or eliminate drainage and flooding problems. The solutions were categorized as either structural or non-structural and also according to their scale, at the neighborhood, watershed, or system-wide level. Priorities were established for the projects based upon criteria such as population served, cost effectiveness, and ability to be constructed. Since 1997, the City has designed and constructed system-wide drainage projects at a cost of \$80 million.

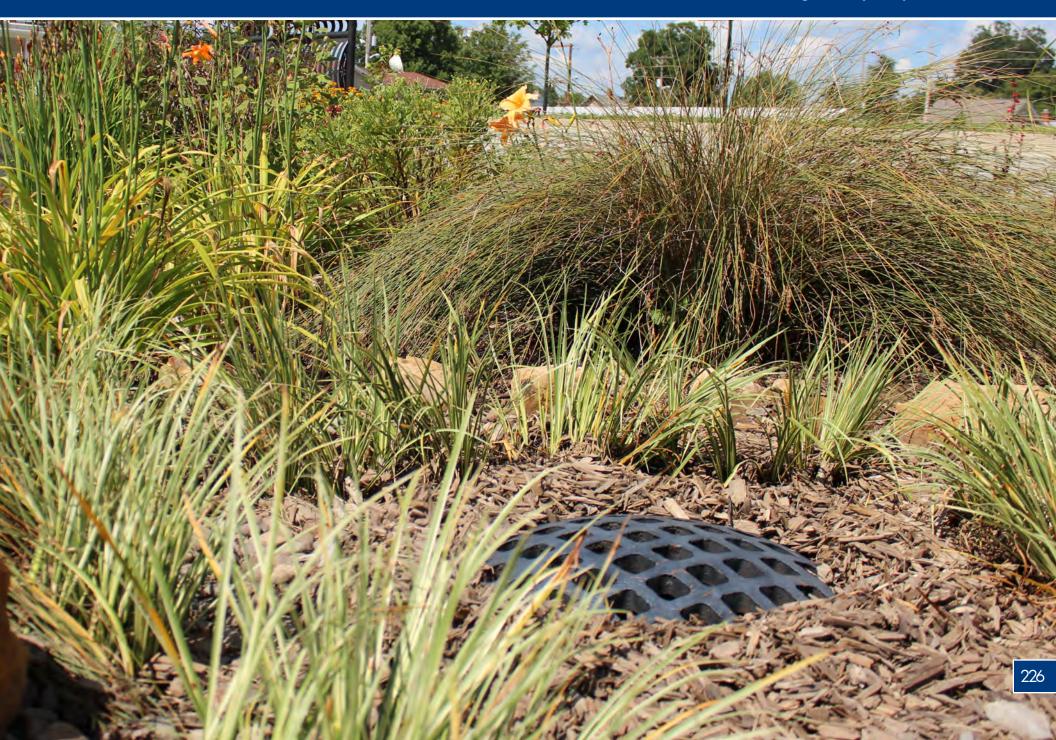
The City continues to work on drainage projects as proposed in the Storm Water Master Plan. Examples of these recently completed drainage projects that have a substantial impact on the CSO problem are the Southeast Side Drainage Projects in the area generally bounded by US 41, Washington Avenue, Green River Road and Pollack Avenue.

Management of storm water in Evansville and Vanderburgh County is generally the responsibility of the Evansville Board of Public Works and the Vanderburgh County Drainage Board (County Commissioners). The staff for the County Drainage Board is the County Surveyor's Office who inspects and maintains the Legal Drains in both the City and County. Because the control of surface water drainage in Evansville and Vanderburgh County is complex, proper management is an important concern. Proper planning and design are essential for subdivisions and other large developments (e.g. shopping centers and apartment complexes) that will have large areas of impervious surface or require placement of substantial fill. Design considerations are evaluated for these projects through the commercial site review and subdivision review processes. Developers should be encouraged to use the best management practices (BMPs) in storm water management such as bioswales, rain gardens and pervious pavement.

A comprehensive drainage system plan is needed to integrate the variety of existing and new facilities into a comprehensive system that provides adequate drainage throughout the County. This planning effort would require coordination and participation by the City and County Engineers, the Board of Public Works, the County Commissioners, the Area Plan Commission, the Water and Sewer Utility, the County Surveyor and the County Drainage Board.

In addition to managing the quantity of water flowing into the drainage system, another issue with storm water involves the quality of the runoff. There are federal (Clean Water Act), state and local requirements to reduce the amount of pollutants that enter the drainage system and ultimately the Ohio River. These requirements include goals for six different water quality measures along with evaluation and reporting efforts for each; the development and implementation of best management practices; and the establishment of a permit program to control pollution in storm water discharges from municipal separate storm sewer systems.

### SECTION 17 Evansville-Vanderburgh County Comprehensive Plan



# **PUBLIC UTILITIES**

### **RURAL SEPTIC SYSTEMS**

On-site sewage disposal plays a vital role in the development of the County due to the lack of available sanitary sewers in much of the unincorporated area. The type of soil that exists can also be a development constraint. According to the Soil and Water Conservation Service of Vanderburgh County, approximately 95 percent of the soils in the County have severe limitations for on-site sewage disposal. This often causes problems for septic systems to operate properly. In areas not served by City sewers and having unfavorable soils, the County requires a minimum lot size of 2.5 acres for new septic systems. This requirement impacts the density at which new development can occur.



### **SOLID WASTE**

Solid waste generated in Evansville and Vanderburgh County is primarily disposed of at the Republic Services d/b/a Allied Waste Laubscher Meadows Sanitary Landfill on St. Joseph Avenue, north of Mill Road. This privately owned landfill located on more than 200 acres has been operating under an IDEM permit since 1978. It is the only final disposal facility for municipal solid waste in Vanderburgh County.

As specified by their local permit and written agreement, Laubscher Meadows is a regional landfill that only accepts waste from the MSA counties. The destination of the waste generated in Vanderburgh County was at one time almost exclusively (99%) taken to Laubscher Meadows. However, the amount of waste sent out of the County for disposal has now increased to 40 percent. At the current rate of disposal, Laubscher Meadows has about 20 years of capacity remaining. Since the permitting and approval for a new landfill is a lengthy process, site selection for a new landfill should be initiated in about 10 years. This assumes that the future amount of waste disposed at Laubscher Meadows per year remains about the same. Therefore, this schedule will need to be adjusted if drastic changes occur in the rate of disposal.

Allied and Veolia Environmental Services are the two major disposal companies that provide trash collection in the City and the County. These two businesses, along with several local independent companies, provide service to the unincorporated areas of Vanderburgh County and to the Town of Darmstadt for residential, commercial and industrial customers. The City's biweekly curbside recycling is provided by Allied. The collected recyclables are taken to Tri-State Resource Recovery for processing and marketing. Tri-State Resource Recovery has become the "processing center" that is considered critical to reaching the Solid Waste District's diversion goals. In addition to this program, there are 31 private companies and not-for-profit organizations on 43 sites that accept drop-off recyclables. Weekly yard waste collection is offered by Allied in the City from the spring through fall. Allied customers also have access to a state-registered compost facility adjacent to the landfill. A Heavy Trash Pick-Up Program is also offered in the City biannually.

#### SOLID WASTE DISTRICT

The mission of the Vanderburgh County Solid Waste District is to:

Inform and educate the citizens of the City and County about proper waste disposal, waste reduction, reuse, and recycling, in conjunction with the private sector, to ensure quality services in these areas.

In 1991, The Vanderburgh County Commissioners created the District and a Board of Directors. In 1992, the District Board adopted The Solid Waste Management Plan, which addresses solid waste services, waste reduction education, and recycling. The goal of the Plan is to not only reduce the amount of material entering the waste stream through source reduction and reuse, but to increase the amount of recycling in all sectors, especially the residential and commercial sectors. The Board guides an ongoing education and marketing program emphasizing reduction, reuse, and recycling to reach established goals. The Board also ensures that the private provision of waste disposal programs, services, and facilities are compatible with the Plan.

Education is one of the major functions of the Solid Waste District. The Solid Waste Plan calls for an education program to improve the awareness and understanding of solid waste management activities in Vanderburgh County and ensure that the waste reduction goals are achieved. The implementation of a successful recycling and source reduction program depends upon the extent to which the behavior of Vanderburgh County residents can be changed in these areas.

To promote the recycling message in the community, the District provides various programs to schools and civic groups about waste reduction, recycling and household hazardous waste. In addition, the District offers various programs to the public including: Annual Household Hazardous Waste Collection Day, Bi-annual Tire Amnesty Day, Monthly Drop-off Recycling Days, and Computer and Electronic Recycling Days.



# **PUBLIC UTILITIES**

### WATER AND SEWER UTILITY ACTION PLAN

Source: Water and Sewer Utility, community input and Area Plan Commission

#### GOAL

• Provide the Evansville metro area with high quality, safe, dependable water and sewer service at rates which encourage economic development. The Utility will manage land and water resources to ensure quality for future generations.

#### **OBJECTIVES**

- To improve treatment plant facilities and processing to meet the needs of the community while simultaneously achieving compliance with Federal and State regulations, particularly Clean Water and Safe Drinking Water Act Amendments.
- To keep a 20 percent capacity surplus so that the system can stay ahead of the demand for new water and sewer service.
- To increase the system's reliability and maintain minimum residual pressure of 20 pounds per square inch under maximum hour demand conditions.

#### POLICIES

- A financing mechanism should be developed for extending and connecting service to all unserved structures within the water and sanitary sewer service areas.
- Implement the recommendations of the Water and Sewer Master Plan.
- All costs associated with extending and/or accessing the water and sanitary sewer network for new service to a development are the responsibility of the developer.

- After inspection and acceptance, the Utility shall assume ownership and maintenance of all water and wastewater facilities installed in the service area.
- Unaccepted facilities not meeting adopted standards shall be privately maintained and their expansion shall be prohibited until standards can be met.
- Ensure that the water and sewer system improvements necessary to accommodate new development are in place when needed to mitigate development impacts.

#### **OBJECTIVE**

• Phase out the flow of storm water through the combined sewer system to reduce the clear water volume reaching the treatment plants.

- Give priority to the use of green infrastructure concepts and other cost effective alternatives to meet the requirements of the Consent Decree in a manner that minimizes structural improvements and substantial sewer fee increases.
- To help lessen the quantity of storm water entering the system, encourage land owners/developers to add green space and plantings including trees that intercept and absorb water, and allow for infiltration of runoff into the ground.

### STORM WATER DRAINAGE ACTION PLAN

#### GOAL

• Continue to improve the capacity and operation of the storm water drainage system as budgetary and personnel constraints permit.

#### **OBJECTIVE**

• Reduce the extent and duration of localized flooding.



- Identify developed areas where frequent localized flooding occurs, prioritize these problems, and develop alternatives for reducing, mitigating, or eliminating the problems through both structural and non-structural means.
- Where flooding problems have been identified, increase the capacity of the drainage system to accommodate short, high-intensity storms and employ alternatives that reduce the volume of storm water the system must handle including reduction of the allowable flow rates from new developments.
- Develop and adopt a City drainage ordinance that will be consistent with the County ordinance.
- Ensure that post development storm water runoff does not exceed pre-construction volumes, thereby reducing the impact of new development on the existing drainage system.
- Encourage the incorporation of green infrastructure concepts and other best management practices for storm water management in planning and design of new development/ redevelopment.
- Investigate pursuing and documenting creditable activities under the NFIP/Community Rating System that relate to Storm Water Management.
- Investigate the establishment of a joint City-County storm water utility to oversee drainage, permitting, compliance, and facilities within the County.
- Encourage developers in growing areas to work together on constructing regional storm water detention facilities that will serve multiple, large scale developments.
- Investigate legislative options to ensure consistent maintenance of Pigeon Creek, and for a better method to establish legal drains.

# **PUBLIC UTILITIES**

### SOLID WASTE ACTION PLAN

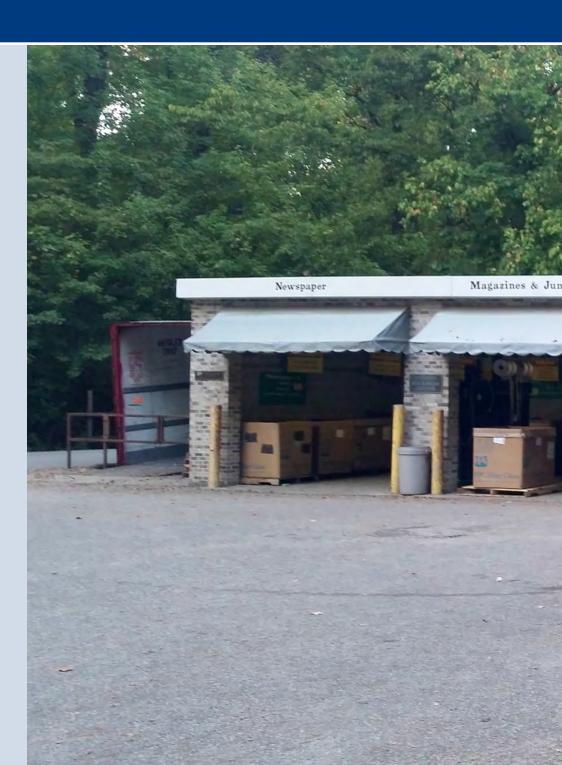
#### GOAL

• Ensure that waste disposal services are provided to meet the existing and future needs of our community in a manner that is environmentally sound, and that incorporates waste reduction, reuse and recycling practices, in conjunction with the private sector, to reduce the waste stream and conserve land/resources.

#### **OBJECTIVE**

• Maintain the rate of reduction in Vanderburgh County's solid waste stream, and meet any federal or state waste reduction goals enacted in the future.

- Investigate the establishment of a regional solid waste management district which could provide desired efficiencies in the management and provision of this service.
- Since the design, permitting and approval for a new landfill is a lengthy process, site selection for a new landfill facility should be initiated about 10 years prior to the date Laubscher Meadows is forecasted to reach its capacity.
- Investigate the creation of a community composting program.
- Investigate creating a construction and demolition recycling center and debris landfill.







# **SECTION 18: URBAN DESIGN AND HISTORIC PRESERVATION**



### **URBAN DESIGN**

The process of shaping the physical form or built environment to fulfill the needs and reflect the values of its residents is called urban design. Also described as "the art of place-making", urban design is used to improve a community by focusing on the way buildings, streets, public spaces and other development relate to one another and create a visual image of the community. This discipline is as concerned with the placement of buildings and the spaces in between, as it is with the buildings themselves. Because people increasingly choose areas that are attractive and socially inviting, the importance of urban design to the economic well-being and perception of a community has never been greater.

The City's first plan, written in 1927, included a section titled "The City's Appearance", which recognized the value of good urban design qualities. This document includes many elements that remain relevant today, and could be used as a foundation for development of a new urban design plan.

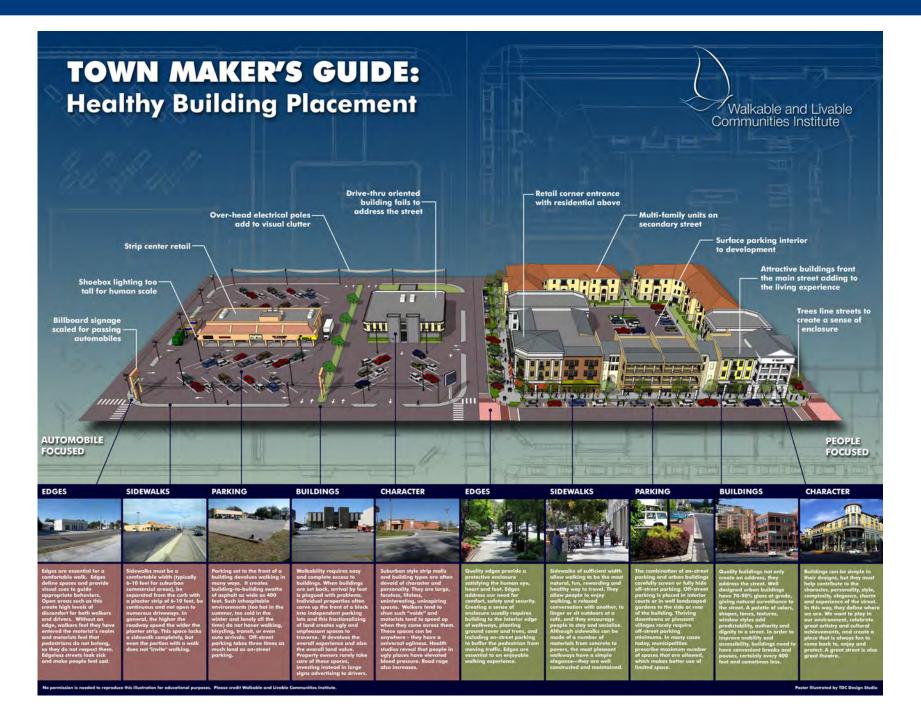
Good urban design is achieved when perception of the surroundings stimulates positive human thought/emotions through attractive appearance and functional efficiency. Urban design can function at three levels in shaping the community identity:

**City/County** - concerned with general elements of a City that unify and provide a sense of physical and social community (i.e., urban form, skyline, variety of heights and architectural styles, layout and arrangement of streets, buildings, parks, etc.).

**Neighborhood** - concerned with focal points, intersections, strengthening boundary features, revitalization, the maintenance of older neighborhood character, and visual and physical connections.

**Corridor/Street/Individual Project** - concerned with micro elements including building setbacks and height; streetscape/ sidewalk elements such as trees, lighting and furniture, to help enhance the character of place. An example of the of block-level design for a mixed use project that illustrates typical vs. best practices in walkability and livability is shown on Page 166.





# **URBAN DESIGN AND HISTORIC PRESERVATION**

#### STEPS TOWARD IMPROVING URBAN DESIGN

Good urban design will be accomplished when all levels of design (City/ County, neighborhood and individual project) are incorporated into a coordinated program that is adhered to over time and focused on an attractive environment and a positive community image. The elements in creating a sound urban design program include:

- Inventory and Assessment identifying what makes our city and county unique
- Regulatory Measures adopting a design standards ordinance
- Neighborhood and Subarea Planning strategy to develop/ maintain/enhance unique and identifiable character in each
- Public Awareness/Education to generate understanding and support
- Innovation efforts to avoid anywhereville
- **Coordination and Partnerships** community wide participation and collaboration.

In conclusion, a city's physical image is of paramount importance to the city's economic and social well-being. This image and conclusion is nicely illustrated in Figure 18-1, which was reproduced from the 1927 City Plan.

#### Figure 18-1: Graphic from 1927 "The City's Appearance" Plan

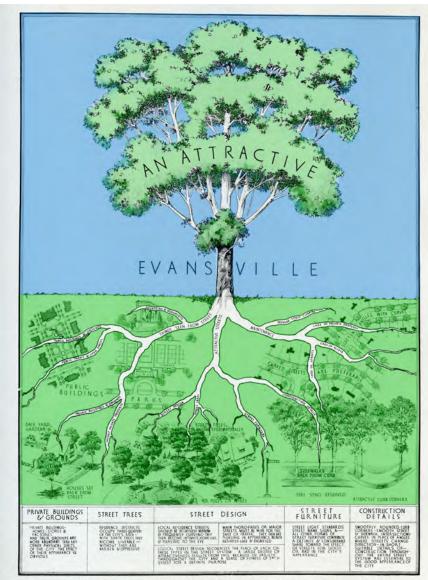


PLATE 1. In this diagram the city is likened to a beautiful tree. The beauty of a tree depends largely upon healthy roots and proper nourishment. Street design, street trees, buildings and grounds are among the basic elements on which the beauty of the city depends.

### **HISTORIC PRESERVATION**

Historic resources reflect and record a community's cultural heritage. This section discusses the importance of preserving historic resources, identifies nationally and locally recognized historic features, and recommends strategies for preservation action. Since these resources symbolize an area's cultural heritage, preservation can strengthen sense of place and community pride. Strategies to preserve these resources must be addressed in the community's plans for the future.

Historic preservation generates significant social, economic, educational, and recreational benefits for the community. Preservation offers an alternative to a deteriorating urban core and the high cost of new housing construction. Preservation makes good economic sense: for business, through the use of available tax credits; for material conservation, because less material is consumed in restorations and rehabilitation than in new construction; for public services, by taking advantage of existing public utilities and established police and fire services (and in doing so, reducing costs and keeping taxes down); and for neighborhoods, by stabilizing the neighborhood and increasing property values, as well as creating a better sense of place and belonging.

Preservation trends favor the technique of adapting or maintaining historic structures for residential use wherever possible. In the past, historic structures were preserved only as museums. In addition to contributing to the community's assets, more widespread use of preservation allows historic buildings to continue as viable structures, whereas vacant structures only continue to deteriorate.

#### IDENTIFICATION AND PROTECTION OF HISTORIC RESOURCES

Historic resources are fragile, limited, and nonrenewable. To be of benefit, they must be carefully monitored and protected. Evansville's Historic Preservation Ordinance was passed by the City Council in order to designate, enhance, and protect outstanding elements of the natural and man-made environment which make up the City's cultural heritage. The Historic Preservation Ordinance also was passed in order to: stabilize and improve property values in areas of cultural architecture, archaeological, or historic significance; foster civic pride; protect and enhance the City's appearance as a stimulus for business and industry; and promote and maintain productive use of land and buildings.

# **URBAN DESIGN AND HISTORIC PRESERVATION**

#### NATIONAL REGISTER OF HISTORIC PLACES

The National Historic Preservation Act of 1966 created the list known as the National Register of Historic Places. In Indiana, the register is administered by the Indiana State Division of Historic Preservation and Archaeology. The National Register is the official list of sites, buildings, structures, districts and objects which qualify by being at least 50 years old and by possessing significance in relationship to historic events, famous persons, architecture, or information. The benefits of designation on the National Register, include:

- Auditorium-Soldiers and Sailors Memorial Coliseum;
- prestige and publicity;
- protection for the property from potential impacts of federally funded projects;
- rehabilitation of historic buildings and investment tax credits to owners; and
- federal grants for preservation projects.

On the Evansville and Vanderburgh County National Register list there are: (For some examples, the date listed is when they were placed on the National Register)

- National Historic Landmark Angel Mounds State Memorial (1966);
- Historic Districts, which are: Bayard Park, Culver, Evansville Downtown, Independence, Lincolnshire, Riverside, and Washington Avenue;
- Multiple Resource Area which includes numerous individual properties located within Downtown Evansville (1982);
- Examples of the categories for properties on the National Register include:
  - Individual homes Reitz Home, now a museum (1973)
  - Commercial Municipal Market (1983)
  - Government Old Court House (1970)
  - Theater The Alhambra (1979)
  - Library Willard (1972)
  - Infrastructure the Ohio Street Bridge, now the Joan Marchand Overlook (1998)
  - Landscape Garvin Park (1980)
  - Military LST 325 (2009)
  - Auditorium Soldiers and Sailors Memorial Coliseum (1979).

#### SECTION 18 Evansville-Vanderburgh County Comprehensive Plan

#### INDIANA REGISTER OF HISTORIC SITES AND STRUCTURES

The State Register was created by law in 1981. All properties on the National Register are automatically listed on the State Register. The criteria and benefits of being listed on either or both of these Registers are virtually the same. However, in Evansville there is only one set of properties on the state list - Downtown Multiple Resource Area.

#### **INDIANA HISTORICAL MARKERS**

Another State program to designate historical sites is the Historical Marker Program. There is a specific application and review process established by the Indiana Historical Bureau to determine the significance for placement of a marker. There are seven Historical Markers in the City and County.

A list of the National Register sites and Indiana Historical Markers are provided in Appendix G.



# **URBAN DESIGN AND HISTORIC PRESERVATION**

## **URBAN DESIGN ACTION PLAN**

#### GOAL

• Incorporate all levels of Urban Design into a coordinated program to achieve an attractive social environment, functional efficiency, and a positive community image.

#### **OBJECTIVE**

• Urban Design should be focused on infill development that enhances the character of the Downtown, West Franklin Street, and the Arts District.



#### POLICIES

- Strengthen existing focal points and create new focal points to connect elements of historic and natural importance, creating interest and variety in the community landscape.
- Utilize appropriate materials and progressive techniques in the design for new public and private improvements such as streets, landscaping, signage, and lighting to enhance the quality of the environment.
- Investigate updating the Zoning Ordinance to incorporate best practices in walkability and livability in key districts.
- Utilize Complete Street design that creates safe and welcoming public space for pedestrians and bicyclists.
- Research the feasibility of placing overhead utility lines underground within new major subdivisions and redeveloped areas; and then evaluate establishing criteria / priorities for burying existing lines.
- Support the appropriate placement of public art in the downtown, especially on the riverfront, Main Street, and at downtown gateways.
- Investigate the feasibility of writing a Landscape Ordinance to be included in the Zoning Code.
- Update the City and County sign ordinances to address sign size in relation to structure size, as well types of signs, design considerations in relation to the context of the location and overall community feel.

## **PRESERVATION ACTION PLAN**

#### GOAL

• The community needs to continue taking strong progressive actions to preserve the historical resources that interpret our rich cultural/architectural heritage.

#### **OBJECTIVE**

• Continue to survey and document the historic landmarks, structures, neighborhoods, and business districts that give character and are part of defining Evansville's image.



#### POLICIES

- Identify, catalog, and evaluate historic resources not already listed in the National Register for the City and County which have special architectural, historical, archaeological or cultural value; and provide documentation that establishes and verifies their significance.
- Maintain the defined catalog of historic resources and monitor the list so that identified sites are considered as resources needing special attention or protection during review of proposed new developments in the City and County.
- Continue to place the most significant resources on the National Register. Listing on the National Register adds strong impetus to preservation by calling attention to a significant historic resource.
- Expand the present Historic Preservation Ordinance and Commission to include historic areas in the County to assure a comprehensive historic preservation effort and program.
- Seek available federal, state and private sources of funds for preservation and restoration activities and acquisitions.
- Recommend to the proper agencies and property owners incentives to encourage historical and cultural preservation.
- Promote urban design at the community and neighborhood levels, including the preservation and rehabilitation of historic sites.
- Locations that qualify as historic sites should be preserved and renovated for public and private use.
- Preserve the defining elements of historic buildings.



# SECTION 19: PLAN IMPLEMENTATION

E

244

## STRATEGIES TO REALIZE PLAN GOALS

For the Comprehensive Plan to be effective, it is essential that continuous implementation efforts are a community priority. The Plan is a statement of the community's goals and values about growth. Diligent consideration of the Plan in making land use decisions is basic for implementation. Land use decisions that reflect the land use plan and the goals, objectives, and policies help to implement the Plan. Implementation can also occur by actions of government agencies other than the APC, adoption of amendments to land development regulations, private development and partnerships between public, private, and non-profit sectors. This section discusses the various actions necessary for successful Plan implementation.

## **DEVELOPMENT EVALUATION**

#### **USE OF THE COMPREHENSIVE PLAN**

When development or other proposals are submitted for action to the Area Plan Commission, the City Council, Town Board of Darmstadt, or County Commission, they should be evaluated for their consistency with the Plan. As a part of this evaluation, a thorough review and interpretation of the Plan is necessary with particular

attention given to land use goals, objectives, and policies. This review involves a determination of whether the Plan provides relevant direction and whether the requested action is in conformance with the Plan. Proposals creating a more extensive impact will require a more detailed analysis and consistency determination. It is likely that there will be development proposals which do not conform to the Comprehensive Plan. Modification of these proposals to make them more consistent with the Plan should be discussed when warranted, based on the results of the proposal and plan reviews. If denial or modification of an inconsistent proposal are not desirable options, the benefits of the project to the community should be weighed against the Plan recommendations. One option to make a project more beneficial to the community is voluntary developer commitments offering site design elements that go beyond requirements in the Code.

"All human situations have their inconveniences. We feel those of the present but neither see nor feel those of the future; and hence we often make troublesome changes without amendment, and frequently for the worse."

- Benjamin Franklin

Administrative procedures for Area Plan Commission meetings should be developed and adopted to help land use decision makers in their review and evaluation of development proposals.

The following criteria should be used to evaluate proposals:

- The suitability of the property for the proposed use and those allowed by the Zoning Ordinance;
- The land use compatibility with existing adjacent land uses;
- The existing and future character of the surrounding area;
- The type and extent of positive and/or detrimental impacts to adjacent properties or the community at large;
  - The impact of the proposal on public services, utilities, and facilities;
  - The benefits or impact to the public health, safety and welfare;
  - The relative conformance of the proposal to the land use plan and its goals, objectives, and policies; and
  - The consideration of responsible development and growth, and any other relevant information.

In planning, administrative, or legislative proposals (such as a subarea plan, capital improvement program, or a zoning ordinance amendment), a similar evaluation is required to identify potential conflicts between the proposal and the Comprehensive Plan. The Area Plan Commission's evaluation should include the following:

- Evaluation of the proposal relative to the extent to which it is consistent with each Comprehensive Plan section and the Future Land Use Map, including the identification of the specific goals, objectives, and policies that the proposal would help to implement or would conflict with; and
- Identification of adjustments to the proposal that would reduce any noted conflicts or negative impacts, and/or if appropriate, possible Plan revisions that could be made in the next Plan update to accommodate the proposal.

#### USE OF THE ZONING AND SUBDIVISION ORDINANCES

Zoning and Subdivision Ordinances have traditionally played a major part in the long-term process of implementing the Plan. The legal framework for the land development regulations is established by the Plan, and these ordinances are tools used for Plan implementation.

Indiana Code 36-7-4-603, which concerns the consideration of proposals under local zoning ordinances, states:

"...the plan commission and legislative body shall pay reasonable regard to: the comprehensive plan;...responsible development and growth".

"Communities can be shaped by choice,

or they can be shaped by chance. We can

keep on accepting the kind of communities

we get, or we can start creating the kind of

- Richard Moe, President,

Historic Preservation

National Trust for

communities we want."

The Subdivision Code for the City (Section 17.05.020) and County (Section 16.04.020) both state:

"The purpose and intent of these regulations is to serve as a guideline encouraging the proper planning and development of subdivisions in order to: ...Guide future growth and development in accordance with the comprehensive plan;..."

Even the first City Plan in 1925 addressed the need for the subdivision of land to be coordinated with an overall plan as follows:

"The purpose of this requirement is not to restrict or handicap the man who wants to plat his property, but to bring his work into harmony with that of others by means of a broad city-wide plan."

This historic plan continues by pointing out that developers' efforts should be coordinated so that the platting of lots does not cost the community in health and well being, or create streets that are a public liability. The most common way that the Comprehensive Plan is implemented is through the administration/enforcement of the Zoning and Subdivision Code requirements. To assure conformity between zoning regulations and the Comprehensive Plan, and to provide for an orderly and responsible sequence of development, the following principles should be employed:

- Zoning should be used to guide development activities into appropriate locations and to enforce development/ redevelopment standards in accordance with the Plan; and
- Zoning districts should be designated and administered in such a way that protection is given to the existing and future use areas from encroachment by uses inconsistent with the Plan.

Rezoning requests and proposed subdivisions should be evaluated thoroughly using the criteria previously listed, especially the Plan's goals, objectives, and policies. In some instances, certain conditions must be in place before land can be used as indicated in the Plan. For example, commercial, industrial and substantial residential uses should not be located in outlying areas until there is adequate infrastructure capacity to support this development.

It is recommended that the Zoning and Subdivision Ordinances be modified as needed to help implement the goals, objectives, and policies in the Comprehensive Plan, and specifically to promote a more compact and efficient city. Modifications concerning the Zoning and Subdivision Ordinances that could be pursued include:

- Periodically review and amend, as necessary, to clearly reflect community needs and values;
- Continually evaluate and revise, where necessary, to ensure that the administrative procedures and process of development review does not impede sound economic development;
- Consider amending the Zoning Ordinance by adopting the plan development procedures allowed by Indiana planning law for specific zoning districts.

Development or modification of other related planning documents may be needed to further enable successful implementation of the Comprehensive Plan. These planning documents include:

- Develop a capital improvements program document that includes proposed City and County projects from the Comprehensive Plan, the Parks Master Plan, the EMPO Transportation Improvements Program, bridge rehab and street repaving projects, sidewalk replacement, water and sewer projects, housing and community development projects and subarea plan projects from the Downtown Master Plan, Redevelopment Area Plans, and the CSO area projects.
- Develop a newly revised Thoroughfare Plan based on a review of the right-of-way standards needed for each type of street and the new road functional classification categories now recognized by federal and state transportation agencies. Adopt an updated Thoroughfare Ordinance that reflects this new Plan.
- Update the current Access Management Manual and adopt the newest standards so their status is elevated from being recommended criteria to mandated requirements.
- Develop and adopt a City Stormwater Drainage Ordinance consistent with the existing County Ordinance that includes special CSO area regulations.

### **INVESTMENT IN PUBLIC IMPROVEMENTS**

To achieve the Comprehensive Plan goals, objectives, and policies, continual investment in public and private improvements will be necessary. These investments, guided by a strong capital improvements program, should direct development and redevelopment. By supporting redevelopment that upgrades streets, sidewalks, utilities and other public improvements in older areas, the City will benefit by making the Urban Core more attractive to stimulate infill, growth and investments.

Infrastructure investment in growth areas also impacts future development. Growth means additional houses, families, and traffic; expanded streets, water and sewer systems; and increased demand on schools, parks, and police and fire service. Evansville and Vanderburgh County have been successful in obtaining developers' assistance and cooperation in dedicating right-of-way and constructing new roads. These new roads improve access, thereby increasing land values and possibilities for additional development. Developer investments for roads also decrease the financial burden on the City and County.

Where appropriate, the Water and Sewer Utility Department encourages developers to construct water pump and sewer lift stations with extra capacity to serve adjacent developments or vacant areas in lieu of constructing several smaller stations. The Utility Department reimburses the developer for the cost of over-sizing the pump/lift stations. Infrastructure extensions necessary to service an individual development are not the responsibility of the public sector. However, when public infrastructure investment is feasible, properly located improvements can help encourage and direct growth into desired areas that do not already have approved development plans.

## **INCENTIVES AND COMPENSATION**

Many of the Comprehensive Plan goals will require coordinated efforts by both citizens and public agencies. This cooperation may frequently involve some cost or inconvenience. In extreme instances (where the public safety or welfare is directly affected), it may become necessary to achieve certain goals through the police power of condemnation. However, in most cases, the use of police power is not warranted, and routine enforcement of the Zoning, Subdivision and Thoroughfare Ordinances is adequate to achieve the desired results.

Achieving the goals in this Plan demands an elaborate and sensitive system of incentives and compensation. It will be important to determine the costs and benefits involved in the achievement of public goals and to distribute them in a manner that is equitable to all citizens. A number of techniques have been developed which should be explored and employed, if appropriate, to facilitate the achievement of the Plan goals in an equitable way. Measures that should be investigated are:

- Encourage changes in State enabling legislation to the delinquent property tax sale process that would support Land Banking and break the cumbersome tax sale cycle thereby helping to eliminate blight in the City of Evansville.
- Provide and/or subsidize public infrastructure improvements to support or attract infill and commercial/industrial projects in outlying areas that have not already been filed for review and approval;
- Utilize available techniques to create easements (e.g. donation, transfer and purchase development rights, and direct purchase) or corridors with special regulations (e.g. overlay zoning districts) for environmental protection, recreational uses, and other public purposes; and
- Provide compensation to the owners of key agricultural land to be withheld from development through either a differential tax assessment, or transfer of development rights.

## FINANCING

The preceding discussions illustrate that many public goals can only be met through the expenditure of public funds. However, there are usually limited public funds available. If the Comprehensive Plan objectives are to be achieved, a wide variety of funding sources must be developed and utilized. A strong capital improvements program is of paramount importance in supporting plan implementation.



### FACTORS AFFECTING IMPLEMENTATION

#### EDUCATION, PARTICIPATION, AND LEADERSHIP

Broad public commitment and involvement is required to create public goals, objectives, and policies. For an effective Comprehensive Plan to be implemented, a vigorous and ongoing program of public discussion, education and participation will be necessary. It will also be important for people who are in decision making positions to understand the needs and values of the community and provide venues and forums for expressing them. Community leaders must take the initiative and help stimulate the interest and understanding that is imperative for implementation of an ongoing successful comprehensive planning process.

Efforts should be initiated to increase citizen involvement in the development of the Evansville-Vanderburgh County Comprehensive Plan. Considerable discussion and consensus are required to develop the Plan's goals. Public participation creates an environment of understanding and support for the implementation process. The VOICE process, which was initiated by Leadership Evansville and involved extensive public meetings and visioning for the community's future, is a substantial supplement to this Plan's public participation process.

### **REVIEW AND UPDATE OF THE PLAN**

The Comprehensive Plan should be reviewed about every five years. This review identifies any changes in conditions that require revisions to the information in the Plan, and involves updating the Plan to reflect these changes.

### **SUBAREA PLANS**

The development of subarea plans, such as corridor and neighborhood plans, can further assist decision makers in the interpretation and the application of the goals, objectives, and policies of the Comprehensive Plan as applied to specific areas and individual development requests. Due to the localized and more specific nature of the subarea document, more personal identification with the planning area and issues is achieved. Greater certainty for private and public investment can be achieved when plans such as these identify recommended land use at a more specific level, target the available undeveloped land, and address traffic circulation and the infrastructure improvements needed for quality development. Subarea plans can also address appropriate relationships between land uses, potential use conflicts, physical features, and urban design and open space needs.

The following guidelines should be used in determining areas that warrant subarea plans:

- where information and data indicate the highest need for neighborhood revitalization and improved community facilities and services;
- where development trends suggest rapid growth is likely to occur in the future, and/or where major land use conflicts are projected; and
- where special regulations are in effect, such as floodplains, redevelopment areas, the airport, and the historic district.

The most current Growth Management Plan that has been approved and incorporated by reference as part of the 2015 Comprehensive Plan is the I-69 Gateway Plan completed in 2010. An area for which a future plan is needed is the University Parkway corridor. The adoption and revision process for subarea plans should be similar to the process used for the Comprehensive Plan.

### SECTION 19 Evansville-Vanderburgh County Comprehensive Plan



# COOPERATIVE MANAGEMENT AND JOINT DEVELOPMENT

Many of the objectives of the Comprehensive Plan cannot be achieved unless the efforts of two or more public agencies or private organizations are coordinated. The trend in reduced government funding creates an even greater need for increased coordination and participation from the private sector. Examples of cooperative management in government are the six joint departments funded by both the City and County. Interagency agreements also help cooperative efforts such as the School Corporation and Parks Department agreement allowing public use of school playgrounds after hours. To maximize use of this strategy, every effort should be made to eliminate or reduce constraints to coordinated joint action. The development of additional cooperative agreements permitting agency funds to be pooled in joint development or joint action projects/programs should be pursued.

To clarify priorities and responsibilities for the level of coordination necessary to implement the Plan, Table 18-1 lists the policies from all the action plans that are expected to be completed within the first five years of the 20-year planning period. Although many of the policies will require action/cooperation of more than one agency, the Table also lists the lead agency (or agencies) to be responsible for completion of each policy statement. This list does not include the policies that require ongoing actions over time or those that will only be acted on in the long-term.

#### Table 19-1: Policies to be Accomplished Within Five Years

Policies	Agency		
General Land Use Action Plan			
Support the implementation of the City's Land Bank program to acquire urban land for redevelopment.	DMD, BC, APC		
Coordinate with Warrick and Gibson Counties on establishing a regional strategy for planning and development of the I-69 corridor to prepare for the future and maximize the benefits this highway will provide to the region.	APC, EMPO		
Pursue the establishment of a sub-area/corridor plan for the University Parkway that will consider adoption of an overlay zone as a tool for its implementation.	County Commissioners, APC		
Amend the Subdivision Ordinance to provide the Area Plan Commission with the authority to require special studies and to address off-site improvements as warranted to mitigate substantial development impacts on issues such as community infrastructure, services and flooding.	APC, City & County Engineers, EMPO		
Investigate changing the sign requirements in the Zoning Code to enhance/improve signage as a contributing element in the aesthetic quality of the community in general and particularly along major corridors and at I-69 interchanges.	APC		
Investigate amending the Zoning Code to establish bufferyard requirements for new development to address visual (aesthetic) compatibility issues.	APC		

Policies	Agency		
Residential Action Plan			
Expeditiously remove abandoned, dilapidated residential structures that are deemed unsuitable for rehabilitation creating shovel ready sites for infill development.	BC, DMD		
Investigate changes to the Zoning and Subdivision Ordinances that would require rezoning from Agricultural to Residential prior to platting major residential subdivisions.	APC		
Central Business District Action Plan			
Explore creating an overlay zone for the entire downtown that incorporates form based code elements.	APC, DMD		
Investigate possible funding sources and incorporate them into a financial plan to fund the public improvement projects identified in the Downtown Master Plan.	ncial plan to fund		
Commercial Action Plan			
When new or redeveloped commercial sites are located adjacent to residential areas, schools, churches, public parks, and the greenway, encourage an appropriate buffer that exceeds the minimum setback requirements in the Zoning Code.	APC		
Investigate amending the Zoning Ordinance to allow for pop up stores, food trucks, outdoor seating at restaurants, and other similar activities that create vibrant places within certain areas/ zoning districts.	APC		

Policies	Agency		
Industrial Action Plan			
When new or redeveloped industrial sites occur adjacent to residential areas, schools, churches, public parks, and the proposed greenway, consider potential environmental impacts and encourage an appropriate buffer using distance (exceeding the minimum setback requirements in the Zoning Code) and/other appropriate screening treatments.	APC		
Promote development of a new research park (possibly located near University Parkway north of USI) and an intermodal logistics park (possibly located along the U. S. 41 North industrial corridor) on appropriate sites in Vanderburgh County.	County Commissioners, ED Coalition of SW Indiana, Private Sector, APC		
Economic Development Action Plan			
Develop a plan to prioritize and fund local road projects, such as intersection improvements, minor road widening and complete street upgrades.	EMPO, City & County Engineering Depts		
Environmental Quality Action Plan			
Require adequate buffering by both distance and landscaping (i.e. trees) between residential areas and any new uses expected to generate nuisance and pollution such as certain agricultural uses, commercial /industrial uses and major transportation facilities.	APC		
Investigate techniques, such as overlay zoning, stream buffer zones, or conservation easements, to protect Pigeon Creek and other major creeks as beneficial community resources.	APC, County Surveyor		

Policies	Agency		
Recreation Action Plan			
Investigate the financial feasibility of building a new indoor aquatic center.	Parks Department, EVSC		
Hazard Mitigation Action Plan			
Develop County-Wide Stormwater Master Plan to provide relief from run-off and flooding resulting from rainfall events.	County Surveyor, City & County Engineers		
Continue to implement the Recommended Actions of the Multi-Hazard Mitigation Plan and update the Plan as scheduled to comply with CRS standards.	EMA, APC, BC		
Update the Subdivision Ordinance so that new roads are designed to provide safe passage during a base flood event.	APC, BC, EMA		
Transportation Action Plan			
Update the EMPO Access Management Manual to reflect the current professionally recognized standards in transportation planning, and investigate adding the most important standards into the Zoning Code.	EMPO, APC, City & County Engineers		
Update the Pigeon Creek Greenway Master Plan.	Parks Department		
Encourage the City and County to adopt a Complete Streets Policy/ordinance consistent with the Evansville MPO's that improves pedestrian access, safety and convenience.	EMPO, APC, City & County Engineers		

Policies	Agency		
Stormwater Drainage Action Plan			
Develop and adopt a City drainage ordinance that will be consistent with the County ordinance.	City Engineer		
Investigate the establishment of a joint City-County storm water utility to oversee drainage, drainage complaints, and facilities within the County.	City & County Departments		
Investigate legislative options to ensure consistent maintenance of Pigeon Creek, and for a better method to establish legal drains.	County Surveyor		
Implementation Action Plan			
Pursue the establishment of a unified development ordinance to include all regulations relating to land use and subdivisions into one code title as allowed by Indiana planning law.	APC		
Establish an intergovernmental Plan Implementation Committee to help manage the implementation of all plans by guiding the compilation of capital improvements programs based on the Comprehensive Plan and the other appropriate City/County plans.	All		

#### SECTION 19 Evansville-Vanderburgh County Comprehensive Plan

### CONCLUSION

The goals, objectives, and policies in the Comprehensive Plan address the concerns of our community about the issues of orderly and responsible growth, equity, and quality of life. Substantial ongoing debate and work with sustained public and private cooperation will be required to achieve them. The desired end result is to create and maintain an appealing living and working environment and quality of life in the community by faithful adherence to implementing these goals, objectives, and policies. In closing, this 1925 City Plan quote sums up the importance of implementation:

"Plans are of no value... if they are not carried out. A city plan, to be worth its costs, must be followed. Its promises of benefit and advantages should be made so obvious and clear that demands will be heard for its execution."



**HR2**4

### IMPLEMENTATION ACTION PLAN

#### GOAL

• Ensure effective and equitable implementation of the Comprehensive Plan, and administration of the Zoning, Subdivision, and Thoroughfare Ordinances.

#### **OBJECTIVE**

 Maintain a strong Comprehensive Plan as an effective and clear guide for the future development of Evansville and Vanderburgh County to be used by government, private agencies and the general public.



#### POLICIES

- Continue the direct involvement in the Comprehensive Plan review process of various jurisdictions and agencies that have planning responsibilities.
- All entities that have jurisdiction over land use related issues should be encouraged to coordinate their programs and projects with the Plan.
- Expand existing Area Plan Commission functions, develop new monitoring capabilities for development, improve data management capabilities through use of Geographical Information System (GIS) software, and provide special studies complementing the Comprehensive Plan and its implementation.
- Every five years, a review of the Comprehensive Plan should be undertaken suggesting any needed revisions. After appropriate evaluation, the Area Plan Commission and the elected executive bodies should adopt an updated Plan.
- Pursue the establishment of a unified development ordinance to include all regulations relating to land use and subdivisions into one code title as allowed by Indiana planning law.
- Update the Zoning and Subdivision Ordinances to achieve more clarity and user friendliness by adding features such as:
  - Procedural navigation flow chats;
  - Graphics that illustrate definitions and development standards;
  - Interactive features found on the Area Plan Commission website; and
  - Emerging best practices.
- Establish an intergovernmental Plan Implementation Committee to help manage the implementation of all plans by guiding the compilation of capital improvements programs based on the Comprehensive Plan and all other appropriate City/County plans.

#### **OBJECTIVE**

• Develop and promote a community education program on comprehensive planning to increase public understanding/ participation in the planning process.

#### POLICIES

- Meet with local media representatives to encourage improved coverage of the comprehensive planning process.
- Encourage the School Corporation to include information in student curriculum about the need for and the public's role in comprehensive planning.
- Meet with citizen and neighborhood groups to explain the planning process.

#### **OBJECTIVE**

• The Comprehensive Plan should guide development and coordinate improvements constructed by the public and private sectors.

#### POLICIES

• Support the continued participation of the Area Plan Commission in any future annexations.

#### **OBJECTIVE**

• Community improvements should be funded through reasonable and equitable taxing and financing methods.

#### POLICIES

- Evaluate current methods to increase the number of improvements financed through assessment and/or revenue bonds, while decreasing the number of improvements financed through operating funds.
- Investigate alternative means of financing capital improvements.

#### OBJECTIVE

• Increase community involvement in the comprehensive planning process and ensure that the Plan reflects community needs and values regarding growth and development.

#### POLICIES

- During the review of the Comprehensive Plan, measure community attitudes and evaluate and update the goals, objectives, and policies, according to community desires.
- Expand communications with neighborhood associations and other community groups to ensure increased citizen participation in the planning process.
- Ensure that the Comprehensive Plan is available for review at locations throughout the City and on the internet.



# APPENDICES

258

# **APPENDICES INDEX**

#### **APPENDIX A: INTRODUCTION**

List of Current Community Plans Public Comments Analysis Table

APPENDIX B: HISTORY Local History text

APPENDIX C: PHYSICAL FEATURES Natural Hazard

#### APPENDIX D: GENERAL LAND USE

Land Use Compatibility Matrix

#### APPENDIX E: ECONOMIC DEVELOPMENT

Commuting Data

# APPENDIX F: ENVIRONMENTAL QUALITY

Air Monitoring Location Maps

#### APPENDIX G: URBAN DESIGN AND HISTORIC PRESERVATION

National Register of Historic Places List Indiana Historical Markers

#### **APPENDIX H: ADOPTION RESOLUTIONS**

Area Plan Commission Evansville City Council Darmstadt Town Board Vanderburgh County Commissioners

#### **APPENDIX I: LAND USE MAPS**

Existing 2015 Future 2035 (THIS PAGE LEFT INTENTIONALLY BLANK)

# **APPENDIX A: INTRODUCTION**

# LIST OF CURRENT COMMUNITY PLANS

Evansville/Vanderburgh County 2004-2025 Comprehensive Plan, Evansville-Vanderburgh County Area Plan Commission I-69 Gateway Small Area Plan, Ratio Architects Millennial Plan for 2040: A Regional Plan for Sustainable Development, 2014, Sustainable Evansville Area Coalition (SEAC) Evansville-Vanderburgh County Multi-Hazard Mitigation Plan, 2011 Parks & Recreation Plan, 2015, Evansville Department of Parks & Recreation Metropolitan Transportation Plan (MTP) 2040, Evansville Metropolitan Planning Organization (EMPO) Transportation Improvement Program (TIP) 2016-2019, EMPO Evansville Bicycle and Pedestrian Connectivity Master Plan, 2015, EMPO Water Master Plan, 2009, Evansville Water and Sewer Utility

#### Table A-1: Public Comments Analysis

Section Number and Title	Comments Received	Comments Addressed by Plan Revisions	Comments Not Addressed (beyond the scope of the Plan or already covered)
1: Introduction	1	0	1
2: History	3	0	3
3: Physical Features	0	0	0
4: Demographics	2	1	1
5: General Land Use	4	4	0
6: Residential	12	3	9
7: Commercial	6	3	3
8: Central Business District	6	0	6
9: Industrial	3	0	3
10: Rural	0	0	0
11: Economic Development	7	3	4
12: Education and Cultural Environment	2	0	2
13: Environmental Quality	4	2	2
14: Parks and Recreation	4	3	1
15: Public Safety and Health	3	1	2
16: Transportation	12	0	12
17: Public Utilities	4	4	0
18: Urban Design and Historic Preservation	1	1	0
19: Plan Implementation	2	0	2
Future Land Use Map	3	0	3
Other – unrelated to the Comprehensive Plan	3	0	3
TOTAL	82	25	57

# **APPENDIX B: HISTORY**

### LOCAL HISTORY

263

An understanding of the past is important as it can speak volumes about the present, Evansville's identity and how we got to where we are today. The desired result is that Evansville's rich history be considered and appropriately reflected in our plan.

In the pioneer era, transportation was limited to the inland river system by the dense, unbroken forest west of the Allegheny Mountains. By 1800, the region's aspiring cities were all located on the rivers - Pittsburgh, Cincinnati, Louisville. Growth was hampered, however, by an elemental fact of nature. It was very easy to move cargoes downstream; it was very difficult to bring other cargoes back upstream.

The first steamboat on the inland rivers journeyed from Pittsburgh to New Orleans in late 1811. Small and primitive though it was, this steamboat heralded a transportation revolution. With its power exponentially greater than what could be provided by muscle or sail, it meant that, for the first time, it would be almost as easy to move people and merchandise upstream as down.

This new industry would guarantee wealth to those who were wise enough to acquire likely town sites on navigable streams. One of the many such individuals who made his way to the federal land office at Vincennes in 1812 was Hugh McGary, Jr. On terms of \$2.00 per acre with four years to pay, on March 27, 1812 McGary purchased just shy of 441 acres on a horseshoe bend of the Ohio River.

If the Ohio was the early 19th century equivalent of an interstate highway, Pigeon Creek would have been the equivalent of a county road. McGary would have been disappointed if he hoped to purchase the land around the intersection of the Creek and the River, as that area had already been claimed. McGary's tract lay to the east, at the "one o'clock" position of the horseshoe bend. It was roughly bounded by present-day Fulton Avenue north to Lloyd Expressway, then east to Baker Avenue, then south along a line that becomes Parrett Street, and finally, west along the line of Washington Avenue to the riverbank.

Although McGary's land lacked the advantage of a waterway junction, it did possess a number of positive features. It was located up on a bluff,

which McGary thought was high above all possible flood. Unfortunately, he has been proved wrong on several occasions, most notably in 1937 when 500 city blocks of Evansville were under water. It was more certain that the low-lying thumb of Kentucky across the Ohio was unsuitable for the location of a town that would directly compete for immigration and development. The nearest rival was Henderson, Kentucky, seven miles downstream.

Other towns, such as Newburgh, were being platted at the same time; therefore, McGary needed to persuade prospective land purchasers to buy their town lots from him, rather than from someone else. One way of doing this would be to have his new town designated the "permanent" seat of county government. With the help of a Gibson County legislator, Robert M. Evans, the new County of Warrick, named after a military man killed at the Battle of Tippecanoe, was authorized in 1813. It stretched along the river from the Harrison County line to the Wabash River.

In June, 1814, the newly selected County Commissioners met at the mill of James Anthony, McGary's brother-in-law, on Pigeon Creek. McGary offered the county government 100 acres of his land if they would designate as the county seat the town he had chosen to name Evansville after the helpful legislator. They were pleased to accept his offer.

McGary had been doing a brisk business in lot sales on a moneyback guarantee that Evansville would indeed become a county seat. Unfortunately, no sooner did that become a reality than the Indiana General Assembly shattered his hopes by creating Posey County with Pigeon Creek as its eastern boundary. With Evansville now on the extreme western edge of a smaller Warrick County, the County Commission met again, returned McGary's 100 acres, and moved the Warrick County seat to the now defunct town of Darlington.

Despite having to refund the money of many lot purchasers, McGary managed to make the last of his four annual payments for his land in 1816. He was, however, "land poor." Robert Evans again entered the picture and with his brother-in-law, James W. Jones, alleviated McGary's cash-flow problem by purchasing one-third interest in the town-founding enterprise. They devised a new town plat on about 200 acres of McGary's original land, with streets running parallel to the river; that is, from northwest to southeast.



Evansville was incorporated in 1817 and again became a county seat when Vanderburgh County was organized on January 7, 1818. The County was named for Henry Vanderburgh, a deceased chief judge of the Indiana Territorial Supreme Court. A newspaper advertisement on April, 1818, touted Evansville's prospects "as a place of landing and deposit for the western part of the State of Indiana" which "certainly holds out a fairer prospect to become a considerable commercial town, than any other in the western part of the state. Merchants, mechanics, and men of enterprise are particularly invited to come and judge for themselves."

The town grew slowly until its economic "take-off" in the early 1830's. It was announced that the state would, as part of a mammoth internal improvement program, build the longest canal in the world, traversing over 400 miles to connect the Great Lakes at Toledo, Ohio, with the inland rivers at Evansville. The canal would not only open up the interior of Indiana to commerce, but it would create an inland transportation route from New Orleans to New York City via the Mississippi and Ohio Rivers, this new Wabash and Erie Canal, Lake Erie, New York State's Erie Canal, and the Hudson River.

The possibility that Evansville would be at the crossroads for the commerce of half a continent brought "merchants, mechanics, and men of enterprise" flooding in. Fortunately, they did not then know, as people have learned on several occasions since, that Indiana transportation projects often take twenty-years to build and are obsolete when completed. Such was the case with the Wabash and Erie Canal. Its construction bankrupted the State, and by the time it was completed in 1853, plans were already being made to build railroads parallel to its route.

Ironically, when the canal was finished, it did not terminate in Evansville after all, but on the tract to the west instead. By 1837, this tract, which was split by Pigeon Creek, had come into the hands of four developers, two named Law, one named Macoll, and one named Scott. Combining the first portions of their names, they came up with "Lamasco" as the name of the new town they platted from First Avenue westward to St. Joseph Avenue. Unlike Evansville, Lamasco's streets were platted on the cardinal points, due north-south and east-west.

# **APPENDIX B: HISTORY**

In 1847, the portion of Lamasco east of the Creek was incorporated, and by the 1850's, Lamasco had annexed land up to the Evansville corporate limits and was threatening to landlock its rival by annexing east of First Avenue. Had this situation continued, it would have resulted in a permanent state of competition for growth, similar to what happened up river at New Albany-Clarksville-Jeffersonville. Fortunately, the leaders of the two towns realized that a merger was in the best interests of all concerned.

The Indiana General Assembly authorized a merger in 1857, and by referendum, the citizens of the new City voted to continue being called Evansville. But, although the Lamasco name disappeared from the map, the Lamasco street grid did not. It was, in fact, extended and it eventually surrounded the original McGary-Evans-Jones grid. That meant that anyone entering or leaving the original Evansville (now the downtown) found, and still experiences today, that the street eventually made an oblique angle turn in one direction or another at the common boundary of the two street grids. This circumstance has been a continuing source of confusion to visitors and residents alike.

The era of Evansville's greatest growth was the second half of the nineteenth century, following the disruption of the Civil War. At that time, the steamboat industry was at its height. Evansville was a major stop for through boats in Pittsburgh-New Orleans commerce, and it was the homeport for a number of steamboat companies engaged in local and regional, or "packet" trade. In 1870, the City annexed "Independence," the area west of Pigeon Creek that was not included when Lamasco incorporated.

Evansville was positioned geographically for commerce, and thanks to an abundance of nearby natural resources, it had something to sell. The products of the fertile farmland surrounding the City found their way to the Evansville wharf and were the basis for a growing flour and corn milling industry.

Coal mines began operating literally on Evansville's doorstep in the 1890's, and by the turn of the century, 10 mineshafts had been sunk within or near the City limits. These mines provided fuel for industry, steamboats, railroad locomotives, and commercial and household heating. Evansville thrived under a cloud of coal dust, smoke and soot.



Foundries were established to serve the mechanical needs of the steamboats but soon branched out into the manufacture of farm implements and household stoves. Hardwood lumber was rafted down the Green River from the heart of western Kentucky. The region's lumber supply fostered large-scale lumber and furniture manufacturing for the sawmills and factories which lined Pigeon Creek after 1870. By 1900, Evansville was one of the largest hardwood furniture centers in the world, with 41 factories employing approximately 2,000 workers. The fortunes that were made in mining, manufacturing and, particularly, the wholesale trade found an outlet in the construction of the imposing Victorian-era homes that have become an attraction for tourists in the Riverside Drive and First Street area (the Riverside Historic District).

Evansville grew with the steamboat industry but was not dependent upon it. The City became an important node in the nation's railroad network in 1887 when the Louisville and Nashville (L&N) Railroad constructed a bridge across the Ohio River between Evansville and Henderson. This alleviated a major impediment to north-south rail transportation and resulted in construction of a major railyard southwest of Evansville, with the new town of Howell created to house railroad employees. In 1916, Evansville would annex Howell, completing the City's counter-clockwise march around the horseshoe bend.

The economic base underwent a change in the early twentieth century. Furniture manufacturing declined as nearby supplies of timber became exhausted, but several other major companies (such as Bucyrus Steam Shovel Plant, Faultless Caster and Mead Johnson Company) moved in to fill the void. In the 1920's two important new industries were introduced, automobile manufacturing and refrigerator production. Major companies in these industries were the Graham Paige Company (later purchased by Chrysler Corporation), Seeger Refrigerator Company, and Servel Incorporated.

The Depression era was characterized by high unemployment and business failure, although the discovery of oil in the area in 1938 was a bright spot. Still, Evansville did not fully recover from the effects of the Depression until the advent of World War II. The war industry was a boon to the local economy with employment rising from 21,000 to 64,000 in just a few months. After the war, many of these plants were successfully converted to peacetime production, and employment continued to climb. This prosperity continued through the Korean War period, with major industries still being refrigerator and automobile manufacturing. The conclusion of the Korean War brought recession to the nation and particularly the Evansville area. Due to the prolonged effects of this recession on the local area, Evansville lost its automobile manufacturing industry and several of its large refrigerator manufacturers.

In spite of the post-Korean War recession, twenty-eight new firms moved to the area between 1955 and 1963, thus saving the Evansville economy from total collapse. Some of these new firms were Whirlpool Corporation, Arkla Air Conditioning Corporation, Alcoa, Bucyrus-Erie Corporation, and General Electric Company. Not only were the new firms significant because of increased employment (12,000 new employees by 1963), but also because of the diversification that was brought to the local economy. The recession had demonstrated the danger of a nondiversified local economy that relied too heavily on a small number of durable goods industries.

In the midst of the recession, the local community responded with efforts toward redeveloping its deteriorating capital facilities, especially those in the Central Business District. This investment resulted in an extensive redevelopment of the City's riverfront and involved other projects such as the Civic Center Complex in 1968. This capital outlay for public facilities was partially responsible for the economic recovery in the 1960's, along with the attraction of some important new industries. Thus, by 1969 local economic performance had rebounded to the level of the earlier peak in 1953.

Today, Evansville and Vanderburgh County have a sound and diversified economy. This goal has been obtained through the cooperation of City and County government, business, and civic organizations. The trend toward diversification of the economy has continued. Evansville has evolved into a major provider of health care services in the Tri-State area, and a regional retail center. Moreover, the manufacture of goods, such as plastics and pharmaceuticals, growth in wholesale trade, and the establishment of Evansville as the service center for Southwestern Indiana, Western Kentucky, and Southeastern Illinois have collectively created a stable local economy.

# **APPENDIX C: PHYSICAL FEATURES**

## NATURAL HAZARDS

The purpose of natural hazard information in the Comprehensive Plan is to educate the public, and to emphasize that development decisions impact the ability to create a more resilient thus sustainable community. Just knowing about the types of natural hazards that are present in southwestern Indiana is not enough to adequately prepare for them.

A NATURAL HAZARD occurs when natural phenomena have the potential to cause fatalities, injuries, and property damage. The natural hazards common in this region can be grouped into the following categories: Atmospheric (e.g. tornadoes and ice storms); Hydrologic (e.g. flooding); and Seismic (e.g. earthquakes).

A DISASTER is the impact from a hazard upon a region affecting the population, the economic, natural, and social environments, and the developed area.

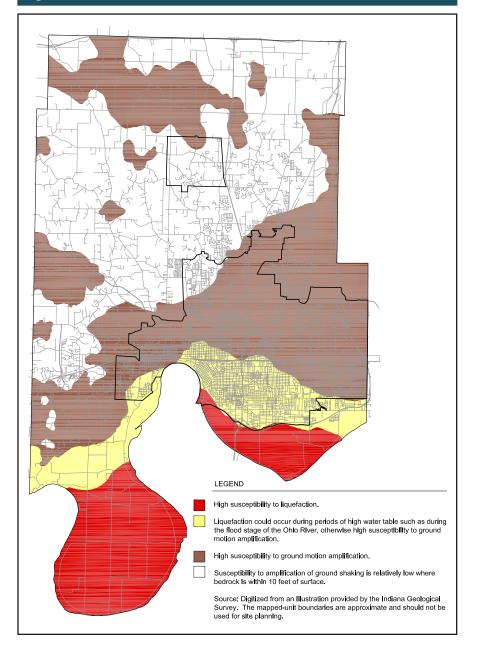
A RESILIENT COMMUNITY is the capacity of individuals, institutions, businesses and systems within the community to survive, adapt, and grow no matter what kinds of chronic stresses and acute shocks they experience. Chronic stresses weaken the fabric of the community on a day-to-day or cyclical basis. Acute shocks are sudden, sharp events that threaten the community including earthquakes, floods, and tornadoes.

Man cannot prevent natural hazards from occurring. However, proper planning can help minimize the extent of damage from future hazard events. The location and construction of new development should adequately take into account the vulnerability to natural hazards so that they do not become disasters.

#### EARTHQUAKES

267

Southwestern Indiana is relatively close to two seismic zones: the New Madrid and the Lower Wabash Valley seismic zones. The New Madrid Seismic Zone extends from west-central Mississippi northward past



#### Figure C-1: Generalized Seismic Hazard Areas

Cape Girardeau, Missouri. Although, it is the major source of seismic activity east of the Rocky Mountains, activity on the New Madrid Seismic Zone has been less frequent than that along the west coast. Because of this level of activity, there is not as much recent New Madrid Seismic Zone data available for analysis. The Lower Wabash Valley Seismic Zone generally follows the Wabash River from the Ohio River north to Terre Haute, Indiana. The proximity of southwestern Indiana to these known zones of seismicity makes the region especially vulnerable to future earthquakes.

Scientists have developed both the Richter Magnitude and Modified Mercalli Intensity Scale to quantify the strength of an earthquake.

According to the United States Geological Survey's (USGS) National Earthquake Information Center (NEIC), numerous earthquakes have occurred within a 50-mile radius of Evansville since 1827. The majority of these earthquakes have been minor events. The most recent earthquake in the Evansville area was a 5.4 that occurred on April 18, 2008. The approximate epicenter for this quake was northwest of Evansville near Mount Carmel, Illinois.

Seismologists estimate that there is a good chance of a magnitude 6 or greater earthquake centered in one of the nearby seismic zones in the relatively near future that easily could produce damage in the Tri-State region. While experts cannot predict with any reliability exactly when or where this earthquake will occur, the opinion of seismologists is that an event along either the New Madrid or the Lower Wabash Valley Seismic Zones is most likely.

Much of the concern about earthquake damage in the Evansville area is based on two earthquake processes (seismic hazards): Liquefaction and Ground Motion Amplification. Since a basic understanding of these concepts is helpful in any discussion of earthquakes, definitions of these important terms are provided below.

LIQUEFACTION refers to the actual physical change that occurs when water saturated sand or sand and gravel is shaken, transforming the material from solid ground, capable of supporting a structure, to a quicksand-like liquid, greatly reducing its ability to bear the weight of a structure. This can cause the structure to settle or tip. The conditions necessary for liquefaction include: a major presence of sand as typically occurs within unconsolidated materials deposited by rivers, a high water table; and strong ground shaking at the site in question.

GROUND SHAKING OR MOTION results from the release of accumulated energy from an earthquake producing seismic waves that radiate outward from a point beneath the epicenter called the focus. There are several types of seismic waves generated that travel both through the earth and along the ground surface. The surface waves are usually the most destructive of the wave types caused by an earthquake. They are usually felt as a rolling or rocking motion.

GROUND MOTION AMPLIFICATION occurs when these surface waves are amplified in unconsolidated materials when the waves bounce off of or are being refracted by solid bedrock nearby.

The areas shown on Figure C-1 depict, in a generalized fashion, the relative susceptibility to amplification of strong ground shaking and liquefaction during any future earthquake. The areas shown on this map depict various soil types and the relative probability of shaking or liquefaction. The Indiana Geological Survey developed the map which shows that the area with the highest susceptibility to liquefaction generally follows the Ohio River floodway. The area where liquefaction could occur is conditional on seasonal high water table created during high water levels on the Ohio River. This area is generally located south of the Lloyd Expressway, from Downtown east to Angel Mounds State Historic Site. The area most susceptible to ground motion amplification can be characterized by thick, unconsolidated materials primarily deposited by the Ohio River over geologic time. The location of this area generally incorporates the City and portions of the County. Structures in these areas are more vulnerable to seismic hazards.

### **FLOODS**

Flooding is the more frequent natural hazard that Evansville is susceptible to. The most significant floods have occurred along the Ohio River. The largest floods in our history are shown on the following chart.

### Table C-1: Benchmarks and Historic Flood Crests for Evansville

	Depth of Water or Elevation
Top of Levee	57.1 ft. or 386.3 msl
January 1937	53.7 ft. or 382.9 msl
April 1913	48.4 ft.
April 1945	48.28 ft.
March 1964	47.72 ft.
April 1997	47.52 ft.
May 2011	46.78 ft.
January 1907	46.2 ft.
Flood Stage	42.0 ft. or 371.2 msl
Pool Stage	12.8 ft. or 342.0 msl
River Gauge Base Elevation	0.0 ft. or 329.2 msl

Note: msl = Mean Sea Level

Sources: National Weather Service; Advanced Hydrologic Prediction Service U.S. Army Corp of Engineers

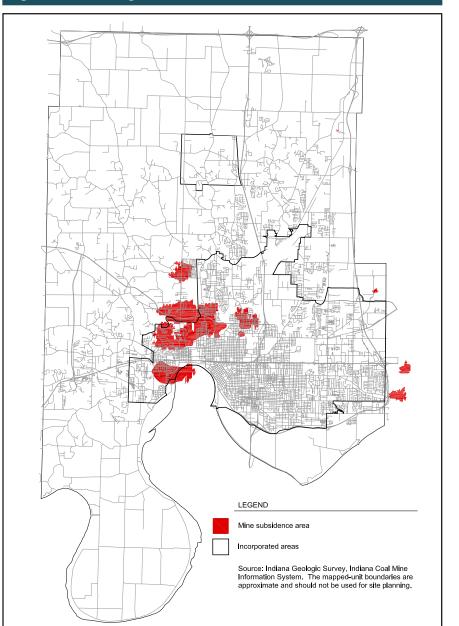
### TORNADOES

In any given year, there is potential for tornadoes to affect the Evansville-Vanderburgh County area. Since 1950, there have been 15 tornadoes recorded by the National Weather Service in Vanderburgh County. The data, compiled by the National Weather Service in Paducah Kentucky, indicates that although a majority of these tornadoes occurred during the traditional tornado season from March through June, tornadoes can occur at any time of year. In fact, two of the recent major tornadoes occurred in January.

On March 18, 1925, the Tri-State Tornado occurred. This nationally significant event, considered among the most powerful and destructive by any criteria, was estimated as an F5 on the Fujita Scale. The path of this storm went from Missouri into Indiana.

The most recent tornado in the Evansville area was an F-3 that occurred on November 6, 2005. This was the deadliest tornado in Indiana since 1974 with 21 people killed and 200 injured. The hardest hit area in Vanderburgh County was Eastbrooke Mobile Home Park located at the southwest corner of Pollack Avenue and Lynn Road. The tornado tracked 41 miles from Henderson County, KY to Spencer County, IN with an average path width of 275 yards.

To measure and compare tornadoes, in 1971 Theodore Fujita developed the Fujita Scale, which provides for consistent evaluation of tornado damage. The Fujita Scale is based on the intensity and type of damage a tornado causes. The National Weather Service has studied and revised this scale and implemented the Enhanced Fujita Scale in 2007.



#### Figure C-2: Underground Coal Mines Potential Subsidence Areas

#### MINE SUBSIDENCE

Underground or deep mining of coal was an economic activity in Vanderburgh County from the 1890's through the late 1930's. The dominant method of deep mining used in Indiana was room and pillar mining. This method commonly left twenty to fifty percent of the coal in the mine to serve as pillars or supports for the overburden. During the 1920's, use of surface mining techniques surpassed deep mining, and, as these deep mines became less economically viable, they were abandoned.

Underground voids, such as those created by deep mining activities, are subject to collapse of the roof material and subsequent failure of the overburden. This occurrence is termed mine subsidence. A large portion of the west side and near north side of Evansville is built over several of these abandoned mined areas as shown on Figure C-2. This information is also available to the public on the internet.

To date, in the Evansville area, there has not been a large incidence of damage reported which has been attributed to mine subsidence. However, if over time this becomes a problem, it is predicted that the area shown on Figure C-2 will be affected.

Subsidence is indicated by the formation of sinkholes, sags, and troughs. Damage to aquifers and the alteration of the flow of ground water may also result. Where manmade structures are present, damage may range from hairline cracks in walls and foundations to structural collapse. Other common forms of subsidence damage are cracks in roadways and breaks in gas and water lines.

Certain modifications of construction techniques can be used to help minimize damage in the event subsidence occurs. Additionally, developers of new structures in these areas should carefully consider this potential hazard, and if necessary, conduct pre-construction testing to help determine if this hazard is present and to what extent it could be a problem.

# **APPENDIX D: GENERAL LAND USE**

### Table D-1: Land Use Compatibility Matrix

EXISTING / PROPOSED	SF	MF	HR	WR	CO	NC	CC	CBD	HIC	LI	GI	HII	WI	AIR	PUD
Single Family			S			S	S								S
Residential (SF)															
Multiple family			S	S					S						S
Residential (MF)															
High Rise	S	S		S											S
Residential (HR)															
Waterfront Recreational /		S	S											N/A	S
Residential (WR)															
Commercial										S					S
Office (CO)															
Neighborhood	S														S
Commercial (NC)															
Community	S										S				S
Commercial (CC)															
Central Business									S	S				N/A	S
Commercial (CBD)															
High Intensity		S						S			S			S	S
Commercial (HIC)														Ŭ	
Light					S			S							S
Industrial (LI)															
General							S		S						S
Industrial (GI)															
High Intensity															S
Industrial (HII)															
Waterfront														N/A	S
Industrial (WI)															
Floodway (F)	S	S		S	S	S	S	N/A	S	S	S		S		S
Agricultural (AG)	S	S		S	S	S	S	N/A	S	S	S		N/A		S
Airport (AIR)				N/A	S	S	S	N/A	S	S	S		N/A		S
Planned Unit	S	S	S	N/A	S	S	S	N/A	S	S	S	S	N/A	S	S
Development (PUD)															
SCALE COLOR: COMPAT	IBLE	(	QUES	TIONA	BLE	INC	OMPA	TIBLE	N//	A= No	t Appli	icable			

S = EITHER SPECIFIC USES OR SITE CONSIDERATIONS

(THIS PAGE LEFT INTENTIONALLY BLANK)

# **APPENDIX E: ECONOMIC DEVELOPMENT**

## **COMMUTING DATA**

Note: These figures are provided to give a summary of commuting patterns, not employment patterns, and will not match labor force or employment numbers from sources like the Bureau of Labor Statistics.

Source: IBRC, using Indiana Department of Revenue data for Indiana IT-40 Returns for Tax Year 2013

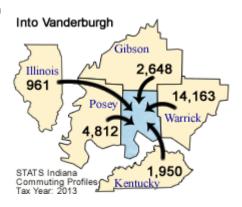
This table was produced by STATS Indiana on July 21, 2015.

Table E-1: Overview of Workers and Commuters in			
Vanderburgh County			
Number of Workers			

Number of Workers				
Who live in Vanderburgh County and work (implied resident labor force)	113,800			
Who live AND work in Vanderburgh County	105,439			
Total number who work in Vanderburgh County ( <i>implied work force</i> )	133,289			
Number of Commuters				
Who live in Vanderburgh County but work outside the county	8,361			
Who live in another county (or state) but work in Vanderburgh County	27,850			

# Table E-2: Top 5 counties sending workers INTOVanderburgh County

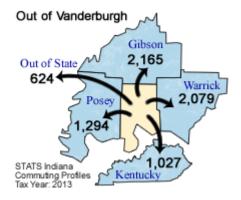
Sending Workers	Workers
Warrick County	14,163
Posey County	4,812
Gibson County	2,648
Kentucky	1,950
Illinois	961
Total of above	24,534



18.4% of workforce

# Table E-3: Top 5 counties receiving workers FROMVanderburgh County

Receiving Workers	Workers
Gibson County	2,165
Warrick County	2,079
Posey County	1,294
Kentucky	1,027
Out of State	624
Total of above	7,189



6.3% of labor force

### Table E-4: Detailed Commuting Table for Vanderburgh County

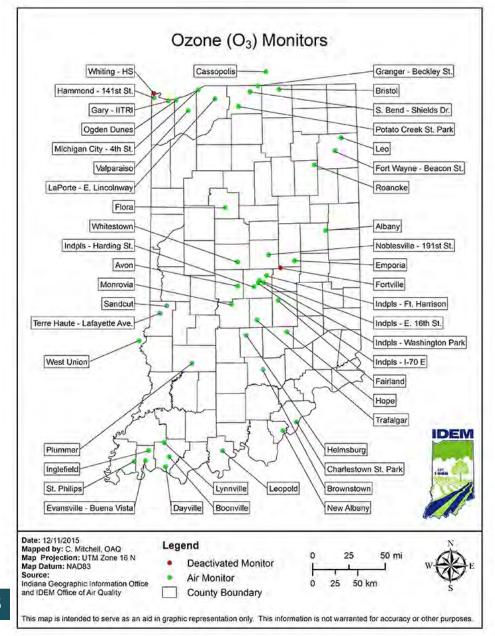
Includes counties where 10 or more people either commute into or out of Vanderburgh County

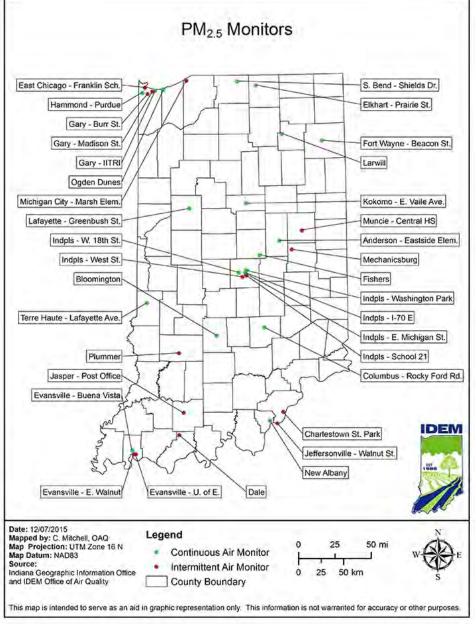
County/State Name	Commute INTO Vanderburgh From	% of County Workforce	Commute FROM Vanderburgh To	% of County Labor Force
Adams	16	0.0	5	0.0
Allen	108	0.1	54	0.0
Bartholomew	12	0.0	5	0.0
Boone	15	0.0	1	0.0
Clark	25	0.0	9	0.0
Crawford	20	0.0	4	0.0
Daviess	89	0.1	24	0.0
Delaware	4	0.0	16	0.0
Dubois	222	0.2	99	0.1
Elkhart	6	0.0	15	0.0
Floyd	19	0.0	24	0.0
Gibson	2,648	2.0	2,165	1.9
Greene	19	0.0	3	0.0
Hamilton	42	0.0	22	0.0
Hancock	10	0.0	5	0.0
Harrison	16	0.0	1	0.0
Hendricks	34	0.0	6	0.0
Illinois	961	0.7	116	0.1
Johnson	22	0.0	5	0.0
Kentucky	1,950	1.5	1,027	0.9
Кпох	135	0.1	97	0.1
Lake	23	0.0	8	0.0
Lawrence	17	0.0	4	0.0

County/State Name	Commute INTO Vanderburgh From	% of County Workforce	Commute FROM Vanderburgh To	% of County Labor Force
Marion	64	0.0	110	0.1
Michigan	21	0.0	6	0.0
Monroe	21	0.0	41	0.0
Out of State	597	0.4	624	0.5
Pennsylvania	13	0.0	9	0.0
Perry	120	0.1	16	0.0
Pike	284	0.2	50	0.0
Porter	15	0.0	1	0.0
Posey	4,812	3.6	1,294	1.1
Scott	12	0.0	5	0.0
Spencer	957	0.7	124	0.1
St Joseph	9	0.0	11	0.0
Ohio	43	0.0	21	0.0
Sullivan	22	0.0	8	0.0
Tippecanoe	8	0.0	39	0.0
Union	11	0.0	17	0.0
Vermillion	13	0.0	11	0.0
Vigo	27	0.0	29	0.0
Warrick	14,163	10.6	2,079	1.8
Washington	12	0.0	3	0.0
Whitley	4	0.0	15	0.0
Wisconsin	20	0.0	3	0.0

## **APPENDIX F: ENVIRONMENTAL QUALITY**

### Figure F-1: Air Monitoring Location Maps





275

(THIS PAGE LEFT INTENTIONALLY BLANK)

# **APPENDIX G: URBAN DESIGN AND HISTORIC PRESERVATION**

### Table G-1: National Register of Historic Places

277

Year Listed	Site Name	Address
1966	Angel Mounds	Pollack Ave.
1970	Old County Courthouse	Entire block bounded by Vine, 4th, Court, & 5th Sts.
1970	Former Vanderburgh County Sheriff's Residence	4th St. between Vine & Court Sts.
1971	Old Post Office	100 block N.W. 2nd St.
1972	Willard Library	21 1st Ave.
1973	Reitz House	224 S.E. 1st St.
1977	Hooker-Ensle-Pierce House	6531 Oak Hill Rd.
1978	Willard Carpenter House	405 Carpenter St.
1978	Riverside Historic District	Roughly bounded by Southlane Dr., Walnut, 3rd., & Parrett Sts.
1978	W. Bedford Sr. House	838 Washington Ave.
1978	Liberty Baptist Church	701 Oak St.
1979	McJohnston Chapel & Cemetery	Kansas Rd. & Erskine Ln.
1979	Soldiers & Sailors Memorial Coliseum	350 Court St.
1979	Alhambra Theatorium	50 Adams Ave.
1979	Greyhound Bus Terminal	102 NW. 3rd St.
1979	McCurdy Building (Sears, Roebuck & Co.)	101 NW. 4th St.
1980	Ridgway Bldg.	313-315 Main St.
1980	Garvin Park	N. Main St. & Morgan Ave.
1980	Bitterman Bldg.	202-204 Main St.

Year Listed	Site Name	Address
1980	Old Bittermann Bldg.	200 Main St.
1980	Smith Mortuary	118-120 Walnut St.
1980	Washington Ave. Historic District	Roughly bounded by Madison & Grand Aves., E. Gum & Parret Sts.
1982	Independence Historic District	W. Franklin St. & Wabash Ave.
1982	Schaeffer House	118 E. Chandler St.
1982	Hose House No. 10	119 E. Columbia St.
1982	Hose House No. 12	1409 First Ave.
1982	Bldg. at 223 Main St.	223 Main St.
1982	Busse House	120 SE 1st St.
1982	Cadick Apt. (Plaza Bldg.)	118 SE 1st St.
1982	Central Library	22 SE 5th St.
1982	<b>Citizens National Bank</b>	329 Main St.
1982	Court Bldg. (Furniture Bldg)	123-125 NW 4th St.
1982	Eagles Home	221 NW 5th St.
1982	Evansville Brewing Co.	401 NW 4th St.
1982	Evansville Journal News	7-11 NW 5th St.
1982	Albion Flats	701 Court St.
1982	American Trust & Savings Bank (Indiana Bank)	524-530 Main St
1982	Geiger & Sons National Biscuit Co.	401 NW 2nd St
1982	German Bank	301-303 Main St.

## Table G-1: National Register of Historic Places (Continued)

Year Listed	Site Name	Address
1982	Harding & Miller Music Co.	518-520 Main St.
1982	Indiana Bell Bldg.	129-133 NW 5th St.
1982	Kuehn House	608-610 Ingel St.
1982	Leich & Co.	420 NW 5th St.
1982	Masonic Temple	301 Chestnut St.
1982	McCurdy Hotel	101-111 SE 1st St.
1982	Morris Plan (Hulman Bldg.)	20 NW 4th St.
1982	National City Bank	227 Main St.
1982	Newman Bldg.	211-213 SE 4th St.
1982	O'Donnell Bldg.	22 NW 6th St.
1982	Puster & Co. Furniture Manufactory	326 NW 6th St.
1982	Rose Terrace	301-313 NW 7th St.
1982	St. John's Evangelical Protestant Church	314 Market St.
1982	Victory Theater & Hotel Sonntag	600-614 Main St.
1982	Van Cleave Flats	704-708 Court St.
1982	Zion Evangelical Church	415 NW 5th St.
1982	Ingle Terrace	609-619 Ingle St.
1982	Orr Iron Co.	1100 Pennsylvania St.
1982	Salem's Baptist Church	728 Court St.
1982	Parson & Scoville Bldg.	915 Main St.
1982	YWCA	118 Vine St.
1982	YMCA	203 N. W. Fifth St.

Year Listed	Site Name	Address
1982	Siegel's Dept. Store	101-105 SE 4th St.
1982	Montgomery Ward Bldg.	517 Main St.
1982	Maier House	707 S. 6th St.
1983	Evansville College	1800 Lincoln Ave.
1983	Boehne House	1119 Lincoln Ave.
1983	Koester/Patburg House	504 Herndon Dr.
1983	Evansville Municipal Market	813 Pennsylvania St.
1984	Conner's Bookstore	611-613 Main St.
1984	Auto Hotel Bldg.	111-115 SE 3rd St.
1984	Fellwock Garage	315 Court St.
1984	Firestone Tire & Rubber Store	900 Main St.
1984	Gemcraft-Wittmer Bldg.	609 Main St.
1984	Huber Motor Sales Bldg.	215-219 SE 4th St.
1984	Lockyear College	209 NW 5th St.
1984	Old Fellwock Auto Co.	214 NW 4th St.
1984	Pearl Steam Laundry	428 Market St.
1984	Roelker House	555 Sycamore St.
1984	Kuebler-Artes Bldg.	327 Main St.
1984	Barrett's Britz Bldg.	415 Main St.
1984	Helfrich House	700 Helfrich Lane
1984	Culver Historic District	Roughly bounded by Madison Ave., Riverside Dr., Emmett & Venice Sts.

## **APPENDIX G: URBAN DESIGN AND HISTORIC PRESERVATION**

Table G-1: National Register of Historic Places (Continued)			
Year Listed	Site Name	Address	
1984	Mead Johnson River-Rail-Truck Terminal & Warehouse	1830 W. Ohio St.	
1985	Bayard Park Historic District	Roughly bounded by Gum, Kentucky, Blackford & Garvin Sts.	
1989	BernardinJohnson House	17 Johnson Pl.	
1989	Lincolnshire Historic District	Roughly bounded by Lincoln, Bennighof, Bellemeade, Lodge, Washington, Harlan, E. Chandler, & College	
1990	Igleheart House	5500 Lincoln Ave.	
1992	Sunset Park Pavilion	411 SE. Riverside Dr.	
1998	Ohio Street Bridge (Joan Marchand)	Ohio St. over Pigeon Cr.	
2000	Evansville Downtown Historic District	Roughly Main St. between 2nd St. & Martin Luther King Jr. Blvd., 4th St., between Sycamore & Chestnut St.	
2000	General Cigar Co.	223 NW 2nd St.	
2004	Oak Hill Cemetery	1400 E. Virginia St.	
2005	Sweeton House	8700 Old State Rd.	
2009	USS LST 325	840 LST Dr.	
2011	Black House	8215 Pollack Ave.	

Source: National Park Service: National Register of Historic Places: Listed Properties as of July 2015

### Table G-2: Indiana Historical Markers

Date Installed	Site Name	Address
1947	Wabash And Erie Canal	SE corner of Old Courthouse lawn at 5th & Vine Streets
1966	Angel Mounds	In front of interpretive center, 8215 Pollack Avenue
1976	First SWCD In Indiana	Booneville-New Harmony Road in 4-H Center
1995	P-47 Thunderbolt Factory	540I US 41 N, east side of highway in front of old Whirlpool Factory
1996	Evansville Cotton Mill	South of Ohio Street & St. Joseph Avenue near Bristol Myers Squibb
1999	McCurdy-Sears Building	101 NW 4th Street. The marker is situated at 5th & Sycamore Streets
2003	Ohio River Levee	Eastern portion of Dress Plaza along the Ohio River, near the intersection of Walnut Street & Riverside Drive.
2007	Sheriff's Residence and Jail	208 NW 4th St.

Source: Indiana Historical Bureau

## **APPENDIX H: ADOPTION RESOLUTIONS**

#### Figure H-1: Area Plan Commission

#### AREA PLAN COMMISSION OF EVANSVILLE AND VANDERBURGH COUNTY, INDIANA

### RESOLUTION ADOPTING THE EVANSVILLE-VANDERBURGH COUNTY COMPREHENSIVE PLAN 2015-2035 on May 12, 2016.

**BE IT RESOLVED** by the Area Plan Commission of Evansville and Vanderburgh County, Indiana ("Area Plan Commission") as follows:

WHEREAS, the Area Plan Commission was established on April 10, 1968, by action of the Common Council of the City of Evansville, by Ordinance 6-68-9 and by action of the Board of Commissioners of Vanderburgh County by Ordinance #1152, under the authority of the State of *Indiana Code 36-7-4-202*; and

WHEREAS, the Area Plan Commission works as a coordinating agency within the city and county governmental structure in comprehensive physical development; and

WHEREAS, Indiana Code 36-7-4-501 states "A comprehensive plan shall be approved by resolution ...for the promotion of public health, safety, morals, convenience, order, or the general welfare and for the sake of efficiency and economy in the process of development. The Plan Commission shall prepare the Comprehensive Plan."; and WHEREAS, the current Evansville-Vanderburgh County Comprehensive Plan ("the Plan") was adopted in 2004 and must be updated to reflect the impact of factors such as events unforeseen at the time of its adoption but occurring after its adoption, changes in the goals and priorities of the public and its elected leaders, advances in technology and engineering, and the progression of the needs of the community to keep the Plan current; and

WHEREAS, the Area Plan Commission initiated the process to draft an update of the Plan, issued public notices for citizen comments that involved numerous public hearings; and

WHEREAS, appropriate revisions to the draft Plan have been made to reflect the input received in the public participation process; and

WHEREAS, the Plan contains policies which serve as a guide and must be given due consideration as the general policy for the pattern of physical development in the City of Evansville, Town of Darmstadt, and Vanderburgh County; and

WHEREAS, pursuant to *Indiana Code 36-7-4-508(a) and* (*b*), after a public hearing(s), the Area Plan Commission may approve the comprehensive plan, and upon approval, shall certify it to each participating legislative body for their consideration; and

**WHEREAS**, the Area Plan Commission finds that the Plan constitutes a suitable, logical, reasonably balanced, and timely plan for the physical development of the City

#### Figure H-1: Area Plan Commission (Continued)

of Evansville, Town of Darmstadt, and Vanderburgh County over the foreseeable future.

**NOW, THEREFORE**, be it resolved that the document entitled "The Evansville-Vanderburgh County Comprehensive Plan 2015-2035", is hereby approved for adoption as the Comprehensive Plan of the City of Evansville, the Town of Darmstadt, and Vanderburgh County.

**BE IT FURTHER RESOLVED**, the Plan is intended to meet the current and future needs of the City of Evansville, the Town of Darmstadt, and Vanderburgh County. The Plan shall represent the vision of our elected officials, Area Plan Commission, Board of Zoning Appeals, and the desires of citizens they represent on the future development of our community. The Plan shall also represent input from boards, commissions, and departments of the participating jurisdictions. The Area Plan Commission shall periodically review the Plan and recommend to these jurisdictions changes, additions or updates to the Plan that are necessary in order to fulfill this resolution and to keep the Plan current.

**RESOLVED, FURTHER**, that the Plan shall be the policy guide for decision making that affects the physical development of the City of Evansville, the Town of Darmstadt, and Vanderburgh County.

**RESOLVED, FURTHER**, that all matters submitted to the Area Plan Commission affecting physical development within the participating jurisdictions shall be reviewed and a report shall be prepared to the City Council, Darmstadt

Town Board, and County Commissioners as to consistency with the Plan.

**ADOPTED** by the Area Plan Commission of Evansville and Vanderburgh County, Indiana by the following vote:

Ayes: 9 Nays: 0 Abstentions: 0 Absent: 4

ATTEST:

Stacy Stevens President, Area Plan Commission

Ronald S. London P.E., CFM Executive Secretary/Executive Director

APPROVED AS TO FORM:

Dirck H. Stahl Area Plan Commission Attorney

## **APPENDIX H: ADOPTION RESOLUTIONS**

#### Figure H-2: Evansville City Council

RESOLUTION NO. C-2016- 11

SPONSOR: ADAMS COMMITTEE: ASD

A RESOLUTION OF THE COMMON COUNCIL OF THE CITY OF EVANSVILLE, INDIANA ADOPTING THE EVANSVILLE-VANDERBURGH COUNTY COMPREHENSIVE PLAN 2015-2035

BE IT RESOLVED by the Common Council of the City of Evansville, Indiana (City Council) as follows:

WHEREAS, on May 12<sup>th</sup>, 2016, the Evansville - Vanderburgh County Area Plan Commission ("Area Plan Commission") adopted the Evansville - Vanderburgh County Comprehensive Plan 2015-2035; and

WHEREAS, the Area Plan Commission was established on April 10, 1968, by action of the Common Council of the City of Evansville, by Ordinance 6-68-9 and by action of the Board of County Commissioners by Ordinance #1152, under the authority of the State of *Indiana Code* 36-7-4-202; and

WHEREAS, the Area Plan Commission works as a coordinating agency within the city and county governmental structure in comprehensive physical development; and

WHEREAS, Indiana Code 36-7-4-501 states "A comprehensive plan shall be approved by resolution ...for the promotion of public health, safety, morals, convenience, order, or the general welfare and for the sake of efficiency and economy in the process of development. The Plan Commission shall prepare the Comprehensive Plan,", and

WHEREAS, the current Evansville-Vanderburgh County Comprehensive Plan ("the Plan") was adopted in 2004 and must be updated to reflect the impact of factors such as events unforeseen at the time of its adoption but occurring after its adoption, changes in the goals and priorities of the public and its elected leaders, advances in technology and engineering, and the progression of the needs of the community to keep the Plan current; and

WHEREAS, the Area Plan Commission initiated the process to draft an update of the Plan, issued public notices for citizen comments that involved numerous public hearings; and

WHEREAS, appropriate revisions to the draft Plan have been made to reflect the input received in the public participation process; and

WHEREAS, the Plan contains policies which serve as a guide and must be given due consideration as the general policy for the pattern of physical development in the City of Evansville, Town of Darmstadt, and Vanderburgh County; and

MAY 17 2016

THEN A CARLFIDENT

WHEREAS, pursuant to Indiana Code 36-7-4-509(b), a comprehensive plan is not effective for a jurisdiction until approval by resolution of its legislative body; and

WHEREAS, the City Council finds that the Plan constitutes a suitable, logical, reasonably balanced, and timely plan for the physical development of the City of Evansville over the foreseeable future.

NOW, THEREFORE, be it resolved that the document entitled "The Evansville -Vanderburgh County Comprehensive Plan 2015-2035", is hereby approved for adoption as the Comprehensive Plan of the City of Evansville.

BE IT FURTHER RESOLVED, the Plan is intended to meet the current and future needs of the City of Evansville, Town of Darmstadt, and Vanderburgh County. The Plan shall represent the vision of our elected officials, the Area Plan Commission, Board of Zoning Appeals, and the desires of citizens they represent on the future development of our community. The Plan shall also reflect input from boards, commissions, and departments of the participating jurisdictions. The Area Plan Commission shall periodically review the Plan and recommend to these jurisdictions changes, additions or updates to the Plan that are necessary in order to fulfill this resolution and to keep the Plan current.

RESOLVED, FURTHER, that the Plan shall be the policy guide for decision making that affects the physical development of the City of Evansville.

RESOLVED, FURTHER, that all matters submitted to the Area Plan Commission affecting physical development within the participating jurisdictions shall be reviewed and a report shall be prepared to the City Council as to consistency with the Plan.

ADOPTED this 13 day of June, 2016 by the Common Council of the City of Evansville, Indiana on said day signed by the President of the Common Council and attested by the City Clerk.

Angel P

Missy Mosby President, Common Council

ATTEST:

yourawindhorson

Laura Windhorst City Clerk

### Figure H-2: Evansville City Council (Continued)

PRESENTED by me, the undersigned City Clerk of the City of Evansville, Indiana, to the Mayor of said city, this <u>ju</u> day of June, 2016, for his consideration and action thereon.

Cycuucu, Wundtor m Ladra Windhorst, City Clerk City of Evansville, Indiana

HAVING EXAMINED the foregoing Resolution. I do now, as Mayor of said City of Evansville, Indiana approve this Resolution and return it to the City Clerk, this \_\_\_\_\_tay of June, 2016 at \_\_\_\_\_ o'clock \_\_.M.

and unerf

Lipyd Winnecke Mayor of the City of Evansville, Indiana

#### APPROVED AS TO FORM:

Joshua Claybourn City Council Attorney

## **APPENDIX H: ADOPTION RESOLUTIONS**

### Figure H-3: Darmstadt Town Board

### TOWN BOARD OF DARMSTADT, INDIANA

RESOLUTION ADOPTING THE EVANSVILLE-VANDERBURGH COUNTY COMPREHENSIVE PLAN 2015-2035 ON JUNE 14, 2016

**BE IT RESOLVED** by the Town Board of Darmstadt, Indiana (Town Board) as follows:

WHEREAS, on May 12th, 2016, the Evansville -Vanderburgh County Area Plan Commission ("Area Plan Commission") adopted the Evansville - Vanderburgh County Comprehensive Plan 2015-2035 (the Plan); and

WHEREAS, on June 7th, 2016, the Vanderburgh County Commissioners adopted the Plan; and

WHEREAS, the Area Plan Commission was established on April 10, 1968, by action of the Common Council of the City of Evansville, by Ordinance 6-68-9 and by the Board of County Commissioners' adoption of Ordinance #1152, under *Indiana Code 36-7-4-202*; and

WHEREAS, the Area Plan Commission works as a coordinating agency within the city and county governmental structure on physical development; and

WHEREAS, Indiana Code 36-7-4-501 states "A comprehensive plan shall be approved by resolution ...for the promotion of public health, safety, morals, convenience, order, or the general welfare and for the sake of efficiency and economy in the process of development. The Plan Commission shall prepare the Comprehensive Plan."; and

WHEREAS, the current Evansville-Vanderburgh County Comprehensive Plan ("the Plan") was adopted in 2004 and must be updated to reflect the impact of factors such as events unforeseen at the time of its adoption but occurring after its adoption, changes in the goals and priorities of the public and its elected leaders, advances in technology and engineering, and the progression of the needs of the community to keep the Plan current; and

WHEREAS, the Area Plan Commission initiated the process to draft an update of the Plan, issued public notices for citizen comments that involved numerous public hearings; and

WHEREAS, appropriate revisions to the draft Plan have been made to reflect the input received in the public participation process; and

WHEREAS, the Plan contains policies which serve as a guide and must be given due consideration as the general policy for the pattern of physical development in the City of Evansville, Town of Darmstadt, and Vanderburgh County; and

**WHEREAS**, pursuant to *Indiana Code 36-7-4-509(b)*, a comprehensive plan is not effective for a jurisdiction until approval by resolution of its legislative body; and

**WHEREAS**, the Darmstadt Town Board finds that the Plan constitutes a suitable, logical, reasonably balanced,

### Figure H-3: Darmstadt Town Board (Continued)

and timely plan for the physical development of the Town of Darmstadt, Indiana over the foreseeable future.

NOW, THEREFORE, be it resolved that the document entitled "The Evansville - Vanderburgh County Comprehensive Plan 2015-2035", is hereby approved for adoption as the Comprehensive Plan of the Town of Darmstadt, Indiana.

BE IT FURTHER RESOLVED, the Plan is intended to meet the current and future needs of the City of Evansville, Town of Darmstadt, and Vanderburgh County. The Plan shall represent the vision of our elected officials, the Area Plan Commission, Board of Zoning Appeals, and the desires of citizens they represent on the future development of our community. The Plan shall also reflect input from boards, commissions, and departments of the participating jurisdictions. The Area Plan Commission shall periodically review the Plan and recommend to these jurisdictions changes, additions or updates to the Plan that are necessary in order to fulfill this resolution and to keep the Plan current.

**RESOLVED, FURTHER**, that the Plan shall be the policy guide for decision making that affects the physical development of the Town of Darmstadt.

RESOLVED, FURTHER, that all matters submitted to the Area Plan Commission affecting physical development within the Town of Darmstadt shall be reviewed and a report prepared to the Town Board as to consistency with the Plan.

ADOPTED this 14<sup>rd</sup> day of June, 2016 by the Town Board of Darmstadt, Indiana

**Bob Stobbs** President, Town Board of Darmstadt

Paul Freeman, Member

Steve Kahre, Member

Phil McElroy, Membe

ATTEST:

Mallory Lowe, Clerk-Treasurer

APPROVED AS TO FORM:

Krista Lockyear Josh Claybourn Town Board Attorney

## **APPENDIX H: ADOPTION RESOLUTIONS**

#### Figure H-4: Vanderburgh County Commissioners

CO.R-06-16-010

A RESOLUTION OF THE BOARD OF COUNTY COMMISSIONERS OF VANDERBURGH COUNTY, INDIANA ADOPTING THE EVANSVILLE-VANDERBURGH COUNTY COMPREHENSIVE PLAN 2015-2035

BE IT RESOLVED by the Board of County Commissioners of Vanderburgh County, Indiana

(Board of County Commissioners) as follows:

WHEREAS, on May 12<sup>th</sup>, 2016, the Evansville - Vanderburgh County Area Plan Commission ("Area Plan Commission") adopted the Evansville - Vanderburgh County Comprehensive Plan 2015-2035; and

WHEREAS, the Area Plan Commission was established on April 10, 1968, by action of the Common Council of the City of Evansville, by Ordinance 6-68-9 and by action of the Board of County Commissioners by Ordinance #1152, under the authority of the State of *Indiana Code* 36-7-4-202; and

WHEREAS, the Area Plan Commission works as a coordinating agency within the city and county governmental structure in comprehensive physical development; and

WHEREAS, Indiana Code 36-7-4-501 states "A comprehensive plan shall be approved by resolution ...for the promotion of public health, safety, morals, convenience, order, or the general welfare and for the sake of efficiency and economy in the process of development. The Plan Commission shall prepare the Comprehensive Plan."; and

WHEREAS, the current Evansville-Vanderburgh County Comprehensive Plan ("the Plan") was adopted in 2004 and must be updated to reflect the impact of factors such as events unforeseen at the time of its adoption but occurring after its adoption, changes in the goals and priorities of the public and its elected leaders, advances in technology and engineering, and the progression of the needs of the community to keep the Plan current; and

WHEREAS, the Area Plan Commission initiated the process to draft an update of the Plan, issued public notices for citizen comments that involved numerous public hearings; and

WHEREAS, appropriate revisions to the draft Plan have been made to reflect the input received in the public participation process; and

WHEREAS, the Plan contains policies which serve as a guide and must be given due consideration as the general policy for the pattern of physical development in the City of Evansville, Town of Darmstadt, and Vanderburgh County, and

WHEREAS, pursuant to Indiana Code 36-7-4-509(b), a comprehensive plan is not effective for a jurisdiction until approval by resolution of its legislative body; and

WHEREAS, the Board of County Commissioners finds that the Plan constitutes a suitable, logical, reasonably balanced, and timely plan for the physical development of Vanderburgh County over the foreseeable future.

NOW, THEREFORE, be it resolved that the document entitled "The Evansville -Vanderburgh County Comprehensive Plan 2015-2035", is hereby approved for adoption as the Comprehensive Plan of Vanderburgh County.

BE IT FURTHER RESOLVED, the Plan is intended to meet the current and future needs of the City of Evansville, Town of Darmstadt, and Vanderburgh County. The Plan shall represent the vision of our elected officials, the Area Plan Commission, Board of Zoning Appeals, and the desires of citizens they represent on the future development of our community. The Plan shall also reflect input from boards, commissions, and departments of the participating jurisdictions. The Area Plan Commission shall periodically review the Plan and recommend to these jurisdictions changes, additions or updates to the Plan that are necessary in order to fulfill this resolution and to keep the Plan current.

RESOLVED, FURTHER, that the Plan shall be the policy guide for decision making that affects the physical development of Vanderburgh County.

**RESOLVED, FURTHER**, that all matters submitted to the Area Plan Commission affecting physical development within the participating jurisdictions shall be reviewed and a report shall be prepared to the County Commissioners as to consistency with the Plan.

ADOPTED this <u>1</u><sup>an</sup> day of June, 2016 by the Board of County Commissioners of Vanderburgh County, Indiana

Bruce Ungethiem P.E.

President, Board of County Commissioners

Joe Kiefer

Vice President

Stop R. Mak

Stephen R. Melcher Member

### Figure H-4: Vanderburgh County Commissioners (Continued)

ATTEST:

ant Brean Brian Gerth

Vanderburgh County Auditor

APPROVED AS TO FORM:

Joseph H. Harrison, Jr. Vanderburgh County Attorney

## **APPENDIX I: LAND USE MAPS**

## Figure I-1: Existing 2015

Figure can be found in attached plastic sleeve or from the link below. Existing Land Use Map

Figure I-2: Future 2035

Figure can be found in attached plastic sleeve or from the link below. Future Land Use Map (THIS PAGE LEFT INTENTIONALLY BLANK)