## **Comprehensive Plan Update**

# Benton County, Indiana

July 6, 2018

Prepared for:

Benton County Advisory Plan Commission And Benton County Commissioners





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Benton County Comprehensive Plan



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## INTRODUCTION

#### PURPOSE AND PREMISE OF THE 2018 UPDATE

The Benton County Commissioners were commissioned to undertake updating the County's 2006 Comprehensive Plan per I.C. 36-7-4 and the assistance of the Indiana Office of Community and Rural Affairs planning grant. The purpose of this update is to bring county policies up to date and to address issues and topics which have evolved since 2006. The specific intent and scope of the 2018 Update is to leave in place those policies, analyses, goals, objectives and other topics which have proven functional to the overall development of Benton County, while also addressing issues that have morphed or arisen since 2006. As such, the 2018 Update will focus on those areas of the Comprehensive Plan where changes have occurred and the need for analytical strategies has been identified. Those issues, topics and analyses from the 2006 Comprehensive Plan that have been adequately and successfully addressed are expected to remain in force and use until such time as those items demonstrate a need for review and/or adjustment.

#### Process

The Benton County Commissioners contracted with RQAW and Wabash Scientific, Inc. to update the comprehensive plan. A steering committee was formed November 2017 with input from the Advisory Plan Commission, County Commissioners, and the Benton County Economic Development Office. The consultant team began with researching, mapping, documenting the existing conditions, and documented changes since the 2006 plan. Furthermore, meetings were held with the consultant team, steering committee, and individuals to discuss issues and opportunities. This allowed the consultant team and steering

committee to understand where Benton County had been and address potential trends and issued within this update.

Additional meetings were held by the consultant team and the steering committee to gather vision and concept frameworks. The public was also engaged through a workshop in March 2018 to inform the public and gather input regarding current opportunities and issues. The plan was drafted in sections by the consultant team, reviewed by the steering committee and revised appropriately. A draft report was also provided for public review and comment prior to the workshop.

Following OCRA's approval, the plan was made available for public comment. A hearing was held on June 5, 2018, and the plan was finalized and adopted by the Benton County Commissioners on July 6, 2018.

#### **OVERVIEWS & HISTORY**

#### **General History**

Benton County was formed in 1840 as settlers were moving to this area to make a life for themselves on the edge of the Grand Prairie with its nutrient rich soil. Settlers logged approximately 1,000 acres of original timber and began cultivation. Since then, the county has been rooted in agriculture.

The earliest transportation routes were on buffalo trails and very primitive roads connecting populations centers, such as the Old Chicago Road, Lafayette Road, and the Michigan Road. It wasn't until arrival of the railroad in 1871 that farmers had adequate means to transport goods.

The county's population grew from 1,144 in 1850 to 13,123 in 1900. With the growth in the Nineteenth Century, Benton County witnessed numerous public buildings and infrastructure construction such as a county farm, schools, social organizations, fairgrounds, churches, etc.<sup>1</sup> However, the population has decreased to less than 10,000 people during the Twentieth Century, which is not uncommon in rural Indiana counties.

For quite some time, the county has been capitalizing on its agricultural heritage; but in 2006, it was chosen for Indiana's first wind farm, ushering in a new chapter of Benton County's history. Since that time, Benton County has been leading the state in wind energy production and is anticipated to continue doing so.

#### Benton County as an Agriculture-Centric County

This 2018 Comprehensive Plan Update is initiated from the developmental perspective that Benton County's economic core is, and has historically been, agriculture. It is the intent of Benton County to optimize its historic role as an agricultural county through the attraction of agriculture-centric economic activity and businesses. While an agriculture-centric developmental perspective does not mean that Benton County would discourage more common forms of development if such opportunities were presented, this statement of purpose is intended to clarify a developmental philosophy that departs from traditional views of seeking/capturing industrial development as a core developmental philosophy.

As such, the Economic Development Plan, developed in conjunction with this Comprehensive Plan Update, will reflect the County's interest in attracting agriculturally-based industry and capitalizing on recent trends toward shortened food-to-table distances and improvements in food production chains and networks.

#### Policies Recognize the 'Covenant to Farm'

Benton County is an agricultural county and land use policies for existing and future development are rooted in the public policy of 'covenant to farm,' in recognition of the agricultural and economic heritage of Benton County. The policy of 'covenant to farm' basically holds that farmers who use accepted and standard farming practices are protected from nuisance lawsuits by adjacent landowners. Generally speaking, those nuisance protections are considered to relate to issues such as noise, odors, environmental, visual, and farm technology, as well as others.



<sup>&</sup>lt;sup>1</sup> Historic Landmarks Foundation of Indiana, *Benton County Interim Report*, Indiana Historic Sites and Structures Inventory (Historic Landmarks Foundation of Indiana, 2009), 12–14.

In addition to 'covenant to farm,' the structure of public policy for Benton County is also rooted in the 'home rule,' as affirmed by the Indiana Legislature. Government, itself, is a generalization which attempts to address larger populations with broader generalities. The provision of 'home rule' affirms that local government and local public policy can respond to specific circumstances in a smaller community with interpretations that are consistent with a smaller generalization. E.g., a rural, agricultural community's policies would reflect rural circumstances, rather than urban. Benton County has, therefore, developed its public policy framework with this understanding of 'home rule.'

It is not the intent of this 2018 Update to address or interpret issues of law or to suggest overly broad rules with specific outcomes. Rather, this provision of the 2018 Update is simply intended as a foundation principle which the County reasonably expects to exercise with regard to public policy decisions that might arise or confront county and/or local government in Benton County.

#### **Residential and Commercial Development Perspective**

Given the above-stated recognition of the agricultural foundations of the Benton County economy, the County expects that residential and commercial development are to be encouraged in locations within and adjacent to municipalities which possess the infrastructure to support and sustain such developments.

The County has studied recent developmental trends of commercial development that signal weakness in 'big-box' retail development patterns that were prominent in the 20th century. In developing this Comprehensive Plan Update, the County has observed the physical closure of large retail centers, while also noting an apparent resurgence in certain types of small business. In recognition of those trends, Benton County will seek to encourage the development of local initiatives to

promote and preserve 'Main Street' commercial centers through intergovernmental cooperation with Benton County municipalities.

Similarly, the County's focus and recognition of its agricultural foundation suggests that the County would expect new residential development to also take place in/near Benton County's small towns, for similar reasons. The infrastructure support offered by municipalities is most functional when residential density is sufficiently high to reduce the capital cost to viable levels. Therefore, it is consistent to expect and encourage new residential development to occur in areas where infrastructure support can be economically extended.

This combination of policies relative to future residential and commercial development would thereby be compatible with Benton County's agriculture-centric character.



#### **STATEMENT OF POLICY**

Development of Public Ways, Public Places, Public Lands, Public Structures, and Public Utilities (IC 36-7-4-502)

For purposes of this Comprehensive Plan Update, Benton County will address the issue of public ways, places, lands, structures and utilities generally as follows:

- Development of public ways will be addressed in the Thoroughfare Plan section of the Comprehensive Plan;
- Development of public places, lands and structures under Benton County jurisdiction primarily include the County Courthouse, County Jail, and Annex located in Fowler, Indiana. Discussion with regard to the County Courthouse, Jail and Annex indicates that there is no immediate need to address further development or major expansion of these facilities as a result of land use or development considerations.
- Development of public utilities in Benton County will be addressed in sections related to wind farms and development of alternative energy systems.

#### Comprehensive Plan: Additional Contents (IC 36-7-4-503)

Section 503 of the statute provides that a comprehensive plan may, in addition to the elements required by Section 502 of this chapter, include the following:

- Surveys and studies of current conditions and probable future growth within the jurisdiction and adjoining jurisdictions.
  - The County's economy has historically been rooted in agriculture and seeks to build upon its agricultural character by encouraging agriculturally-based economic development opportunities.

- Maps, plats, charts, and descriptive material presenting basic information, locations, extent, and character of any of the following:
  - Maps, plats, charts, etc., are included with specific development of materials and research commensurate with the exploration of Benton County's developmental policies and goals, as presented herein.
  - Research material indicates that the primary areas needing redevelopment are the historic Main Street commercial areas of Benton County's municipalities and proposed strategies for dealing with such areas are presented herein.
  - Planning related to public ways, including bridges, viaducts, subways, parkways and other public places is presented in the Thoroughfare Plan section, herein.
  - The Comprehensive Plan presents material relative to sewers, sanitation, and drainage, including handling, treatment and disposal of excess drainage waters, sewage, garbage, refuse and other wastes in the context of Section 502.
  - The Comprehensive Plan addresses issues of air, land and water pollution in the overall context of the agriculturalcentric economy and the future development thereof, as presented in the Environmental Plan.
  - Issues of flood control and irrigation are addressed within the context of identification of wetlands, aquifers and drainage, in the context of protection of these resources in fulfillment of the future development strategies of the County.
  - The County does not own utilities; however, this
    Comprehensive Plan proposes future development policies
    that encourage development with intensive urban uses are



located with access to municipal infrastructure, including municipal and private utilities.

- To the extent that this issue is not covered in Section 502, this Comprehensive Plan proposes future development strategies and policies that take advantage of and otherwise optimize existing transportation assets, including the use of rail to serve high-intensity agricultural functions and needs.
- Benton County lacks the population densities widely accepted as necessary to support the cost of mass transit, including taxicabs, buses and street, elevated, or underground railways, except in highly specific situations.
- Benton County's population densities and trends do not tend to support a system of county-owned parks, playgrounds, reservations, forests, wildlife refuges and other public places of a recreational nature, however, consideration of such recreational opportunities is open, if demonstrated to be cost-effective.
- Benton County's population has been declining for more than a century, thereby suggesting that demand for new/expanded public buildings and institutions is relatively low.
- As stated in multiple places, policies and strategies for land utilization in Benton County are presented in the context of larger strategies and opportunities herein.
- Benton County is committed to conservation of energy, water, soil, and agricultural and mineral resources in multiple and diverse ways, including one of Indiana's largest commitments to the development of alternative energy.

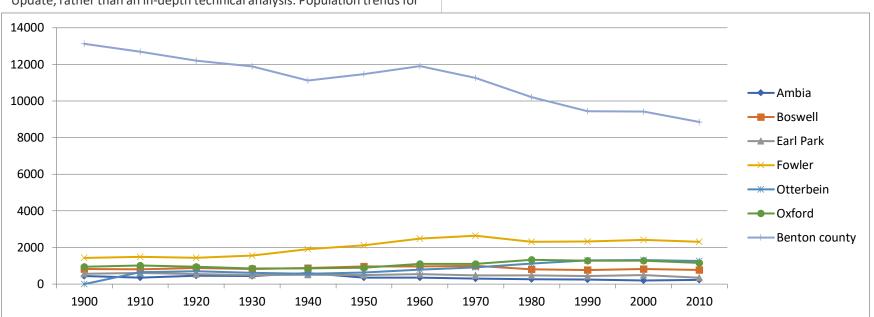




## DEMOGRAPHICS

The demographic analysis presented in the 2006 Comprehensive Plan has been updated to reflect more current data. Generally speaking, the trends for Benton County population have been consistently declining for many decades, with unincorporated population declining more dramatically than population in municipalities, resulting in a higher concentration of the total population within municipal boundaries. The tables and charts below attempt to summarize the findings of the updated demographic analysis.

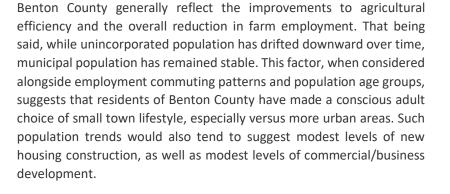
#### SUMMARY



This analysis is offered as a general assessment for purposes of the 2018 Update, rather than an in-depth technical analysis. Population trends for

Figure 1: Population Benton County and Towns 1900-2010





#### **MEDIAN AGE**

The table below indicates that the median age in Benton County is increasing (which is commensurate with statewide increases in Indiana, especially in rural areas).

	Median age (years)		
	2000 2010		
Benton County	36.7	40.1	
Ambia	33.5	31.4	
Boswell	36.1	38.1	
Earl Park	35.5	42.0	
Fowler	37.6	41.8	
Otterbein	31.7	32.4	
Oxford	37.5	39.6	

#### Figure 2: Table of Median age 2000-2010

#### AGE GROUPS: RAW NUMBERS DATA

Inasmuch as the overall population of Benton County is declining, the raw census population numbers reflect that decline for 2000 and 2010. As stated previously, municipalities tend to have sustained less loss of population, but the overall pattern would be consistent with the larger trends toward larger and more efficient farms, with employment and commuting patterns suggesting that Benton County residents tend to work outside of Benton County.

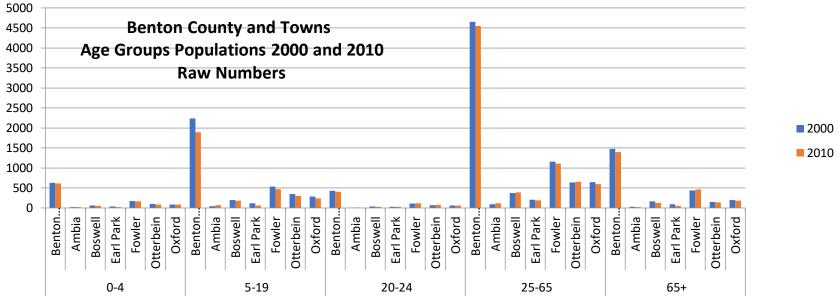


Figure 3: Benton County and Towns Age Groups Populations 2000 and 2010, raw numbers



#### AGE GROUPS: PROPORTIONATE DATA

The data presented below suggests that the two largest proportions of the Benton County population are working-age adults and school-age children. This proportionate distribution suggests that Benton County is successful in attracting/retaining working families and adults which prefer something other than urban living, especially small-town cultural attributes. Benton County has experienced modest increases in the proportion of working-age adults, while holding steady in the proportions of pre-school and school-aged children. This tends to suggest a conscious choice of lifestyle by individuals with incomes and reduced need for high-intensity public assistance. The proportionate data also suggests that Benton County's young adult population has remained at low levels. The combination of low proportions of young adults and larger proportions of working-age adults is partially an arithmetic function, but also suggests that 'first jobs' are being sought elsewhere, with population moving to Benton County as wealth and family are accumulated.

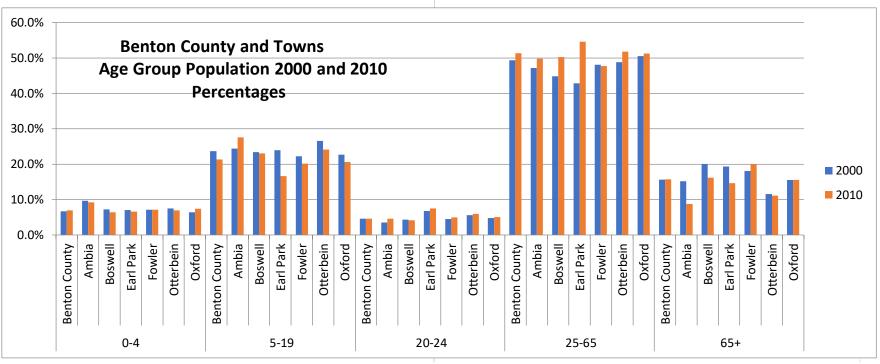


Figure 4: Benton County and Towns Age Group Population 2000 and 2010, percentages



#### INCOME

The two standard demographics measures of incomes are generally considered to be a 'per capita' income computation, as well as a 'household income' population for purposes of this 2018 Update, as shown in the tables below. The Census data for Ambia suggests some event that had a substantial impact on incomes between 2000 and 2010, however, research has not identified an income impact event peculiar to Ambia at this time. (It is noted that the 2010 census did experience some challenges to accuracy, and it is possible that the Ambia data can simply be attributed to an error in the raw data or its conversion.)

Between 2000 and 2015, there has been a general upward trend in both per capita income and household income in Benton County (except for Ambia, as noted). Generally speaking, the income trends reflect the larger, statewide trends for small towns and rural areas, with relatively small variation.

	Per capita income (dollars)		
	2000	2010	2015
Benton County	\$17,220	\$21,949	\$22,526
Ambia	\$14,169	\$12,419	\$17,217
Boswell	\$14,401	\$18,876	\$20,169
Earl Park	\$14,369	\$21,355	\$20,714
Fowler	\$17,881	\$22,253	\$21,648
Otterbein	\$17,128	\$19,969	\$19,803
Oxford	\$16,472	\$19,972	\$21,406

Figure 5: Per capita income (dollars) 2000, 2010, and 2015

Median household income (dollars)			
	2000	2010	2015
Benton County	\$39,813	\$46,318	\$47,046
Ambia	\$36,667	\$27,188	\$35,208
Boswell	\$33,224	\$42,292	\$39,375
Earl Park	\$32,981	\$36,000	\$44,688
Fowler	\$40,396	\$42,188	\$42,241
Otterbein	\$40,524	\$42,337	\$43,594
Oxford	\$39,375	\$42,828	\$45,682

Figure 6: Median household income (dollars) 2000, 2010, and 2015



#### **COMMUTING PATTERNS**

The figures below show the 2004 commuting patterns, as presented in the 2006 Comprehensive Plan, as well as the updated 2016 data. The comparative data generally shows that fewer workers are commuting out of Benton County and more workers are commuting into Benton County. However, commuting patterns continue to show Benton County residents commuting out of the county.

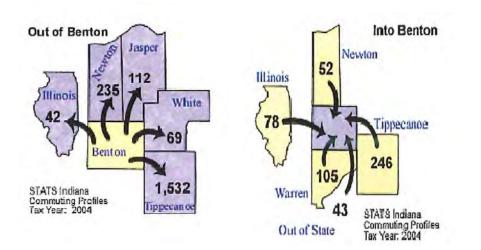


Figure 7: Commuting Patterns (Comprehensive Land Use Plan, 2006 (2004 data))

2

(http://www.stats.indiana.edu/web/county/commuting/2016/Benton.asp

Updated Commuting Patterns (2016 data)<sup>2</sup>

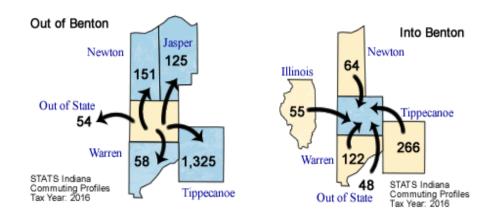


Figure 8: Updated Commuting Patterns (2016 data)

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## **PUBLIC INPUT**

#### **PUBLIC WORKSHOP**



Figure 9: Workshop title slide

A public workshop was conducted on March 27, 2018 to inform the public about the Comprehensive Plan update, to gather input regarding current opportunities and issues, and to help develop a vision for the future. The workshop was advertised at all town council meetings, in the *Benton Review* (county-wide newspaper), on the County's website, and on Facebook. The workshop was held at the County Annex building in Fowler at 6:30 P.M., light refreshments were provided, and 24 people were in attendance. Please see Appendix A for additional information relating to public involvement.



Figure 10: Public workshop

The workshop began with an introduction and explanation of the planning process and purpose for the workshop. The workshop format involved a series of slides with short presentations that were separated with periods of public engagement. The public engagement involved questions in a modified SWOT (Strengths, Weaknesses, Opportunities, Threats) analysis format and other questions that requested feedback in an open and anonymous way. The engagement allowed for instant feedback by displaying a graph with the group's overall answers which allowed for everyone to see where there was consensus or not.

The workshop concluded with a time of small group discussion, an opportunity to provide written comments, and closed with a large group conversation that included review and discussion of a few engagement questions that lacked consensus. The slide presentation, engagement questions (with overall responses), and written and discussed comments are in Appendix A.

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## **ECONOMIC DEVELOPMENT**

## **ECONOMIC DEVELOPMENT**

#### STRUCTURE & PURPOSE OF THE ECONOMIC DEVELOPMENT PLAN

IC 36-7-4-502 provides that a comprehensive plan must contain at least the following elements:

- (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.
- (3) A statement of policy for the development of public ways, public places, public lands, public structures, and public utilities.

The statutory requirements to address future development of Benton County is obviously to be performed within the context of Benton County's character and attributes.

There is a direct public policy relationship between comprehensive plan requirements for future and land use development, and addressing "economic development" issues. The statute which governs "economic development plans" (IC 36-7-14, et seq.) operates as a public policy parallel to the 'development' requirements of the comprehensive plan statute. It is, therefore, the intent of Benton County to develop an Economic Development Plan which is consistent with both IC 36-7-14-502 and IC 36-7-14, et seq., and which sets forth a platform from which Benton County can respond to economic development opportunities which are consistent with the County's developmental goals, objectives and policies.

### COOPERATIVE POLICIES OF THE COUNTY COMMISSIONERS AND PLAN COMMISSION

This Comprehensive Plan Update is undertaken through the primary cooperation of the County Commissioners and the Benton County Plan Commission, with direct input from other offices and agencies. At the time of development of the Comprehensive Plan Update, Benton County has not designated a Redevelopment Commission, however, the County would consider taking institutional steps necessary and appropriate to address the needs of specific economic development opportunities as opportunities which are appropriate to Benton County arise, on a caseby-case basis.

The County reserves the right and opportunity to review and analyze economic development on a case-by-case basis in order to identify potential environmental, economic and other threats and to mitigate negative consequences to the extent reasonably possible.

### SPECIAL ZONING REQUIRED TO PROTECT AQUIFERS & DEMAND FOR WATER RESOURCES

Benton and neighboring counties have had previous experience with land use and development which has created, and is dependent upon, an intense demand for water. It has been noted that the drilling of highcapacity wells can have a substantial detrimental impact on natural water resources, aquifers and other sequential environmental impacts.

As such, this Comprehensive Plan Update recommends that any proposal which suggests or otherwise requires a high-capacity well on any site in Benton County should conform to the Indiana's Water Resource Management Act (IC 14-25-7) to assure that the high-capacity well will not have an adverse impact on neighboring wells and water supplies. Please see the Environmental Plan section and Appendix C for maps of water resources and aquifers.

#### DEVELOPMENTAL CHARACTER OF BENTON COUNTY IS AGRICULTURAL

The following statements are offered as the public policy basis for the Comprehensive Plan Update as the policy relates to future development and land use within the County:

- Benton County is an agricultural county with an agriculturecentric economy;
- Benton County will respond to economic development opportunities with analytical scrutiny and be sensitive to potential threats to the environment, health and welfare of the community at large;
- Benton County will primarily seek economic development opportunities which are consistent with the agricultural character of the local economy, including agri-business attraction;
- Benton County is committed to the development of alternative energy sources, including wind and solar power;
- Benton County will seek to establish and improve economic and institutional relationships between Benton County and higher education such as Purdue University and Ivy Tech with the intent of identifying and implementing new economic development opportunities, as well as improvements to the local workforce;
- Benton County's stated policies with regard to 'covenant to farm,' as well as other policies, are not generally disposed to consider eminent domain as a vehicle for economic

development, but rather to be used only for improvements to public infrastructure necessary to support new or expanded economic activity.

- Benton County will endeavor to encourage the location of new development in locations which are appropriate to the development's need for modern infrastructure, especially with regard to higher densities and urban-type development.
- As a general policy, Benton County encourages new residential (including subdivisions and 'cluster housing'), new commercial, and new industrial development to be located in/near municipalities which provide infrastructure and services appropriate to support such development (but the County is open to individual residences in rural areas.)

The above statements of character and policy are intended to serve as the platform for development policy as set forth in this Comprehensive Plan Update. At the same time, it is appropriate to state that an economic development plan for an agricultural area seeking new development is not responsive to expressed needs for urban renewal or urban redevelopment. Municipalities in Benton County are expected to respond to the 'urban' development issues within the context of their own needs, including pursuit of redevelopment programs including Main Street (see Main Street Redevelopment Areas provisions of the Comprehensive Plan Update). The provisions to allow unique responses to the needs of each town is intended to provide optimal flexibility and reinforce the operative premise of Home Rule.

As an agricultural county, it is Benton County's overall objective that future development/urbanization occur on sites with suitable access to infrastructure, such as sewer, water, storm water and other utilities. Generally speaking, therefore, such future development is encouraged to take place in/near existing municipalities which possess such infrastructure. This general land use development policy, therefore, enables existing municipalities to grow with minimal impact on the agricultural character of the unincorporated portions of the County. It should, however, not limit the development of individual housing units in the county with adequate access to infrastructure on the site.

It is further noted that this policy of encouraging new development to locate with convenient access to municipal infrastructure has a secondary impact supporting efficient sewer, water, storm water and infrastructure systems (i.e., public ways, public systems, public utilities, etc.), as well as public services such as police, fire, streets, libraries, etc.

### POLICY FOR FUTURE DEVELOPMENT & LAND USE DEVELOPMENT OF THE COUNTY

As an agricultural county, including specific provisions such as covenants to farm, and preservation of agricultural character, it is the general policy of Benton County to encourage all new residential, commercial and industrial development to be located in efficient proximity to municipal services and infrastructure.

This policy is intended to preserve agricultural character, while also enabling Benton County towns to develop and implement coherent policies with regard to infrastructure extensions, municipal services, municipal revenues, annexation, and other issues commonly experienced by small municipalities. It is the County's intent that each municipality be enabled to develop such policies based on the circumstances and particularities of the municipality, so as to best serve the citizens of the town, as well as the county.

## POTENTIAL ECONOMIC DEVELOPMENT AREAS (IC 36-7-14, ET SEQ.)

It is noted that parcels containing wind turbines have been designated as Economic Revitalization Areas (ERAs), and as such, are eligible for tax abatement.

The demographic history of Benton County clearly shows declining population which is generally considered a primary indicator of limited economic growth. Increases in agricultural labor efficiencies have been a primary factor in the loss of population. These demographic realities are consistent with development policies which encourage future development to be located with access to municipal infrastructure and utilities found in existing municipalities. Encouragement of new development to locate in the proximity of existing municipal services is consistent with larger policies of minimizing impact on agricultural activity in unincorporated areas.

As an agricultural county with declining population, Benton County is receptive to economic development proposals in the county and will respond to such opportunities on a case-by-case basis, with consideration of:

- the nature and character of the economic development opportunity and the major business enterprise being proposed;
- the proposed site and its characteristics;
- whether the proposal serves the best interests of the community;
- the request for appropriate re-zoning, including special exception provisions;
- the potential impacts of the proposed development on public health, safety and welfare;

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- the potential impact of the proposed project on infrastructure systems, including highways, sewers, water and other infrastructure;
- the economic impact of the proposed opportunity, including;
  - proposed employment and wages;
  - cost (public and private, as related to the well-being of the community);
  - enhancement of the property tax base, as well as other public revenues;
  - impact on surrounding property values;
  - o demand for utilities or other public improvements;
  - the extent to which the proposed enterprise might serve to retain/expand existing business
     opportunities;
  - other factors and similar conditions which are relevant to the public interest;
- any request for public incentives related to the development opportunity.

The County will determine the propriety of designating potential economic development opportunities as Economic Development Areas (ERAs) in conjunction with IC 36-7-14, et seq. and approval of the proposed development opportunity is intended to assure conformity with the Comprehensive Plan. Such Economic Redevelopment Area designations will be undertaken on a case-by-case basis with consideration of the demands and impacts of any proposed project on the county, as well as the immediate project area, including adjacent areas.

#### Benton County as an Economic Development Area

The following represents a general description of Benton County for purposes of conforming with statutes related to the designation of Economic Development Areas, and the employment of underlying economic development incentives which might be requested as part of new development proposals and opportunities.

- Benton County has already designated a substantial number of "Economic Revitalization Areas" in support of wind farm development.
  - Further economic development designations can be undertaken to extend/employ those ERA designations.
- The entirety of Benton County has experienced prolonged economic distress and lack of opportunity to meet statutory requirements as an 'area in need of development/redevelopment.'
  - While the primary land use of the County is agricultural, Benton County municipalities have also experienced economic contraction;
  - This Comprehensive Plan Update seeks to enable individual municipalities to identify and pursue economic development and redevelopment opportunities within municipal limits;
  - The County Plan Commission and County Commissioners seek to construct a platform of inter-governmental cooperation to enable individual municipalities to respond to their own needs;
- Agricultural technology requires access to telecommunications systems and services, and Benton County has notable areas where telecommunications are inadequate or inconveniently deficient,

which alters the ability of agricultural economies to compete in the larger marketplace.

- GPS technology is required to locate and direct farm machinery and optimize farming operations.
- Advancement in drainage technology generates higher yields on agricultural cropland, while simultaneously increasing the hydraulic load on drainage infrastructure often developed in the 19th and 20th centuries.
- Historic retail trends once gravitated toward big box retail which depends upon large population centers to be economically viable.
  - As a result of the trend toward big box retail, small retail which sustained small town Main Street areas, was often lost, or severely reduced.
  - As a result, Benton County small towns have less retail Net Assessed Value (NAV) upon which to rely for the property tax revenues which sustain municipal services.
  - New commercial trends reduce development and big box retail, which is suggesting greater viability for small, individually-owned retail/commercial with carefullytargeted markets.
- Benton County seeks to develop relationships and networks with agricultural universities and to develop benefits from those relationships for developmental purposes.

#### **GOALS & OBJECTIVES OF THE ECONOMIC DEVELOPMENT PLAN**

The following represent the Goals and Objectives of the Economic Development Plan:

- Reverse the long-term trend of decreasing population;
- Develop extended economic development opportunities with regard to the development of alternative energy, including;
  - o wind energy;
  - o solar energy;
- Enhance the economic competitiveness of Benton County for attracting new development opportunities, especially those which enhance the agricultural character and economy of the County, with encouragement of new residential, commercial and industrial development in areas with efficient access to municipal infrastructure.
- Encourage the development of new and small businesses of a scale commensurate with Benton County municipalities.
- Enhance public safety and emergency response services through enhanced telecommunications services, especially along major highway corridors.
- Improve local telecom service to benefit existing and future population, in order to enhance the competitive position of Benton County with regard to economic development, and existing agricultural activity.
- Increase and improve the competitive position of Benton County sites for statewide economic development opportunities, especially with regard to agriculture-related economic development opportunities.

 Encourage the development of certified sites for economic development projects, especially in locations with access to municipal infrastructure.

#### **ECONOMIC DEVELOPMENT PROJECTS**

The following Economic Development Projects are generally included in the Comprehensive Plan Update as facilitating the overall economic development of the County:

- Develop alternatives for enhancement of cellular and broadband telecom to support and sustain local business and agricultural operations, as well as enhancing service to individual citizens for additional public benefit.
- Enhance emergency telecommunications services to assure access to emergencies through the County, especially along major highway corridors.
- Develop plans to assure that legal drains can be expanded to accommodate increased water volume resulting from the installation of system drains.
- Encourage and facilitate the development of Main Street programs in Benton County towns for the purpose of stabilizing the property tax base which is instrumental in supporting municipal services.
  - secure and amplify the historic agricultural character of Benton County towns;
  - enhance the property tax base and secure revenues that support municipal budgets and services;
  - attract visitors through locally-sourced food and highquality restaurants;

- encourage, develop and sustain small businesses to locate in Main Street areas;
- stimulate viable economic uses for commercial, industrial and business buildings within municipalities.
- Create, enhance and sustain Benton County as an economically competitive location for agriculture-centric development, including:
  - encouragement and assistance in developing certified sites for responding to economic development opportunities.
- Work cooperatively with landowners to obtain certification for economic development sites, especially in locations with efficient access to municipal infrastructure.

#### **ECONOMIC DEVELOPMENT STRATEGY**

Benton County has established an office of Economic Development and has committed funding to make the County more responsive to the needs and expectations of the economic development standard. After careful consideration of Benton County's character, including its strengths, weaknesses and traditions, the County has established a preference for pursuing development opportunities which are consistent with its agricultural character and traditions.

The following are intended to broadly outline Benton County's strategy for becoming more competitive in identifying and attracting development opportunities:

- Benton County has made a long-term commitment to alternative energy in the form of wind farms.
  - Future development policies should seek to strike an appropriate balance between various forms of energy to assure consistent service in Benton County.
- Benton County has proven to be a successful host for Confined Feeding Operations (CFOs), and has developed policies and projects that attract and retain those economic activities while simultaneously protecting the environment and overall property values.
  - Benton County land use policies have been developed to assess and analyze proposals for expansion of CFOs, assuring that such proposals be approached carefully and with environmental sensitivity, due to the intensity of CFO operations and the potential for environmental accidents.

- Benton County's Economic Development office has initiated activities to assist and encourage private landowners to pursue and achieve 'site certification' in accordance with the guidelines of the Indiana Office of Community & Rural affairs (OCRA).
  - Achievement of site certification effectively pre-qualifies certain sites to respond to economic development opportunities on a statewide basis, in conjunction with Office of Community & Rural Affairs (OCRA) and the Indiana Economic Development Corporation (IEDC).
- Benton County's Economic Development office has also initiated networking efforts to develop and enhance synergies and linkages with Purdue University (Purdue), the Purdue Research Foundation (PRF) and other organizationally-related entities for the purpose of identifying and capturing potential development opportunities.
- Benton County's Economic Development office is involved with the Wabash Heartland Innovation Network (WHIN) to unify the 10-county region's assets and build upon digital agriculture, next-generation manufacturing, and Internet of Things (IoT). Benton County's Economic Development office also participates in Indiana's Technology Corridor, consisting of nine counties.
  "Indiana's Technology Corridor combines leading-edge research and innovation with an enduring entrepreneurial spirit, abundant natural resources, and a surprising variety of lifestyles. "<sup>3</sup>
  - Benton County will seek to identify WHIN and Indiana's Technology Corridor incentives and projects which conform to the county's goals.



<sup>&</sup>lt;sup>3</sup> Indiana's Technology Corridor, "Indiana's Technology Corridor," 2018, https://www.indianastechnologycorridor.com/.

- Benton County's Economic Development office, in cooperation with other county and regional agencies, has initiated an effort to identify and quantify current deficiencies in Benton County's telecommunications networks, and to develop detailed strategies for addressing telecommunications needs;
  - The primary telecommunications goal is to enhance cellular and data services along US41 and US52 for the purpose of protecting public safety and providing emergency services.
  - The secondary telecommunications goal is to develop Benton County's telecommunications networks in quantities and qualities necessary to support the expectations of 21st Century development.
  - The ideal telecommunications outcome for Benton County is to have consistent, high-quality telecommunications service throughout the county.
- By encouraging new residential, commercial and industrial development to take place in areas with efficient access to municipal infrastructure, Benton County seeks to enhance the fiscal health of municipal services while minimizing impact on the agricultural character of the unincorporated portions of the county.
  - These new developments generally demand higher levels of services, such as public safety and infrastructure services, which can be most efficiently and effectively provided by municipalities.
  - These new developments also tend to provide fiscal revenues to support such municipal services, which are also expected to benefit municipalities.

 By encouraging location of new development proximate to municipal services, the land use and zoning conflicts are minimized at both the municipal and county levels, thus creating the most efficient and effective method for preserving agricultural character of the unincorporated county.





## LAND USE AND ZONING

#### LAND USE

#### **Current Land Use**

Benton County's land use patterns show how the county has developed over time. Current land uses were mapped using the County's Geographic Information System (GIS) data and aerial photographs. This section of the Plan Update identifies the current land uses and zoning, and provides rationale for identifying future land use areas. Within Benton County, the following land uses have been identified:

- Agricultural
- Commercial and Institutional
- Industrial
- Residential
- Governmental
- Town
- Natural and Open Space
- Other

Please refer to the following maps showing the current land use for the entire county and each township within. As stated before, Benton County is almost entirely dominated by agricultural land use.

#### Land Use Change

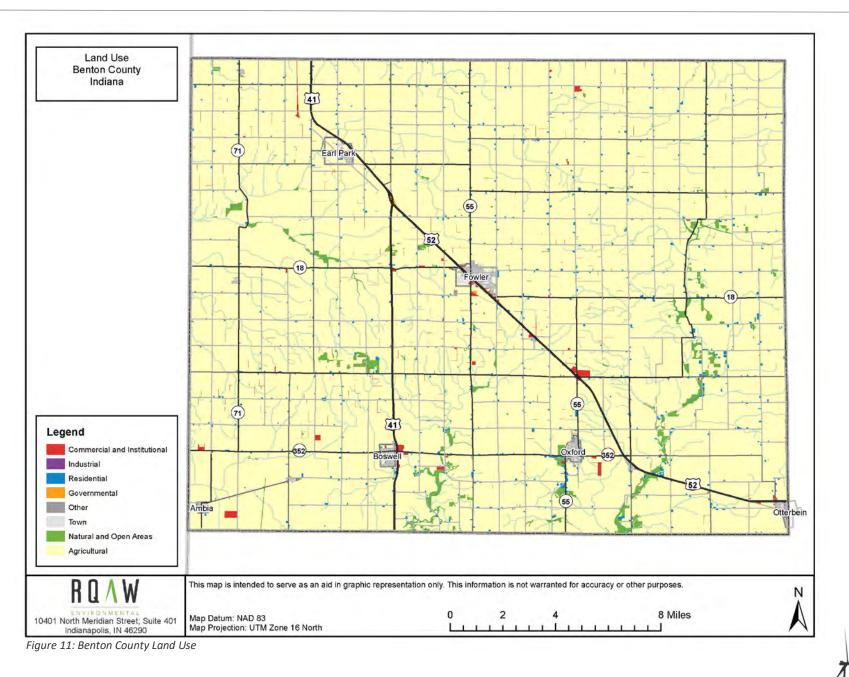
Since the 2006 Plan, there has been no significant change to land use. It was forecasted in the 2006 Plan that over time, the conversion of farmland to non-farm uses would occur at a moderate rate. The only noticeable changes, since that time, have occurred in the areas of agribusiness and wind farm development. Such changes are visible where land previously used for agricultural production is converted to small commercial operations or industrial facilities, CFOs, wind turbine access roads and electrical sub stations. These changes have typically occurred in remote areas away from urbanized towns.

Another small, but identified change has occurred in residential subdivisions. A cluster housing area was erected southeast of Fowler along SR 18. A rural residential subdivision has been constructed along US 52 where it passes over Big Pine Creek.

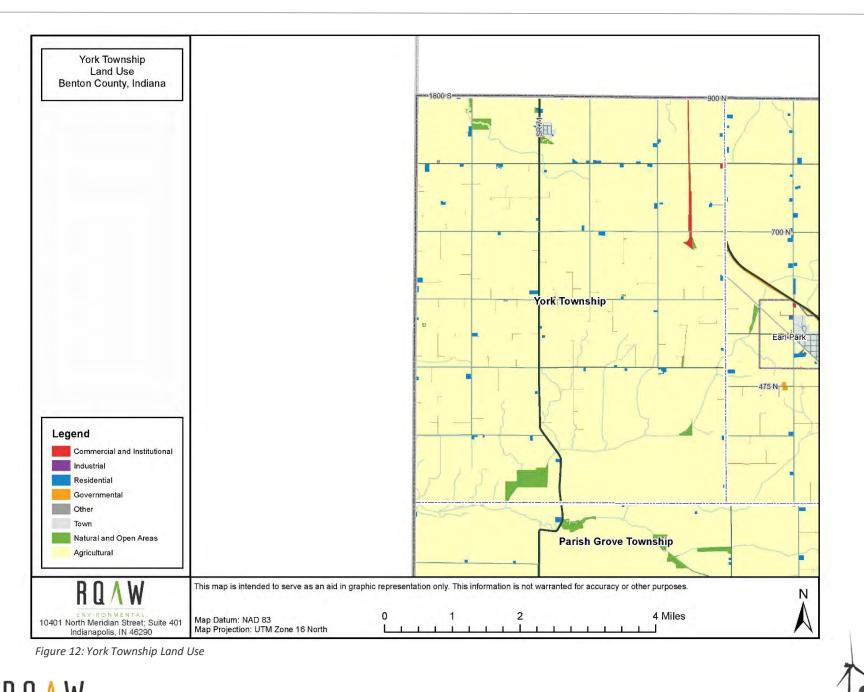
#### Future Land Use

Future land use for Benton County is anticipated to remain largely as it existed in 2006. As mentioned throughout this Update, development should occur in efficient proximity to municipal services and infrastructure. This policy preference will continue to preserve the agricultural character of Benton County.

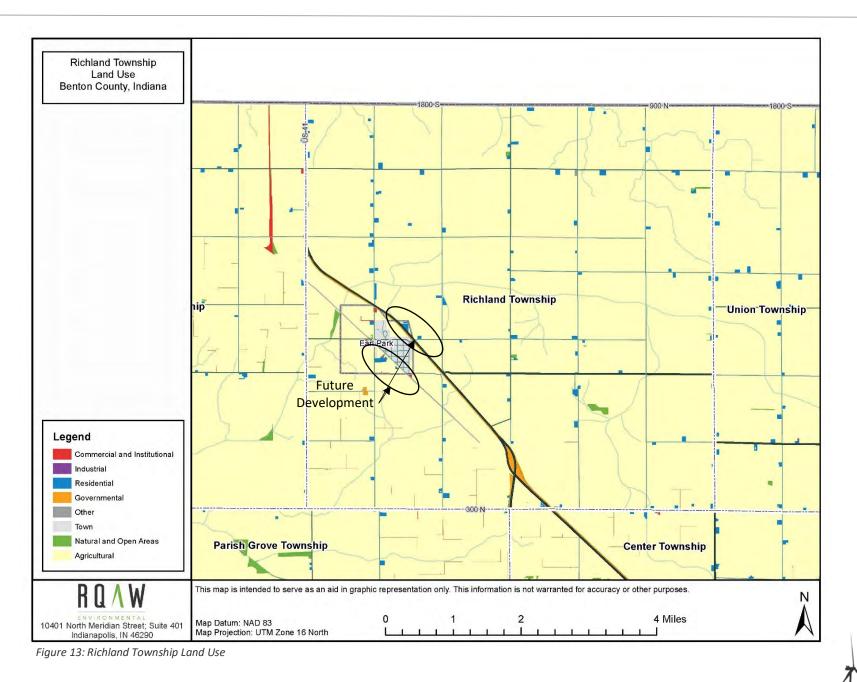




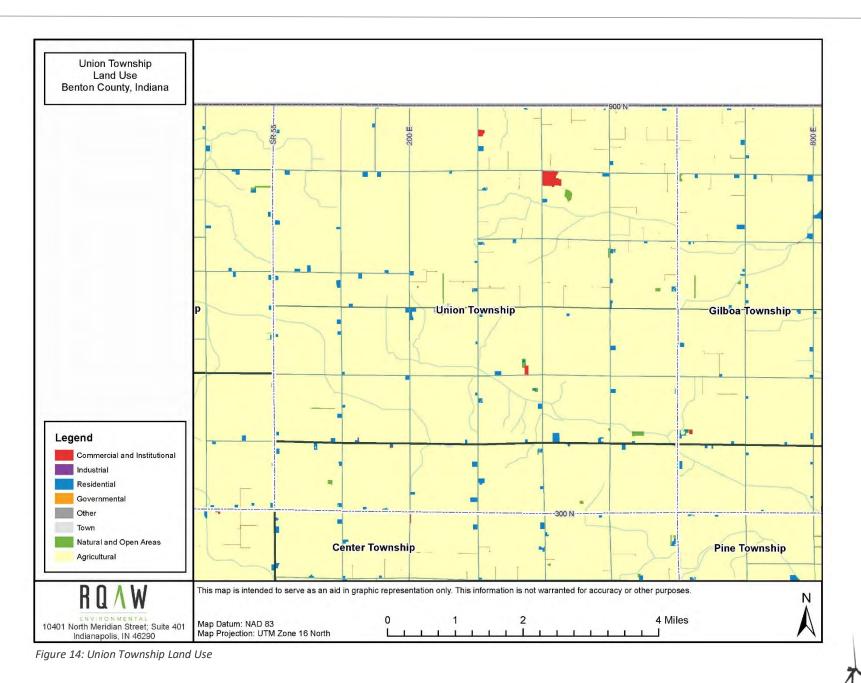






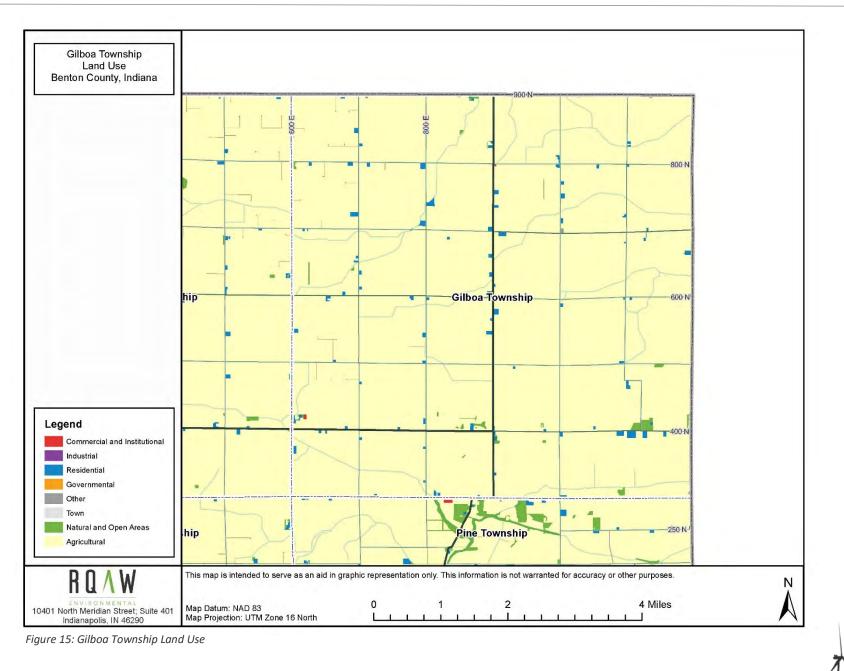




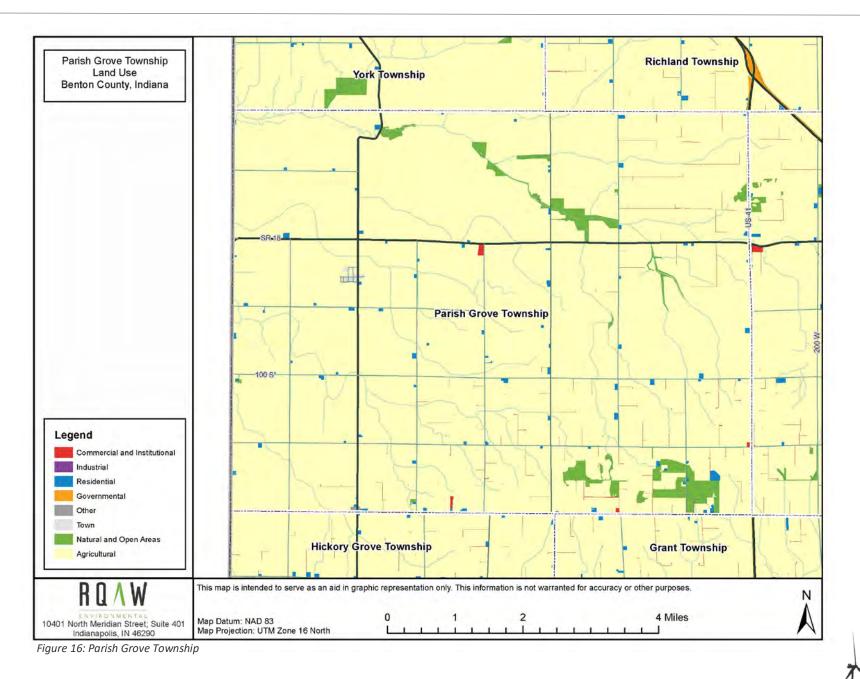




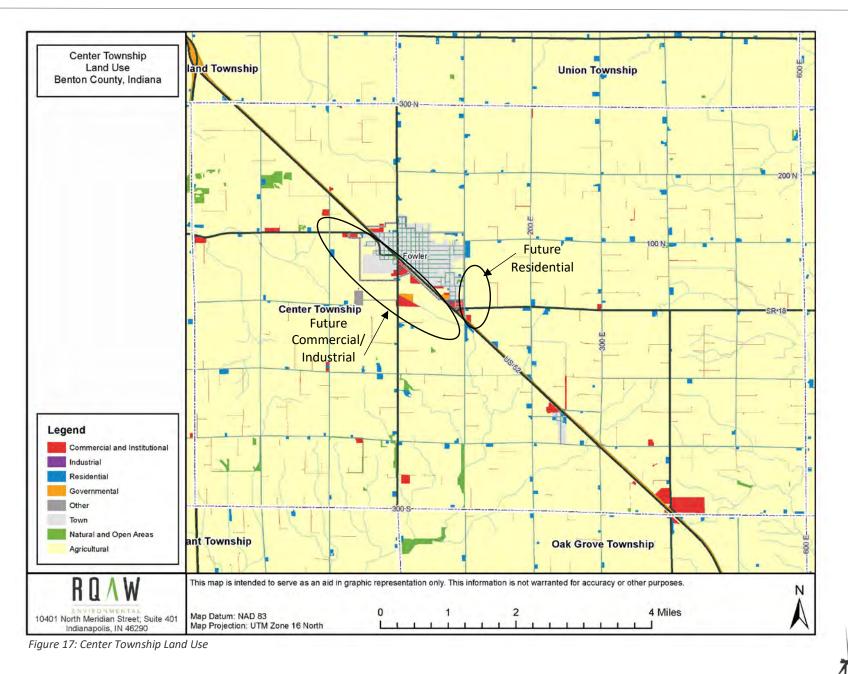
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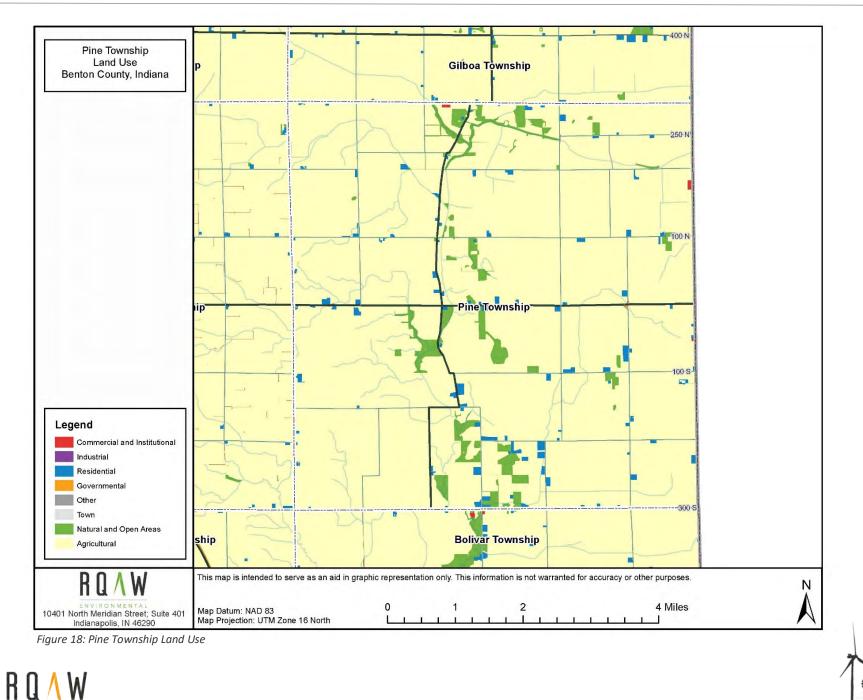




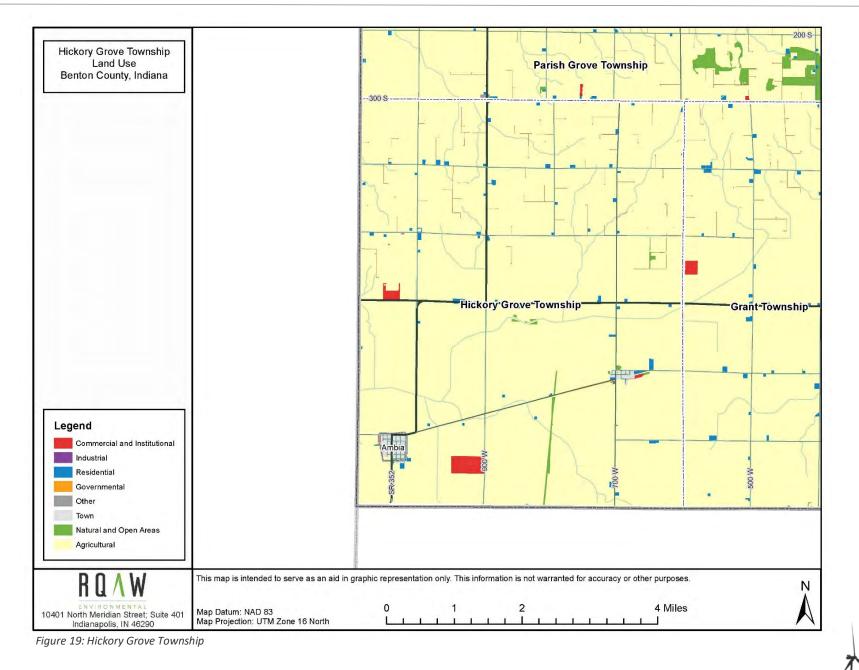




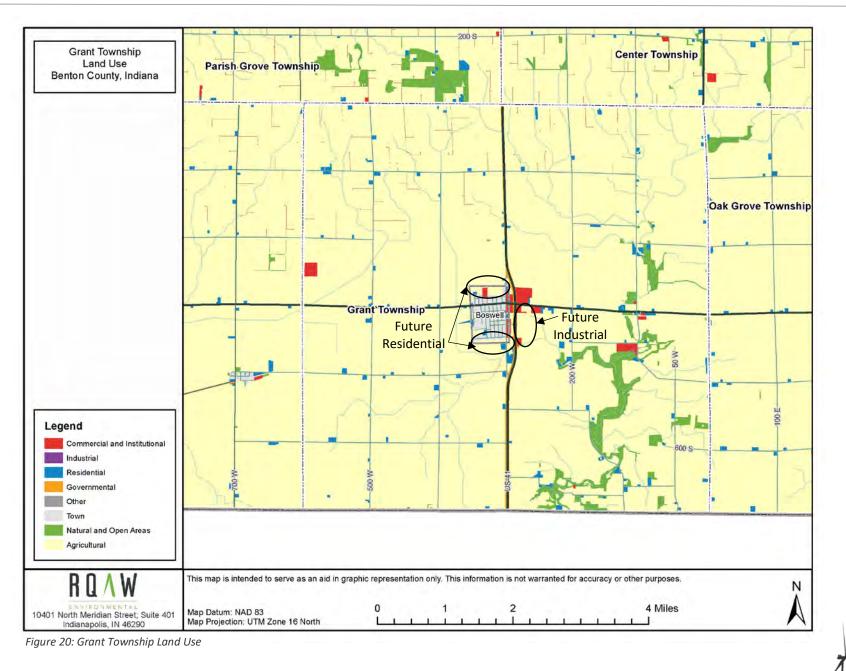




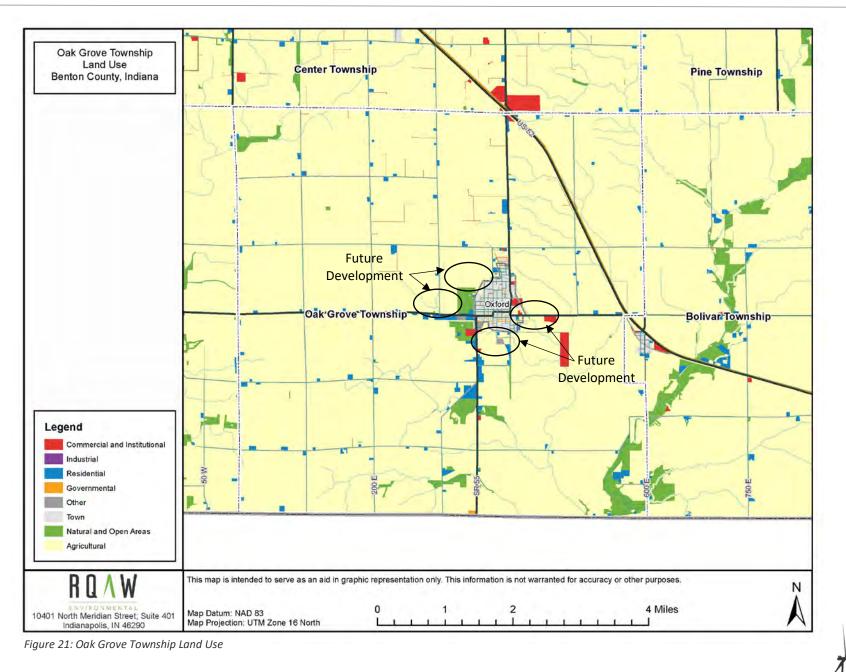




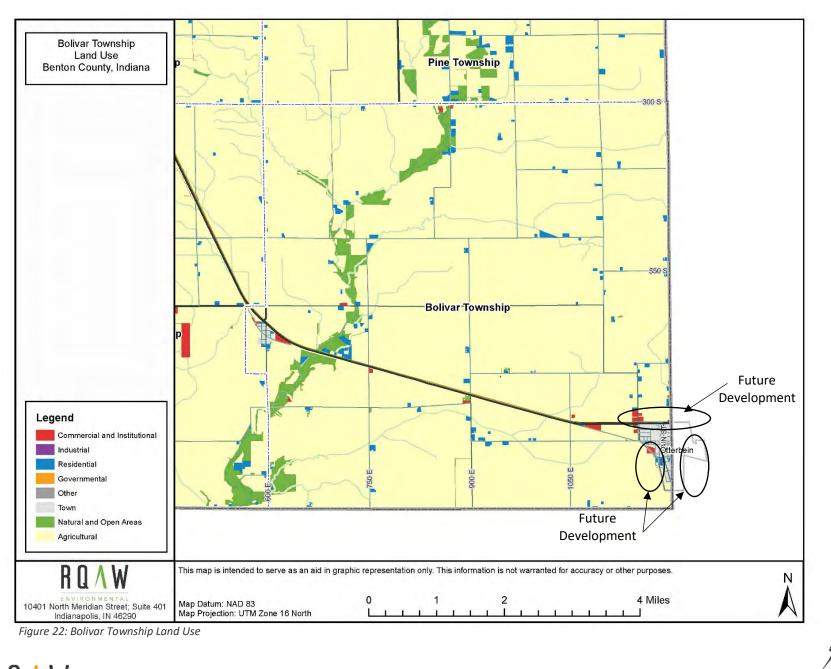














#### ZONING

#### **Existing Zoning**

Although similar, zoning and land use designations are significantly different. While land use indicates the actual activity taking place on a parcel, zoning designates what can legally be done with a parcel. Zoning regulations integrate development and design guidelines for intended

uses. The existing zoning maps are provided for a reference. Please see the County's ordinances regarding specific zoning issues and parameters. Also note that Fowler and Earl Park have their own zoning ordinances and comprehensive plans. Therefore, they are not included in the County's zoning.

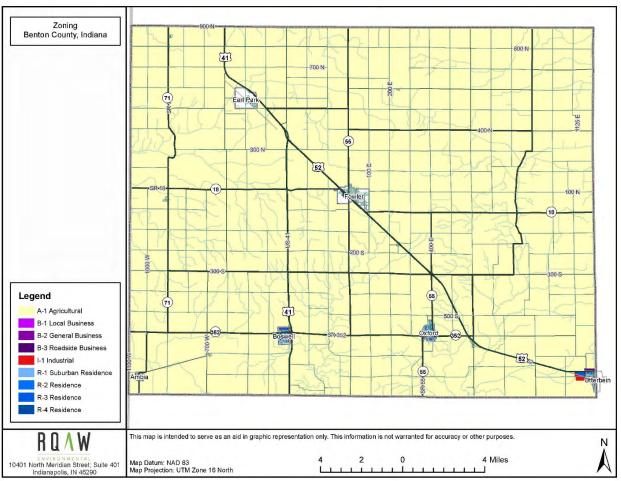
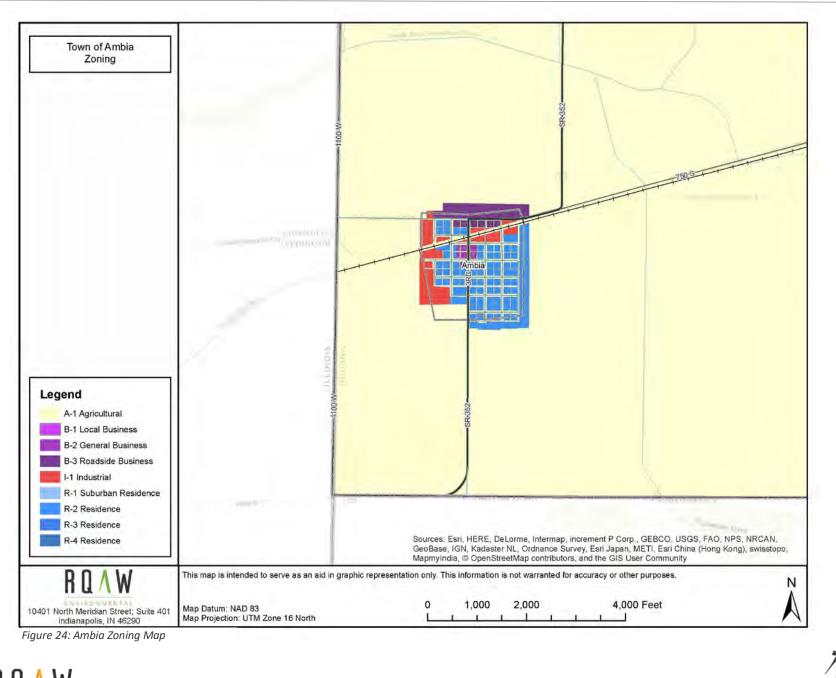
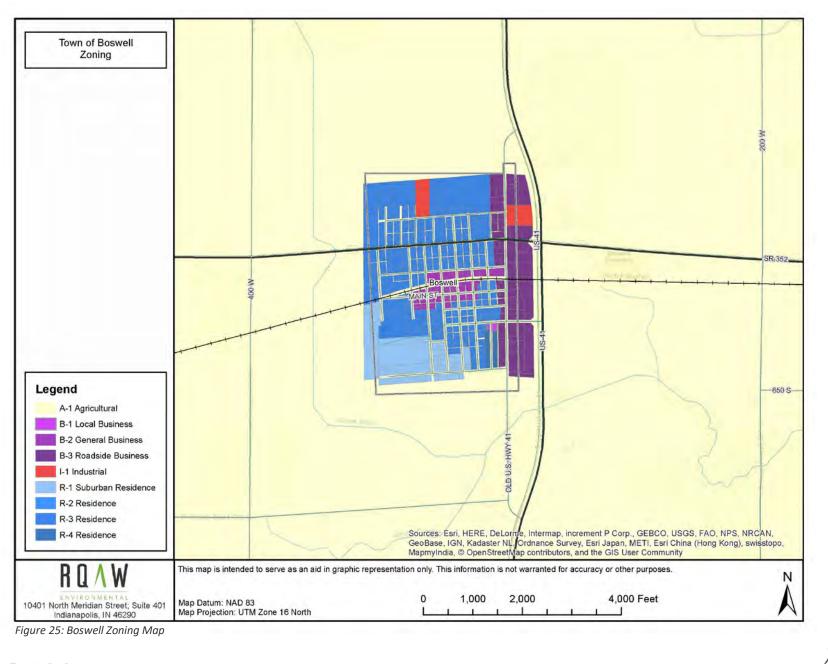


Figure 23: Benton County Zoning Map

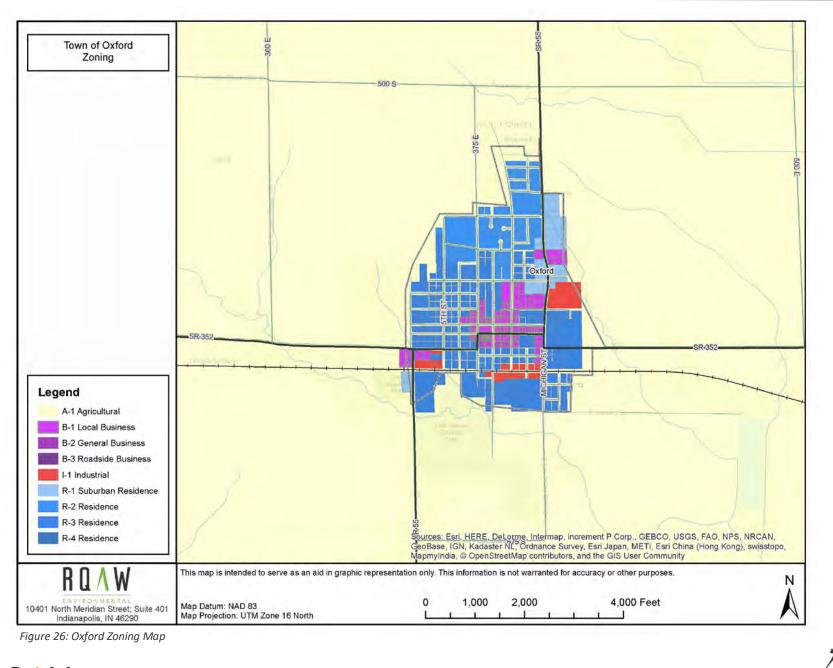




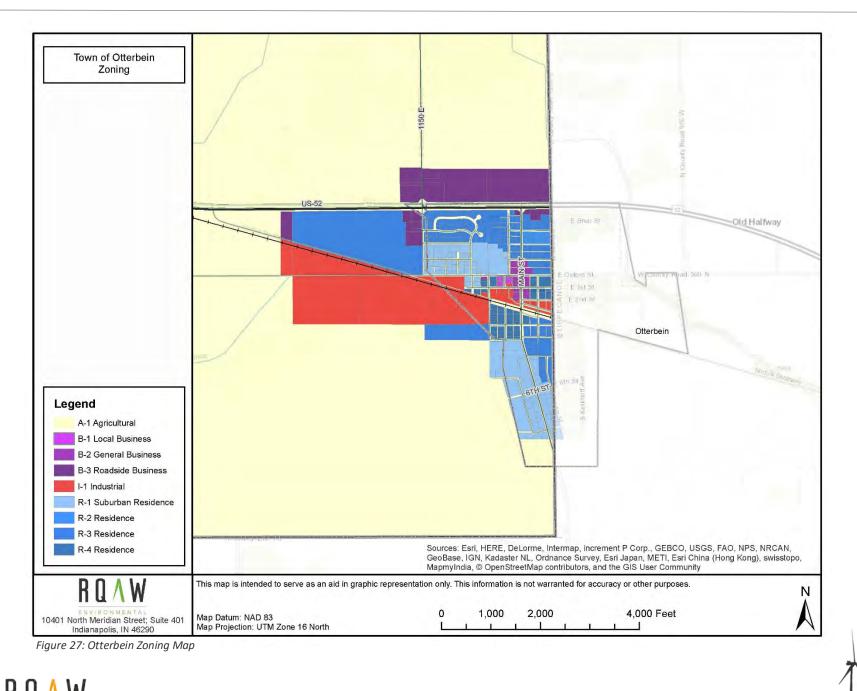












# MAIN STREET REDEVELOPMENT AREA

## **MAIN STREET REDEVELOPMENT AREAS**

#### INTRODUCTION

Indiana has a well-established Main Street program, the technical details of which are set forth in IC 4-4-16. Any Main Street effort in Benton County should be firmly rooted in those statutory requirements, and should be pursued in close cooperation with the Office of Community & Rural Affairs (OCRA), as provided in the statute. OCRA provides a broad range of technical assistance and other guidance in support of communities who wish to pursue redevelopment of their historic downtown areas.

Generally, the Main Street program was an action model which was originally developed by the National Trust for Historic Preservation, and the National Main Street Center (NMSC) was later spun off from the National Trust to function separately. OCRA generally retains a relationship with NMSC for purpose of resource exchange and other



technical guidance.

OCRA has also produced a Main Street Guide which is available online (see link in footnote<sup>4</sup>). The OCRA Main Street Guide provides substantial technical and legal information to assist in initiating local Main Street programs, including "18 Easy Steps" for initiating a local Main Street organization (see p. 17). The Main Street model originally developed by the NMSC revolves around four key points:

- 4-points of Main Street
  - o Local Organization
  - o Design
  - o Promotion
  - o Economic Restructuring

Later, the NMSC added points related to "Transformative Thinking," primarily for the purpose of generating additional creativity from local leadership which could sustain the redevelopment of Main Street over a longer period.

In addition to the fundamentals of a local 'Main Street' program, OCRA has set aside grant funding for the development of "Downtown Revitalization Plans." This 2018 Update is developed with the specific intent of encouraging and facilitating the creation of local Main Street organizations and providing a framework for those communities to access OCRA funding to assist in Main Street redevelopment.

This section of the 2018 Comprehensive Plan Update is intended to set a framework which Benton County municipalities can use to initiate a Main Street redevelopment effort, with the potential for OCRA technical assistance, as well as possible grants.

http://www.in.gov/ocra/files/2017%20Indiana%20Main%20Street%20Prog ram%20Guide.pdf.

<sup>&</sup>lt;sup>4</sup> "Indiana Main Street Program Guide & Handbook" (Indianapolis, IN: Indiana Office of Community & Rural Affairs, 2017),

#### MAIN STREET: LOCAL ORGANIZATION

All Main Street organizations are intentionally rooted locally in order to assure maximum resolution of political and other distractions at the local level. By requiring a strong local organization, the local Main Street strategies, goals, and projects can be pursued with optimal recognition of local uniqueness. The following basic bullet points are fundamental to the development of an effective organization.

- In all cases, Local Organizations drive the local Main Street process.
  - In this case, each municipality in Benton County would be responsible for initiating its own Main Street organization and process.
  - The local organization is encouraged to use the Main Street Guide (available from OCRA) extensively in order to establish a local 'Main Street' organization that recognizes the parameters for access to other resources.
  - Additional resources are available from OCRA, depending upon need.

The local organization is thereby free to engage local unique particularities in the development of its Main Street program.

#### **MAIN STREET DESIGN**

For general purposes, the fundamental 'design' element of the Main Street redevelopment model is to rely heavily on the historic design of Main Street buildings. The ultimate intent of Main Street redevelopment, as envisioned by the National Trust for Historic Preservation, was to enable historic buildings to functionally compete in a modern economic marketplace, while retaining their historic design characteristics. Main Street redevelopment projects which rely upon restoration of historic architectural elements are generally considered to be the most successful at fulfilling the intent of the Main Street model.

The basic foundation of many/most Main Street programs is to preserve and renovate the original historic design of the building, especially as viewed from the street/sidewalk. In order to optimally support the 'Design' integrity of a Main Street redevelopment effort, communities which have initiated a Main Street organization are encouraged to undertake three initial 'Design' tasks:

- Gather historic photographs of the Main Street area from local archives (public and private) in order to establish historic design facts.
- Take current photographs of all existing Main Street building facades in order to establish current conditions and catalog buildings photos by address.
- Develop and maintain an inventory of Main Street buildings, including occupancy and vacancy.

Comparisons between the historic photographs and the current conditions serve to facilitate discussion and promote the Main Street historic identity.

In addition to the historic Main Street buildings, the 'Design' element of the Main Street model includes careful consideration of several other



downtown amenities which are ultimately combined to create a space which is both peaceful and vibrant, as follows:

- street furniture
  - o pedestrian benches
  - o trash receptacles
- signage
  - o reflecting a historically sympathetic design
  - signage can be selected to reflect the unique history of the community
- paints, colors and artistic enhancements
  - Several historic organizations offer paint/color combinations that are considered historically sympathetic.
- street and building lighting
  - light poles/standards that are historically sympathetic but can be functionally upgraded for energy consumption and maintenance purposes.

There is a wealth of reference material, as well as an inventory of successful Main Street communities, available to advise local organizations with regard to Main Street design elements.

#### **MAIN STREET PROMOTION**

The third element of the Main Street redevelopment model is "Promotion," with the specific intent to promote new consumer traffic in the Main Street area. 'Promotion' generally emphasizes two baseline concepts and then grows over time to address other opportunities that might arise:

- Main Street events which celebrate the community at large, but are located in the Main Street area.
- Promotion of Main Street businesses in order to achieve and sustain economic viability.

It should be obvious that communities which already host celebratory events in the downtown area have the advantage of an event framework and infrastructure, as well as attendees/customers, without having to develop events from scratch. Communities where the Chamber Of Commerce, Little League, Scouts, or other service organization already host major events often find that they have the initial infrastructure in place to develop more events which bring positive attention to the Main Street area.

More recently, the promotion of Main Street has also developed synergies with personal health initiatives which encourage walking and other forms of physical exercise. As such, Main Street organizations are beginning to develop specific promotions where citizens of the community are encouraged to walk to, and around, Main Street areas for personal health reasons, while also dining, visiting and interacting with neighbors.

The statewide network of Main Street communities has shared hundreds of personal stories about creative businesspeople who were effective in promoting Main Street. In one case, the owner of a coffee shop made contact with a series of car enthusiast clubs of various margues and invited them to rendezvous on her Main Street. Downtown business people reserved the parking allowing the owners to display their collector cars in the morning, and took photographs of each of the cars with their owners, and obtained email addresses to send the photos. Once the group was gathered, she distributed maps of a scenic route where they could parade their cars, and the timing was such that their arrival back at the rendezvous happened to coincide with lunch. (The simple purpose of such an illustration is simply to engage local leaders to think of event themes that the Main Street area could support, rather than to recommend specific action.)

#### MAIN STREET ECONOMIC RESTRUCTURING

The long-term goal of Main Street redevelopment is to cause the community to reconsider the economic viability of the historic downtown area, and to redevelop old downtown commercial buildings with new and viable businesses. It has been common for Main Street organizations to find that historic buildings pose infrastructure deficiencies, especially with regard to telecommunications and fire safety infrastructure. Ultimately, the most purposeful Main Street organizations develop a working knowledge of the strengths, weaknesses and deficiencies of each Main Street building, often as a direct result of long term involvement.

There are several general trends which might prove beneficial for Main Street organizations, but each organization must be prepared to adapt to local economic parameters:

- Big-box retailers are failing.
  - Online shopping is displacing big-box retailers (who were largely responsible for the decline of Main Street retail).
- Restaurants are trending more toward fresh and local produce/products.

- Current trends emphasize fresh local foods, with reduced shipping distance giving local suppliers an advantage.
- If telecommunications infrastructure is sufficient to support professional services, professionals such as accountants, attorneys, etc., can be more remotely located, rather than concentrated in a 'headquarters.'

It is impossible to predict the specific impact of economic trends on small town Main Streets, such as those of Benton County. Individual creativity will likely be the primary basis of success. However, it is the intent of Benton County to support local Main Street organizations in developing and implementing Main Street redevelopment strategies that are uniquely responsive to local character.

## MUNICIPALITIES PURSUING MAIN STREET DESIGNATIONS AND RESOURCES

While the Comprehensive Plan Update is separate from the individual Downtown Revitalization Plans, Towns interested in Main Street can preperform some tasks that would be very expensive to have performed by consultants, and would better inform any professional services which might be pursued. Some of these suggested tasks would be:

- Develop an inventory of photographs of all Main Street buildings;
- Develop an archive of historic photographs of Main Street buildings for historic comparison purposes;
- Pull together property records showing public rights of way to facilitate redevelopment planning;
- Develop a tracking system to show vacancies/occupancy of Main Street buildings.



Main Street organizations who seek professional services from architects, planners, etc., can include the above as reference documents which would enable responding firms to develop more detailed proposals.

### DOWNTOWN REVITALIZATION GRANTS FOR MAIN STREET COMMUNITIES

Communities interested in pursuing Main Street designation would potentially be eligible for grants to develop a Downtown Revitalization Plan, which contain the basic elements presented on the OCRA website and generally presented below.

#### Elements of a Downtown Revitalization Plan (per OCRA requirements)

- Introduction
- Evaluation of Existing Conditions
  - o Market conditions
  - Physical conditions
  - Facade recommendations
    - photos of downtown buildings
    - renderings and recommendations for improvements
  - o Signage
  - o Lighting
  - o Structural issues
  - o Historic features
  - Paint colors, finishes, exteriors, etc.
  - Cultural/Social issues
- Other Recommendations
- Proposed Plan
- Implementation & Maintenance
- Summary
- Appendices
  - o Materials specifications
  - Proposed ordinances
  - o Other details of the plan

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## **THOROUGHFARE PLAN**

## **THOROUGHFARE PLAN**

#### INTRODUCTION

IC 36-7-4-502(3) provides that a comprehensive plan must contain a statement of policy for the development of public ways. The Thoroughfare Plan is the primary method of implementing the transportation-related goals for Benton County. This Comprehensive Plan Update serves three basic functions regarding thoroughfare planning:

- To provide the public with an assessment of the progress which the County has made regarding improving thoroughfare facilities and policies;
- To provide the public with an assessment of needs regarding thoroughfare facilities and policies; and
- To provide the public with additional strategies related to improving thoroughfare facilities in Benton County.

This Thoroughfare Plan represents an analysis of the current transportation network in Benton County and provides suggestions for improving the thoroughfare system. Issues, projects, policies, etc., which are addressed in previously planning documents remain the same as previously described unless otherwise updated. Any silence of this document regarding any project, policy, or priority is not to be construed as anything other than simple lack of change to previously approved positions. Therefore, any existing thoroughfare plan continues to be in full effect unless updated herein.

#### **IMPORTANCE OF TRANSPORTATION PLANNING**

Benton County is fortunate to have a high-quality network of roads and bridges. The county continues to provide improvements to the transportation system for improved safety, traffic flow, connections, and accessibility for the resident population and visitors. With "some of the best roads in the state," the Benton County transportation network is positioned for provide for economic success when it comes to the movement of goods and services.

#### **TRANSPORTATION CONTEXT AND REGIONAL CONNECTIONS**

Benton County is in a rural area, half way between Indianapolis and Chicago, with a significant portion of local roads (approximately 340 miles) compared to state roads. The state roads are under the jurisdiction of the INDOT Crawfordsville District. Benton County is served by US highways 52 and 41 and state highways 18, 55, 71, and 352. US 41 is a principal arterial highway connecting the western side of the state to Chicago and Evansville. US 52 is the minor arterial highway, providing access to Lafayette and areas to the northwest. Benton County does not contain any interstate highways. However, I-65 is located just outside of the northeast corner of Benton County. Interchanges with IN 18, US 231, US 24 in White and Jasper Counties provide access to I-65.



#### **PREVIOUS THOROUGHFARE PLANNING**

Benton County continues to see a level or decline in population and traffic counts. Thus, no major investment has taken place for the implementation of new thoroughfares. The previous thoroughfare planning and improvements have occurred with the maintenance, repair, and replacement of existing facilities. This has manifested in the repaving of roads and replacement of bridges. This type of planning is anticipated to continue.

#### ROADWAYS

#### **Right-of-way**

Transportation right-of-way is land reserved for the publics' use for over-land transportation routes. Most Indiana county roads maintain a 40-foot right-of-way. The right-of-way in Benton County is 50-feet (25feet on each side of the centerline of the road). The right-of-way increased from 40-feet by county ordinance. The ordinance increased the right-of-way to allow for additional safety with a larger clear zone as agricultural equipment is increasing in size. Benton County wishes to maintain a 50-foot right-of-way for public safety and requires utilities to be located at the edge of right-of-way rather than the 20 feet from the road centerline as is customary in other counties.

#### Classifications

 Arterial roads are characterized by a capacity to quickly move a relatively large volume of traffic and are often restricted to serve abutting properties. The arterial system provides for high travel speed and the longest trip movements. A rural arterial provides connections between major urban areas and provides a level of service suitable for statewide or interstate travel. Major arterials provide the highest traffic volume and the greatest trip lengths. Minor arterials provide a mix of interstate and interregional travel service. Minor arterial provides lower travel speed, accommodates shorter trip lengths and lower traffic volume, but provide more access to property.

US 41 is the only major arterial in Benton County. It serves as a major north-south corridor along the western side of the state connecting areas to Chicago, Terre Haute, Vincennes, and Evansville. US 41 travels through the towns of Boswell and Earl Park.

US 52 is the only minor arterial in Benton county. It serves as a major northwest-southeast corridor through the central part of the county. The US 52 corridor connects Benton county to Lafayette, Indianapolis, and Chicago. It is likely the most traveled roadway servicing the high numbers of commuting patterns between Benton and Tippecanoe Counties.

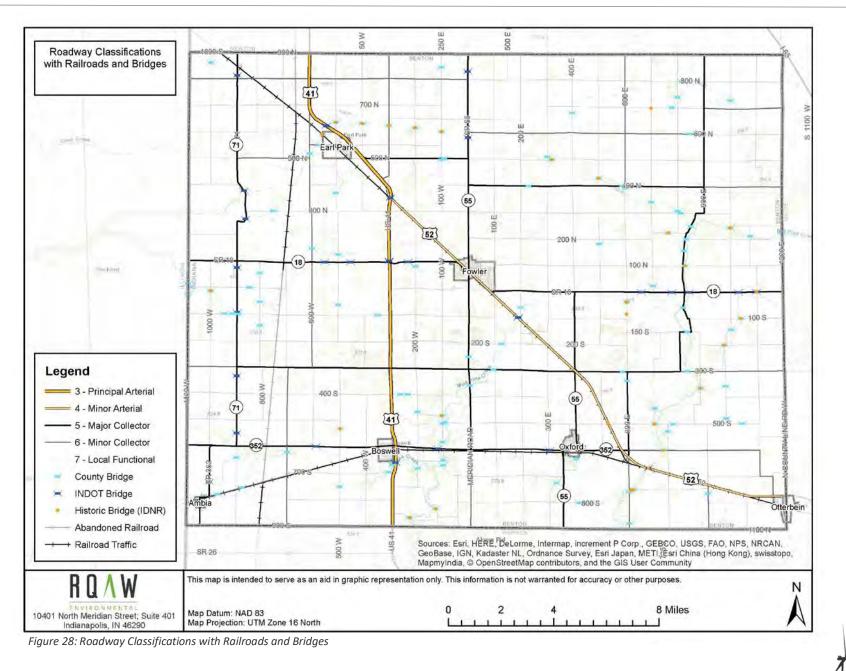
These corridors are major contributors to the image and perception of Benton County.

- **Collector roads** are characterized by a roughly even distribution of access and mobility functions. Traffic volume and speed are somewhat lower than that for an arterial. In a rural area, a collector serves intra-regional needs and provides connections to the arterial system. The collector roads in Benton County include all state roads and some county roads.
- Local Functional roads are of two types in Benton County. Rural local roads carry low volumes of traffic typically at speeds higher than urban local roads and employ some access controls. Urban local streets are generally found in neighborhoods with low volumes of traffic at slower speeds and shorter distances.<sup>5</sup>

1%20Benton%20County%20Masterplan/16%20Resources/Transportation/ 2013%20Indiana%20Design%20Manual\_Chapter%2040.pdf.



<sup>&</sup>lt;sup>5</sup> Indiana Department of Transportation, "Indiana Department of Transportation - 2013 Design Manual, Chapter 40," 2013, 6–7, file:///P:/17S-700-028-





#### **Traffic Volume**

The INDOT provides Annual Average Daily Traffic counts for highways and some local roads in Benton County. Predictably, US 41 and US 52 are the most traveled roads in 2006 and 2016. In a comparison of traffic counts from 2006 to 2016, note that counts on US 52 have increased, while counts on US 41 have remained steady or decreased marginally. The highest traffic counts in 2016, and the highest increase from 2006, occur on US 52 in the area of Otterbein, suggesting growth and development in this area of the county. As mentioned previously, this data corresponds with the commuting patterns with Tippecanoe County.

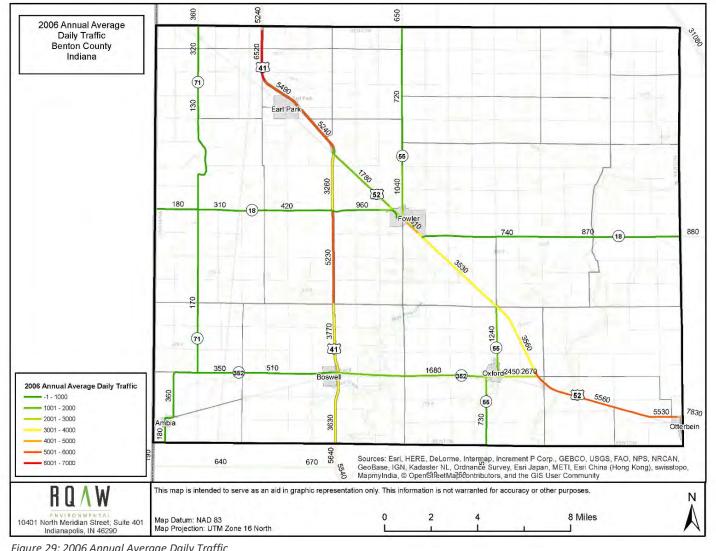




Figure 29: 2006 Annual Average Daily Traffic

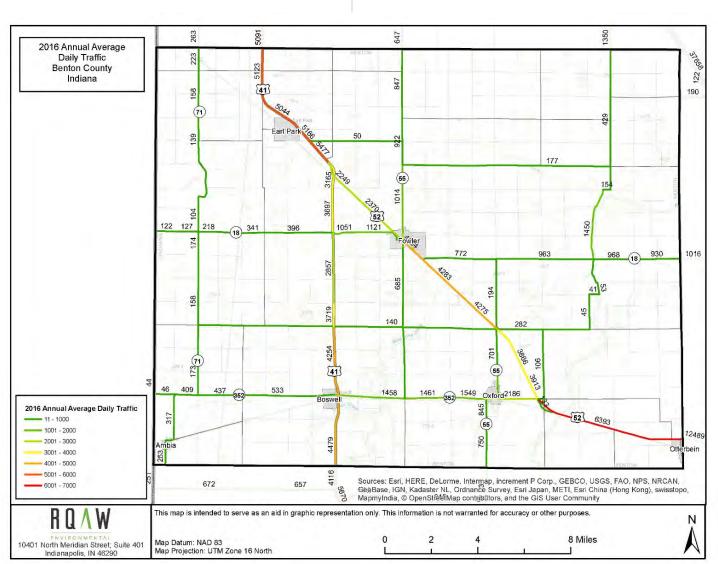


Figure 30: 2016 Annual Average Daily traffic



55

#### **Road Ratings**

The roads under Benton County's jurisdiction were rated in 2016 and 2017. Please see the map below and table in Appendix B. To summarize, all road segments were rated on a scale of 1-10 with 1 being poor condition and 10 being good condition. Roads with a 1-3 rating will likely need to be replaced, roads with a 4-6 rating will likely need to be rehabilitated or repaved, while roads with a rating 7-10 are in good condition and no work is recommended in the near future. The survey identified:

- a. 80 miles of 1-3 ratings
- b. 192 miles of 4-6 ratings
- c. 66 miles of 7-9 ratings

Please see map of roads rated 1-3 from the 2016-2017 survey in Appendix B.

#### **BRIDGES AND SMALL STRUCTURES**

#### Bridges

In addition to the 340 miles of roadways, Benton County maintains 118 bridges. Like roadways, bridges are inspected on a regular basis and given a condition rating. The most recent inspection/study was completed in 2017. It identified four recently improved bridges between 2014 and 2017. It also indicated four bridges to be functionally obsolete, seven to be structurally deficient and the rest to be good. Furthermore, the study identified eight (8) bridges for replacement, rehabilitation or removal in the next 10 years. Please see the following data from the 2017 Benton County Bridge Inspection Report in Appendix B:

• 2017 Bridge Inspection Map with load ratings.

- Graph of structurally deficient bridges.
- Table of priority schedule for bridge replacements and rehabilitations.
- List of posted bridges.
- Summary of recently replaced and rehabilitated bridges.
- Summary of structure types.
- List of Historic Bridges.

#### **Small Structures**

Small structures (defined as a bridge or culvert with a span greater than 2.99 feet, but less than 20 feet) are also inspected on a regular basis. The most recent small structures inspections occurred in 2017 for Gilboa and Hickory Grove Townships. Please see Appendix B for a table of culverts and small structures that have work completed since 2006.

#### RAILROADS

Railroads have been an important asset to Benton County since well into the 19<sup>th</sup> century. All incorporated towns are established along railroad routes. The Kankakee, Beaverville, & Southern (KBS) Railroad continues to operate as a local railroad primarily for line-haul service of agricultural products. Additionally, a small spur Bee Line railroad is in the southwestern portion of the county. All the railroads in Benton County are considered Class III railroads which "provide a retail function within the Indiana rail network by gathering rail shipments and passing them between customers and Class I railroads, which then provide long-haul service to other parts of the country."<sup>6</sup> All of Benton County's railroads

http://www.in.gov/indot/files/2017%20Indiana%20State%20Rail%20Plan. pdf.

<sup>&</sup>lt;sup>6</sup> "Indiana State Rail Plan" (Indianapolis, IN: Indiana Department of Transportation, October 2017), S-5,

haul less than 5 Million Gross Tons Per Mile (lowest category for the state of Indiana).<sup>7</sup>

#### **Grain Elevator**

According to the State Rail Plan, "Agricultural products are shipped and received at locations in farming communities. Many local areas and small towns have rail-served grain elevators that receive products by truck from the farms and provide storage and loading to the rail network. The same or similar facilities provide access to inbound products such as feed and fertilizer. These facilities can be operated by the railroads, large agricultural companies, and by farm cooperative organizations."<sup>8</sup> According to the Indiana State Rail Plan, one Major Grain Elevator is located in Benton County. It is located on the KBS line, adjacent to US 52 in Swanington, southeast of Fowler.

#### Abandoned Railroad Right-Of-Way

According to the State Rail Plan, "Before a railroad can sell or transfer property ownership of a rail corridor and its underlying property to a non-rail operating entity, the corridor must be "abandoned". This is a process whereby the Surface Transportation Board (STB) releases the railroad from its common carrier obligation. Once the corridor is abandoned, the railroad can sell the land if the corridor had originally been acquired by purchase. However, if the railroad was granted a "right" to use the land for railroad purposes through easement, the ownership of the right-of-way reverts to the current owner of the parcel of land that contained the easement when it was granted."<sup>9</sup>

A good portion of the former KBS Railroad line along the west side of the county, except for a spur south of Earl Park, was abandoned circa 2005. The Commissioners understand that the abandoned railroad right-of-

way was donated to the county. Confirmation of such transfer would require additional research and is outside the scope of this planning document. Any abandoned railroad right-of-way in Benton County should be considered to be reused for a trail network.

<sup>9</sup> "Indiana State Rail Plan," 38.

<sup>&</sup>lt;sup>7</sup> "Indiana State Rail Plan," Figure 2.1, 26.

<sup>&</sup>lt;sup>8</sup> "Indiana State Rail Plan," 44.

#### **Railroad Crossings**

When compared to state-wide statistics, Benton County has a low rate of highway-rail grade crossing crashes.<sup>10</sup> Benton County has 92 highway-rail grade crossings. Please see Figures 31 and 32 below.

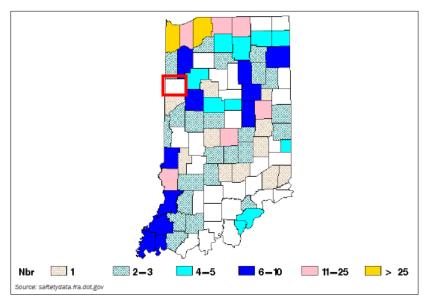


Figure 31: Highway-rail grade crossing crashes 2014-2016

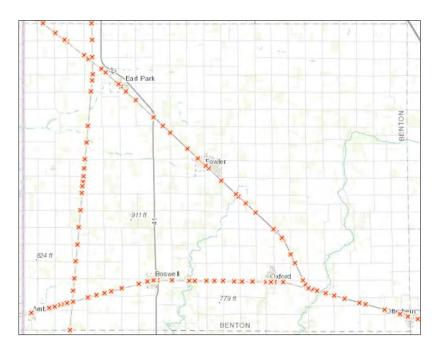


Figure 32: Highway-rail crossings in Benton County

<sup>10</sup> "Indiana State Rail Plan," 73.



"The Indiana legislature established the Railroad Grade Crossing Fund (RRGCF) (I.C. 8-6-7.7-6.1) to increase safety at rail-highway at-grade crossings. Local governments are eligible to apply for funding to enhance safety at rail-highway intersections through the RRGCF with a 100 percent reimbursement for materials up to \$40,000. Class II and Class III railroads and port authorities may also apply for RRGCF as well; however, they are required to provide a 50 percent financial match for sight obstruction removal and grade crossing surfacing projects."<sup>11</sup>

Additionally, many more state and federally financed programs exist to improve the safety of railroad crossings and the efficiency and the economic benefit of railroad freight transportation.<sup>12</sup>

#### **OTHER TRANSPORTATION**

#### Airports

According to the Indiana Map data, five private airports are located in Benton County. The Kentland Airport and Purdue University Airports are still the closest public airports and Benton County should consider policies to take advantage of their local and opportunities for economic development and advanced agribusiness.

#### **Public Transportation**

Benton County has two public transportation services, including the Town of Boswell Area Transit Van (BAT VAN) and the Benton County HOPE (Helping our Passengers Everyday) Transit Program. Both transportation services are volunteer based and request no fees. The BAT Van is for persons of all ages and disabilities living in the towns of Boswell, Oxford, Dunnington, Tab and Talbot. The HOPE Transit Program is county-wide and designed to help the elderly, persons with mobility impairments, and eligible Medicaid recipients get to needed medical appointments. It is recommended that these public transportation services continue to serve these populations at need, as well as continue to self-assess new opportunities

Benton County Comprehensive Plan

Wabash Scientific, inc.

<sup>12</sup> "Indiana State Rail Plan," Sect. 1.8.



<sup>&</sup>lt;sup>11</sup> "Indiana State Rail Plan," 14.

#### **TRANSPORTATION IMPROVEMENTS**

Since 2006, one of the largest contributors to the improving the transportation network in Benton County has been the wind farm companies. Benton County ordinances require that the wind farm companies repair/improve roadways used and damaged during wind farm development. To date, the wind farm companies have invested more than \$35 million in road improvements.

Between 2007 and 2017, Benton County has improved 51 bridges, small structures, or culverts using only county funds.<sup>13</sup> In addition, Benton County and the Indiana Department of Transportation, along with the Federal Highway Administration, have continued to invest in the county's roadways. In 2016, Benton County was awarded 45 projects through the Community Crossings Initiative which requires only a 25% match. These projects combine with INDOT projects to create more than a \$31 Million investment in Benton County roadways over the next five years where 73 lane miles will be resurfaced and 11 bridges rehabilitated or replaced.

In 2017, Benton County applied for additional Communities Crossings grants consisting of 37 projects and more than \$1 Million in funding. Many of these road projects were road segments rated 1-3 during the previous 2016-2017 inventory study (see Appendix B). INDOT awarded Benton County two culvert projects (#393 and #394) for about \$22,000. The County is currently assessing the issues associated with Communities Crossings grants in order to establish the most consistent performance possible.

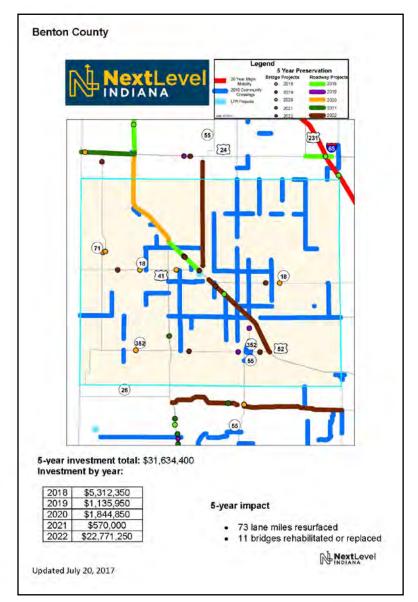


Figure 33: Next Level Work 2018-2022

<sup>&</sup>lt;sup>13</sup> Benton County Highway Department, "Bridges and Small Structures Spreadsheet," Microsoft Excel (Fowler, IN, 2018).

#### **TRANSPORTATION FUNDING OPPORTUNITIES**

#### **Roads and Bridges**

The primary funding sources for road and bridge projects in Benton County include the County's budget and state programs through INDOT. Of the INDOT sources, the State Motor Vehicle Highway (MVH) Fund and the Next Level Roads: Communities Crossing Initiative are most used. The Communities Crossing matching grant program started in 2016 and as seen above, Benton County was awarded funding for many projects. This program is a matching grant program which requires a 25% match from communities with smaller populations such as Benton County. Larger populations must pay a 50% match. As with most funding sources, not all work-types or services expenditures are eligible for the Communities Crossing program.

#### **Railroad Crossings**

The Railroad Grade Crossing Safety grant program is administered by the Department of Transportation Rail Office. Applicants are encouraged to apply for 100% reimbursable grant funds to pay for certain types of rail safety improvements and receive up to \$40,000. Enhancements could be such items as advance warning signs, pavement markings, or others discussed with INDOT. Detailed guidelines for the program along with application forms can be found at www.in.gov/indot/2394.htm.

#### THOROUGHFARE GOALS, PLANS, AND RECOMMENDATIONS

The county's goal for its thoroughfares is to maintain a safe and accessible transportation network that provides connections for residents, visitors, and economic development as people, goods, and services are transported. The county plans to maintain and or improve road and bridge conditions in safe working capacity to achieve this goal.

With regard to Benton County's transportation plans, no new routes are proposed. The county plans to maintain and improve roads and bridges as conditions deteriorate and improvements are warranted. According to the Indiana State Transportation Improvement Program (STIP) projects on state routes 18, 55, 352, 71, and US highways 41 and 52 are anticipated. Please see the STIP in Appendix B.

#### Recommendations

- Prioritize road and bridge improvement projects with road segments and bridges that receive low condition ratings.
- Utilize MVH funds to complete as many of the denied 2017 Communities Crossings projects as possible.
- Prioritize projects with the road segments and bridges that have the lowest condition ratings.
- Continue to repave and rehabilitate roads and bridges to prevent more costly replacement and reconstruction.
- Prioritize high quality roads and bridges in the areas with the highest traffic counts, particularly on US 52 near Otterbein, with the highest overall counts and largest increase in traffic volume, and near US 41 near Earl Park area, with the second largest traffic counts in the county.
- Consult when applying for Communities Crossings funding.
- Maintain, rehabilitate, and replace roads and bridges using state and federal funds as much as possible.



- Consider applicability of railroad crossing funding to improve crossing safety throughout the county.
- Continue upholding ordinances that require wind farm companies to repair and improve roads and bridges in conjunction with wind farm development.
- Continue to widen roads and bridges during improvement projects to allow for increased safety, particularly in regard to larger agricultural equipment moving on the roadways.
- Continue completion of road and bridge inventories on a regular basis to remain eligible for transportation funding from the state and federal government.
- Work with INDOT Crawfordsville District LPA director to ensure properly approaching funding opportunities.



## **ENVIRONMENTAL PLAN**

### **ENVIRONMENTAL PLAN**

#### INTRODUCTION

#### **Environmental Setting**

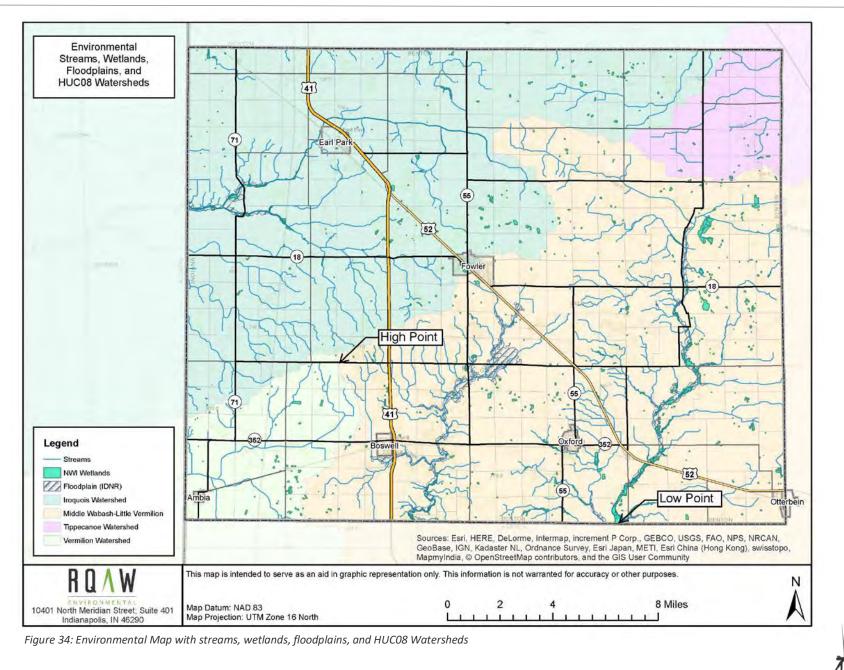
Benton County's relatively flat landscape and nutrient rich black soil are the result of glaciers retreating through this area about 10,000 years ago. The lowest elevation point is approximately 670 feet above sea level at the Big Pine Creek and Warren County line; while the highest point of elevation is approximately 915 feet above sea level on the ridge southwest of Fowler, approximately 1.3 miles west of US 41. The result is an overall maximum change in elevation of less than 250 feet and a landscape that has been referred to as the "Grand Prairie". Benton County lies on the rim of this landscape consisting of primarily tall grasses with swampy areas and occasional forest groves of oak, hickory and pine along waterways. This landscape type may also be referred to as "Oak Savanna."

The county is drained by five main streams: Big Pine Creek, Mud Pine Creek, Sugar Creek, Mud Creek, and Carpenter Creek. These lie within four main watersheds: Iroquois, Middle Wabash-Little Vermillion, Tippecanoe, and Vermilion. Water is primarily supplied through ground water, with "the principal source being deposits of sand and gravel near streams and layers of sand and gravel intermixed with glacial till." Wells are typically between 50 to 350 feet deep. Furthermore, some of the aquifers in siltstone and shale are poor sources of ground water.<sup>14</sup>

In addition to the high quality of soil and water supplies, the Grand Prairie is also known for its strong and consistent winds. Historically, wild

fires fueled by dry grasses and strong winds could quickly clear the landscape of most things above-ground, making farming difficulty. As settlement occurred in the 19<sup>th</sup> century, the thick black soil was plowed and cultivated grasses, grains and vegetables replaced the native prairie grasses. Then in the 21<sup>st</sup> century, farming the wind's power began and now huge wind turbines are common features across the Benton County's landscape.

<sup>&</sup>lt;sup>14</sup> Soil Conservation Service, "Soil Survey of Benton County, Indiana" (U. S. Department of Agriculture, 1989), 2.





#### **Environmental Significance**

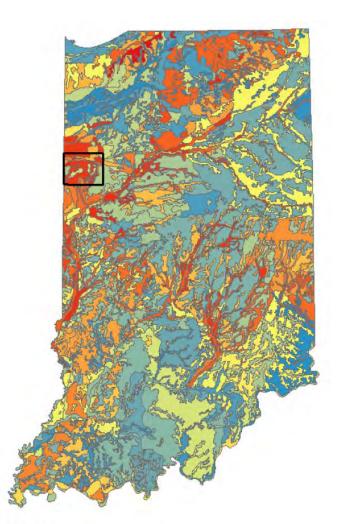
After the people of Benton County, the natural resources are its most valuable commodity in terms of providing for a strong economy and the overall public health and safety.

Since the time of settlement, the Benton County economy has relied on high quality soils to produce agricultural goods. Benton County may have the largest percentage of unconditional prime farm land of all Indiana Counties. Benton County is 9<sup>th</sup> in the state for average acre value at \$6,457/acre and has the largest average farm size at 667 acres. This is compared to the Indiana average farm size of 251 acres.<sup>15</sup> With proper soil management practices, yields can continue to increase and positively impact Benton County's most important economic driver.

Benton County should consider the overall health and safety for its residents when discussing the environment. As described above, an environment with quality soils, waters, etc. can offer a thriving economy which generates an improved quality of life. Furthermore, a clean environment is essential for safe food production and water use in Benton County and neighboring counties.

#### Environment and the 'Covenant to Farm'

Benton County is primarily an agricultural community and wishes to maintain an agricultural economy. Thus, protection of its environment should be considered an important priority. Additionally, as mentioned earlier in this Plan, Benton County is a "Covenant to Farm" county and it should be kept in mind that the recommendations made in this plan are advisory and established from the perspective of the "Covenant to



Blue=Low Yellow=Medium Red=High

Figure 35: Unconditional Prime Farm Land



<sup>&</sup>lt;sup>15</sup> "2012 Census of Agriculture" (U.S. Department of Agriculture, May 2014), https://www.agcensus.usda.gov/Publications/2012/Full\_Report/Volume\_1 ,\_Chapter\_1\_US/usv1.pdf.

Farm." Site specific environmental concerns for future development are currently addressed in the rezoning and special exceptions process. Ordinances are established and working effectively to address site specific environmental issues during this process.

#### ENVIRONMENTAL SUCCESS AND CHANGES SINCE THE 2006 COMPREHENSIVE PLAN

As an update to the 2006 Plan, Benton County has experienced changes to the environment in the areas of soil and water quality, agribusiness, wind farms, and legal drains.

#### Improved Soil and Water Quality

In terms of soil and water quality, Benton County has made significant strides in reducing negative impacts to agricultural soils and its waterways, particularly in the Big Pine Creek in the Middle Wabash-Little Vermillion Watershed. In 2015, The Nature Conservancy in cooperation with the Benton, Warren, and White County Soil & Water Conservation Districts created the Big Pine Creek and Mud Pine Creek Watershed Management Plan.<sup>16</sup> The plan and associated programs through the US Department of Agriculture (USDA), Natural Resource Conservation Service (NRCS), and the Benton County Soil and Water Conservation District has recommended Best Management Practices (BMPs) such as buffer strips and riparian zones along creeks, cover crops, and crop rotations. Currently, cover crops are being used on 2,000-3,000 acres of the 200,000 acres in the Big Pine Creek Watershed. The USDA/NRCS and Benton County Soil and Water Conservation District programs for improving soil and water quality are proving to be economically beneficial to agribusiness with improved long-term yields.

#### Agribusiness

As is well-known, agriculture is the primary economic driver in Benton County. Since the 2006 plan, the largest change in agribusiness has been in the area of Confined Feeding Operations (CFOs). Note that per the Indiana Department of Environmental Management (IDEM), Confined Animal Feeding Operations (CAFOs) have a larger number of animals, but for all intents and purposes are treated as the same of CFOs.<sup>17</sup> Therefore, all operations will be referred to as CFOs and not CAFOs within this Plan and by the county. Currently, five CFOs are permitted to operate in Benton County and one has been approved by the Board of Zoning Appeals (BZA) and will be established in the near future.

CFOs in Benton County are established as a special exception to the agricultural zoning per ordinance Sec. 8-10-b-35 and require a 500-foot setback and an application. A portion of the zoning exception application involves a *development plan* which is reviewed by the BZA on a case-by-case basis. The county will also ensure that CFO's are not located in close proximity to another so that there is sufficient availability of inputs (feed) and land to properly manage waste without competition. Furthermore, all CFOs, as defined by IDEM, are required to obtain an IDEM permit and approval prior to construction.

Benton County has proven to be an ideal location for CFOs. There are ample supplies for feed; land to manage the waste; and infrastructure for transporting goods and products. It is anticipated that more CFOs will look to locate in Benton County. CFOs offer an economic boost to the economy and are generally acceptable land uses in the county. It is recommended that Benton County allow CFOs that operate in an

<sup>&</sup>lt;sup>17</sup> Purdue Agriculture, "Confined Feeding Operations (CFOs)," 2018, https://ag.purdue.edu/cfo/Pages/what-is-cfo.aspx.



<sup>&</sup>lt;sup>16</sup> The Nature Conservancy, "Big Pine Creek Wabash River," 2018, https://www.nature.org/ourinitiatives/regions/northamerica/unitedstates /indiana/placesweprotect/big-pine-creek-1.xml.

environmentally sustainable way and that do not provide negative impacts to soil and water resources, nor the public health and safety.

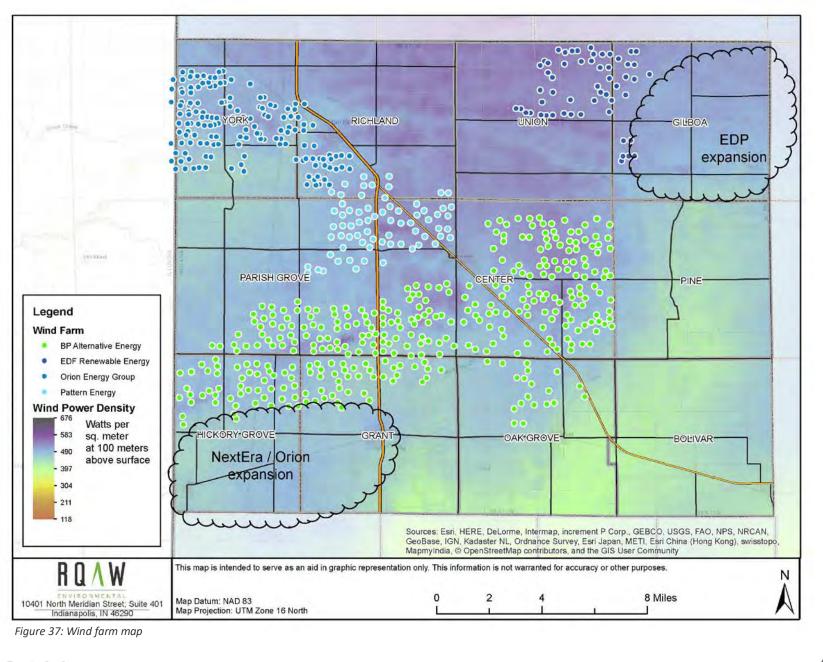
#### Wind Energy

The development of wind farms may be the most noticeable change across the Benton County landscape following the 2006 Plan. The following table and map show where 560 turbines have been erected in all townships except Pine and Bolivar, in the east and southeast where soils are not as suitable for turbine foundations. When considered as a whole, the combined capacity for all wind turbines in Benton County is 988 Megawatts which provides enough energy to power more than 275,000 homes.<sup>18</sup>

Year	Farm	Developer/Owner	Number of Turbines	Capacity (Megawatts)
2007	Benton County Wind Farm	Orion Energy Group LLC	87	130.5
2008	Fowler Ridge Wind Farm, Phases I & III	BP Alternative Energy	222	402
2009	Fowler Ridge Wind Farm, Phase II	BP Alternative Energy	133	199.5
2010	Hoosier Wind Farm	EDF Renewable Energy	53	106
2016	Amazon Wind Farm Fowler Ridge	Pattern Energy	65	150
Figure 20	S: Wind Turhine Tak	Total:	560 Turbines	988 MW

Figure 36: Wind Turbine Table

<sup>&</sup>lt;sup>18</sup> Paul Jackson, "Benton4Business," 2018, https://benton4business.com/.





In addition to simply generating electricity, wind farms have begun to generate significant economic and quality of life impacts as well as other air and water improvements. Simply put, wind energy is cleaner and prevents the use of coal fired electricity generation. According to the US Department of Energy (USDOE), each 1,000 MW of wind power capacity developed in Indiana will annually save 1.68 billion gallons of water and eliminate 3.1 million tons of carbon dioxide emissions. Furthermore, the following list shows examples of the economic and quality of life improvements offered by the wind farms in Benton County:

- Wind farms have created 95 new jobs,
- Wind farms revenues have helped the County Council and Commissions to pay off debt,
- Wind farms revenues have provided funds to the towns and townships for projects,
- Wind farms revenues have helped reduce property taxes,
- Wind farms are generating tourism business in the County, and
- Wind farms revenues and impact charges have served to repair and improve roads as required per the County's wind farm ordinance

In addition to current wind farm development since 2006, even more is anticipated. The Meadow Lake Wind Farm operated by EDP Renewables in White County is anticipated to expand into Gilboa Township with 60 additional turbines, and Orion Renewable Energy Group has partnered with NextEra Energy Resources to develop a portion of the Jordan Creek Wind Farm in Hickory Grove and Grant Townships in southwest Benton County.

#### **Legal Drains**

Legal drains and system tiling are important to the agricultural community for supplying drainage to wet crop lands, thus increasing yields, as briefly discussed in the Economic Development section of this Plan. The County continues to maintain and repair legal drains with assessments. Efforts are being made to adequately assess legal drains in advance of necessary repairs or improvements. The advancement of GPS yield tracking technology in agricultural equipment has resulted in additional system tile installation since the 2006 plan. With this technology, farm operators can better understand where yields may increase with additional drainage. As a result of additional system tiling, the increased hydraulic load sent to local drains is beginning to take a toll on the aging drainage infrastructure. Furthermore, the drainage system is experiencing increased sedimentation which lowers the drainage system capacity and suggests evidence of soil erosion. The county has an easement of 150-feet (75-feet from centerline of the ditch) for the maintenance of all legal drains. The county's easement is 40-feet for non-legal drains.

#### Land Owner Types

Since the 2006 Plan, there has been an increase in investment, and sometimes absentee, agricultural land owners. The number of large farm operators is increasing and the number of smaller family owned and operated farms is decreasing. As the size of farms increase, it becomes more challenging for the owners and operators to manage the soil's health. Additionally, many investment land owners reside outside of Benton County, resulting in some economic benefit leaving the county.



#### **ENVIRONMENTAL GOAL**

The environmental goal for the Benton County Comprehensive Plan Update is to maintain quality natural resources for Benton County's overall health and safety, as well as economic success. This includes maintaining/preserving/restoring soil quality for a thriving agricultural economy and improve, or at least, maintain water and air quality for the overall health and safety of current and future residents.

#### **ENVIRONMENTAL RECOMMENDATIONS**

**Objective**: Increase overall environmental considerations throughout Benton County.

#### Policy:

- Encourage environmental and agricultural education through Purdue and the United States Department of Agriculture (USDA), Natural Resource Conservation Service (NRCS), and Benton County Soil and Water Conservation District (SWCD) opportunities.
- 2. Promote agriculture and developing agribusiness operations to improve or maintain environmental conditions regarding soil, water, and air quality.
- 3. Consult with environmental professionals within Benton County and throughout Indiana.

**Objective**: Provide for adequate drainage for sustainable agricultural yields.

Policy:

- 1. Develop a way to stay ahead of legal drain maintenance and improvements as system tiling is increasing, whether by increasing assessments or through some other means.
- 2. Encourage operations that reduce the amount of sedimentation into legal and non-legal drains.

**Objective**: Further implement environmental protections on a case-by-case/site-by-site basis through the zoning special exception applications process.

#### Policy:

- 1. Recommend that the county work with conservation professionals to develop special exception zoning processes by incorporating additional environmental sensitivities for the long-term safety of Benton County residents, soil health, and water and air quality.
- Consider diverse BZA appointees so that multiple perspectives regarding environmental considerations are heard and considered. Extend consideration to replacements of recused members as well.
- 3. When considering a change in zoning for CFOs, consult the Purdue Department of Animal Science CFO website (https://ag.purdue.edu/cfo/Pages/default.aspx) to further consider potential environmental impacts.



**Objective**: Maintain or improve water quality for the public's health and safety.

#### Policy:

- 1. Promote the reduction of nitrates into waterways via lawn and landscape fertilization, and runoff from agricultural operations.
- 2. Encourage proper system tiling practices by coordinating with the USDA to prevent illegally impacting wetlands.
  - a. Use the previous National Wetland Inventory (NWI) map for reference, but ensure accurate wetland delineation through the USDA's office. See NWI Wetlands mapped in Figure 34 above.
- 3. Promote the use of easement and mitigation programs to preserve and restore streams, riparian areas, and wetlands.
- 4. Site potential water pollutant sources away from headwaters, streams, and other water sources.

**Objective**: Maintain air quality throughout Benton County.

#### Policy:

- 1. Continue to encourage harvesting wind energy to reduce the amount of coal fired electricity generation.
- 2. Continue using the zoning ordinance for developing additional wind farms.

**Objective**: Maintain or restore soil health (structure and organic nutrients) and prevent soil erosion for a continued agricultural economy.

#### Policy:

- 1. Promote the use of technology such as GPS yield tracking for improved nutrient application practices by saving on the amount and costs of fertilizers.
- Promote the use of USDA, NRCS, and Benton County SWCD Best Management Practices (BMPs) and incentive programs for long-term prosperity of soil health and agriculture, such as the following. Note that the programs are open to land owners and farm operators and that the BMPs may not show immediate improvements to soil quality and yields, but over time yields are expected to increase.
  - a. Crop rotation
  - b. No/low till
  - c. Cover crops
  - d. Vegetated swales and grass water ways
  - e. Buffer strips

# **APPENDIX A: PUBLIC INPUT**

### **APPENDIX A: PUBLIC INPUT**

#### **PUBLIC WORKSHOP**

**Presentation and Engagement** 









### Workshop Format

- Agenda
  - Introduction
  - Planning process
  - Engagement process and demo
  - Discussion, engagement, and large group conversation
  - Final discussions
    - Table and large group
  - Close



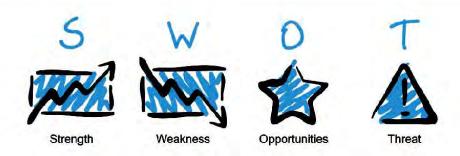






### **Engagement Process**





### Sample Questions:

The use of wind farms to develop the economy and generate local revenues is a:

A. Strength / Opportunity

B. Weakness / Threat

Which of the following should be the highest priority for Benton County's transportation?

A. Wider roads and bridges

B. Improved intersections and railroad crossings safety

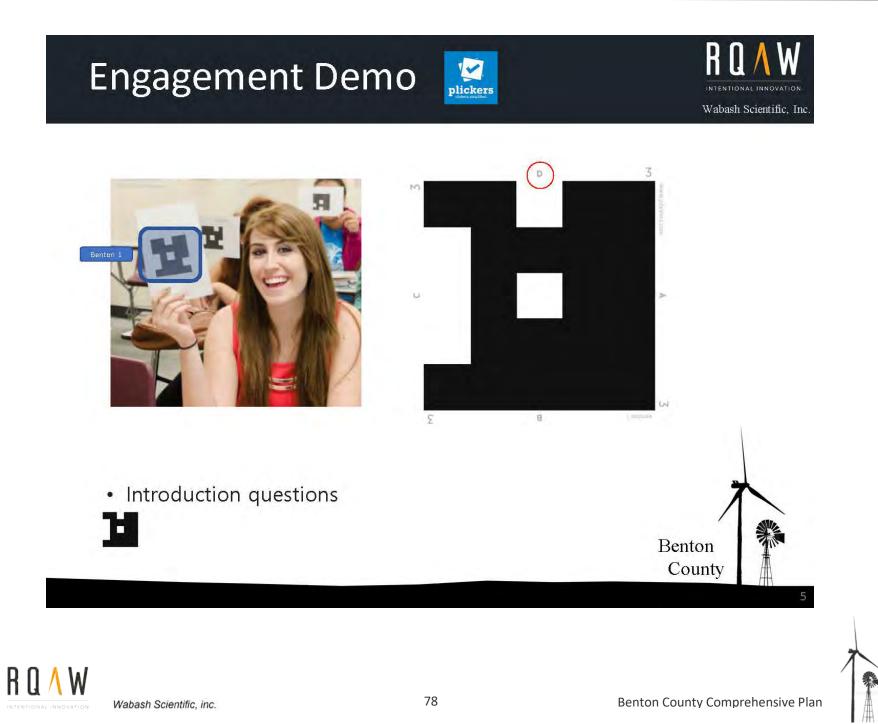
C. Alternative transportation: sidewalk, bike lanes, public transit, etc.

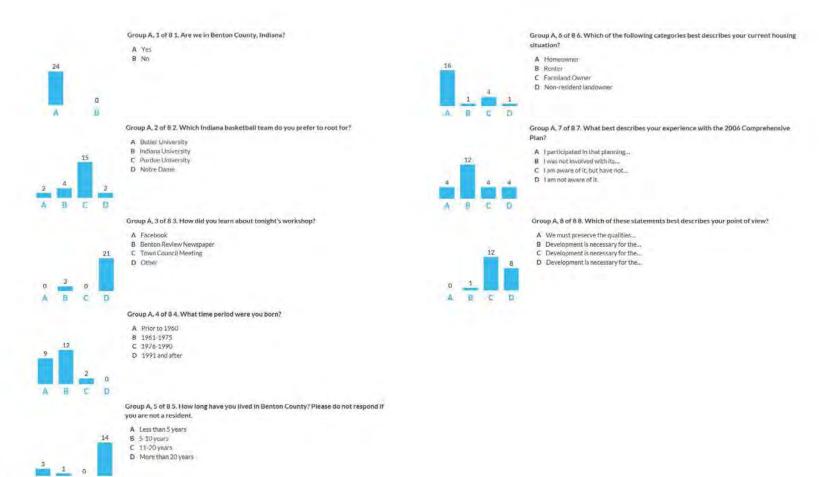
D. Improved road pavement and bridge conditions





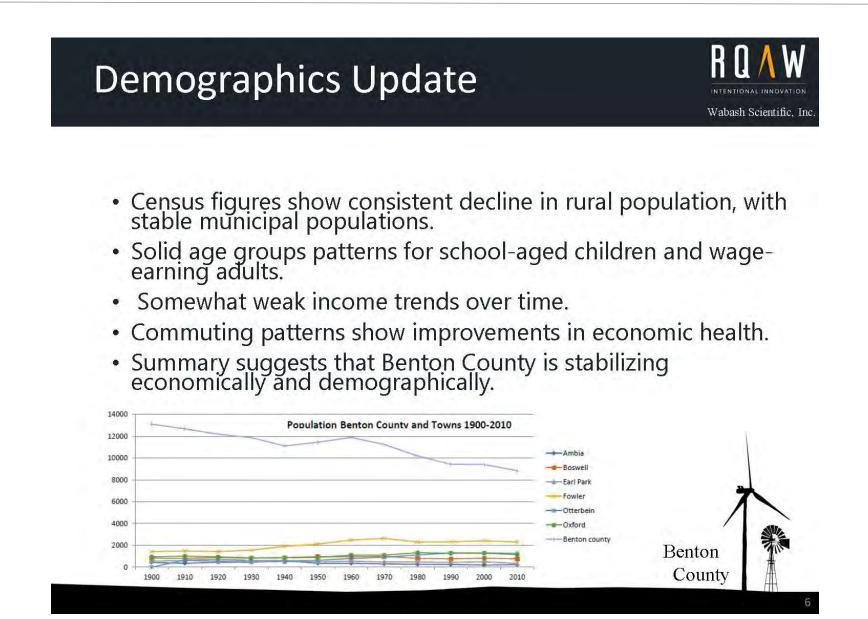
Benton County







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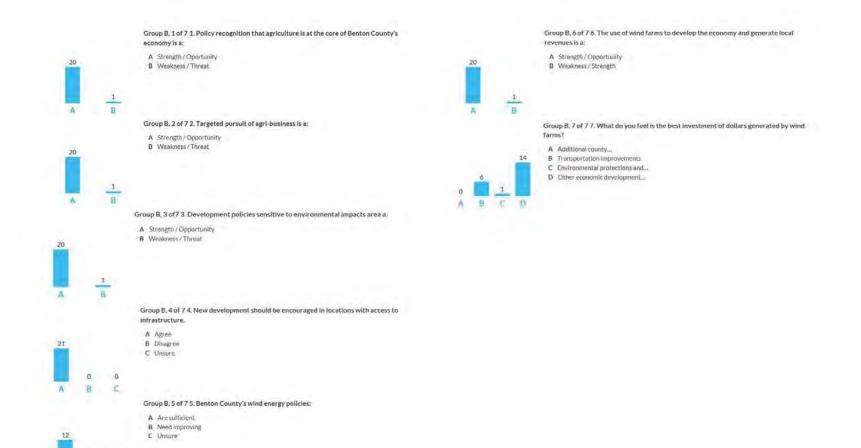




- Policy recognition that agriculture is the economic core and targeted pursuit of agri-business.
- Development policies sensitive to environmental impacts.
- Encourage new development in locations with access to infrastructure.
- Platform of inter-governmental cooperation.
- Leader in wind energy policy and alternative energy as a form of economic development – generating local revenues.



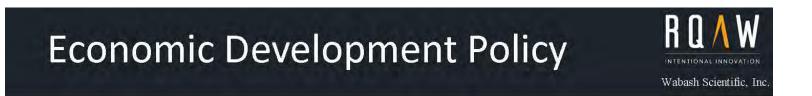
Benton County





C

Benton County Comprehensive Plan



- Telecommunications infrastructure
  - Improvements would benefit existing population.
  - Improvements would make Benton more attractive for economic development opportunities.
  - Improvements enhance emergency response.
  - Improvements benefit education resources.
- County economic development policies should consider telecom policy, despite difficulties and lack of authority.



Benton County





Group C, 2 of 3 2. County economic development policies should consider telecommunications policy, despite difficulties and lack of authority.



Q A

RQ / W

Group C, 3 of 3.3. Fun question - In what year did the number of cellphone-only households exceed 50% in the United States?



A 2014 B 2015 C 2016 D 2017

A Agree B Disagree

C Unsure



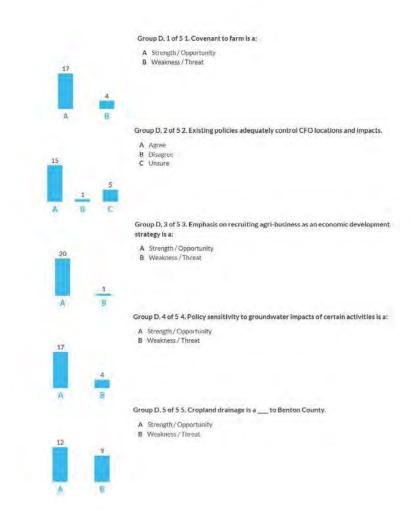


- 'Covenant to farm.'
  - Recognizes economic core of Benton County.
  - · Builds on current strengths.
  - Promotes development in areas with access to infrastructure.
  - Simplifies land use impacts/interactions.
- Changes in agricultural crop technology are controlled for unintended impact.
- Existing policies adequately control CFO locations and impacts.
- Emphasis on recruiting agri-business strengthens local agricultural economy.
- Policy sensitivity to groundwater impacts of certain activities.
  - Policies protect groundwater impacts.
- Recognition of sequential impacts on drainage.
  - Enhanced cropland drainage has impact on county drainage infrastructure.











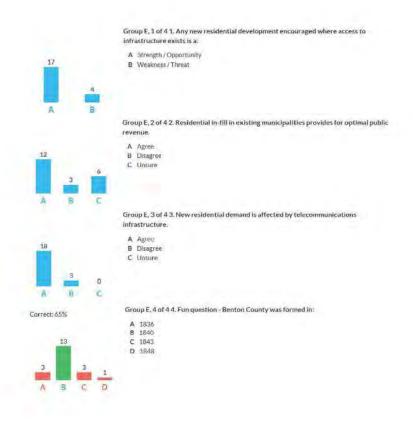
Benton County Comprehensive Plan



- New residential development encouraged with access to infrastructure.
  - Residential in-fill in existing municipalities provides optimal public revenue.
  - Single-site rural residential development not prohibited.
- New residential demand is affected by telecom infrastructure.



Benton County



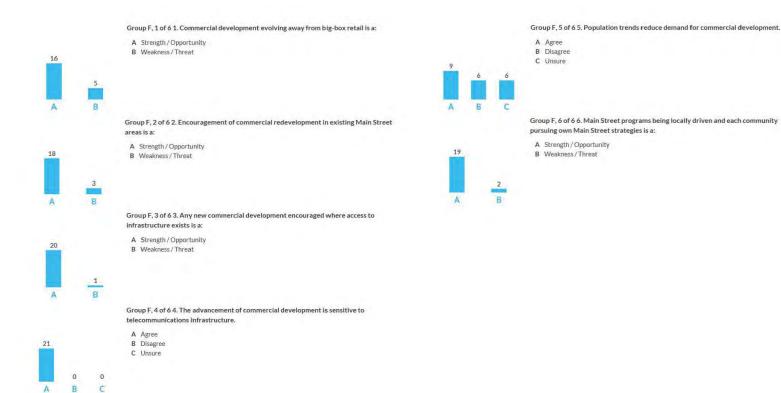




- Commercial development is evolving away from big box retail.
- Commercial development sensitive to telecom infrastructure.
- Encourage commercial redevelopment in existing Main Street areas and new commercial development in locations with access to infrastructure.
- Population trends reduce demand for commercial development.
- Indiana Main Street program is locally driven: Benton County communities can decide own strategy.













- Lack of direct access to interstate highways.
  - Does County have capacity to address 'solutions'?
- Development of 'certified sites' benefits economic development opportunities.
- Primary links to industrial interests likely to be neighboring counties.
- Alternative energy benefits industrial development.

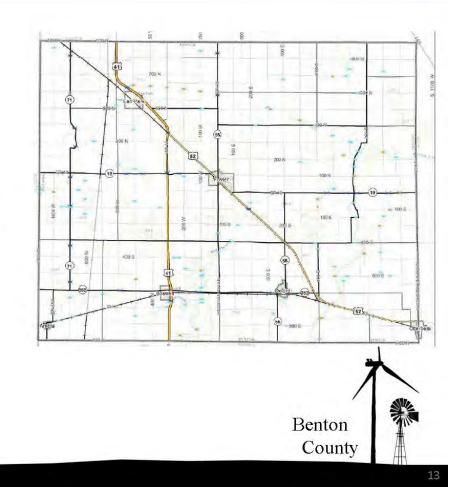




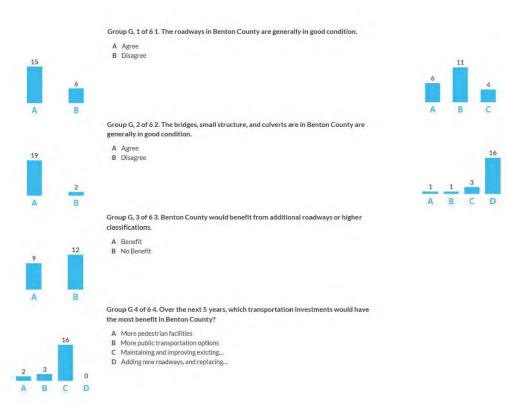
### **Thoroughfare Plan**



- Roadways
  - Classifications
  - Volumes
  - Conditions
- Bridges and small structures
- Railroads







Group G, 5 of 6 5. Abandoned railroad right-of-way should be converted to trails.

Group G, 6 of 6 6. Which of the following should be the highest priority for Benton

A Agree

B Disagree

C Unsure

County's transportation?

A Wider roads and bridge

B Improved intersections and ...

C Alternative transportation:... D Improved road pavement and bridge...



### **Environmental Plan**

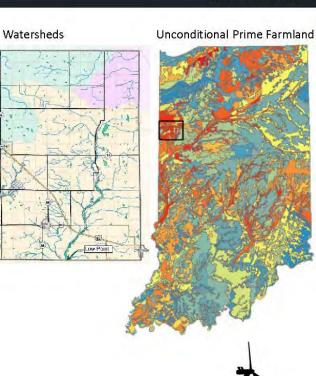
- Public health and economic success
- Setting & Significance
  - Grand Prairie
  - Soil, Wind, Water
- Changes since 2006 Plan
- Environmental Policy

# E

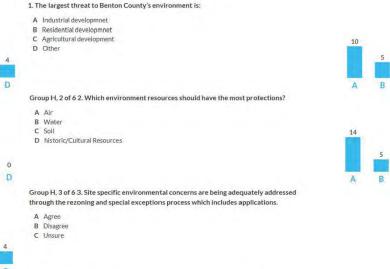




gh Pein



Benton County



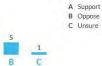
Group H, 4 of 6 4. Would you say that the quality of the local environment:

- A Is poor, and we need to do more to ...
- B Is good, and we don't need to ...
- C Is good, but we need to do a more...

Group H, 5 of 6 5. If the steps to improve Benton County's environment required increases in your taxes, would you support or oppose increases for preserving existing wood...



Group H, 6 of 6 6. If the steps to improve the condition of legal drains in Benton County required increases in your taxes/assessments, would you support or oppose increas...





B C

16

ABC

A B

C



- Small group discussion
  - Take notes
  - Report to large group

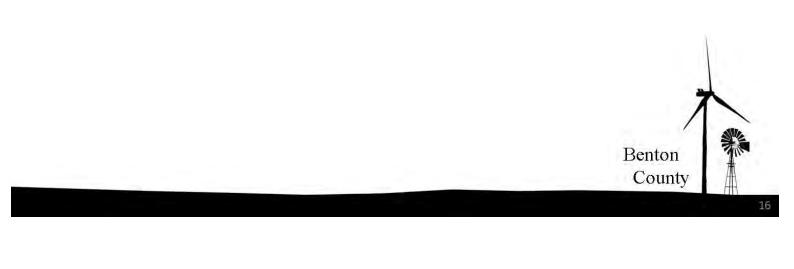




## Thank you for coming!

- Final steps
- Contacts

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#### **Group Discussions:**

The following topics were discussed in response to the question: if you could control the future, how would you describe Benton County in the next 10-15 years?

- Increase cell phone coverage areas throughout the county.
- Improved fiber optic availability.
- Flooding has been an issue in Boswell. The county drain comes through town. It is full during rain events and there is not capacity downstream to add the runoff from the area of Boswell.
- We would be offering support businesses to Purdue. Benton County may not have major industry/business, but it would be great to provide businesses to support those.

The results of the following engagement questions were presented for further discussion:

### 1. What do you feel is the best investment of dollars generated by wind farms?

- a) Additional county facilitates/buildings (0 responses)
- b) Transportation improvements (6 responses)
- c) Environmental protections and enhancements (1 response)

 d) Other economic development pursuits such as other technology, industry, commercial development, or Main Street redevelopment (14 responses)

#### Discussion points

• Reinvesting in economic development provides for a continual cycle of economic growth and investment in all areas of the county.

#### 2. Cropland drainage is a \_\_\_\_ to Benton County.

- 1) Strength/Opportunity (12 responses)
- 2) Weakness/Threat (9 responses)

#### Discussion points:

- Drainage is defiantly an opportunity to increase crop production, but could also be a threat depending on how far away from a ditch you are located.
- County drains are getting fuller and fuller and they just can't handle all the water sometimes.
- System drains spread the time when water is being added to the legal drain; it is a larger period compared to surface runoff.
- Cropland drainage is more of an opportunity more than a threat.
- Cropland drainage may cause environmental issues:

- Pulling nutrients out of the fields and cause water quality issued downstream.
- Drainage should be paired with practices that some farmers are already doing to save money such as cover crops and grass water ways.
- These practices (i.e. cover crops, grass water ways, etc.) prevent nutrients from running off and sediment from running into the ditches and legal drains so they do not need to be cleared out so much.
- Difficult because sediment comes from upstream. If a farmer downstream is using cover crops, but farmer upstream is not. The upstream farmer is adding to the sedimentation and all pay the same amount to keep the drain clear.
- Those not involved with farming are typically not fans of system tiling because of the amount of water coming down, but much of that is surface water. Wasn't sure if chemicals enter the water ways more through system tiling or surface drainage.
- System tiles seem make the water volumes flashier. You get more water out of the tiles quicker if they are system tiled. The tile (conventual or system tile) doesn't have much to do with runoff. If you get a heavy rain, the surface seals over and it runs off regardless of being tiled.
- Concern about the connection between irrigation wells and cropland drainage.

#### 3. The largest threat to Benton County's environment is:

- a) Industrial Development (3 responses)
- b) Residential Development (5 responses)
- c) Agricultural Development (8 responses)
- d) Other (3 responses)

Discussion points:

- Should be clarified that agriculture is the major land use in Benton County, that is why it would be the obvious threat.
- When you look at agricultural development, it is a possible threat because you are not adding just one animal, you are adding more sizable development with many head.
- Residential development with homeowners probably contribute more to chemicals entering the water way verse farmers. Farm operators typically apply a specific amount to get the maximum return on their investment. Homeowners apply massive amounts of chemicals and when you get a good rain it goes into the street and the storm water system.
- We would like to find a way to keep the chemicals that are applied from going down the river. That is money just floating down the river by not being used.

RQAW

Written comment form responses:

#### If you could control the future, how would you describe Benton County in the next 10-15 years?

- More wind turbines.
- Excellent Broadband.
- Better roads.
- Medium sized industry.
- Better cell service.
- Clean streams.
- More diverse business (i.e. aquaculture, agriculture, industry).
- Cleaner environmental area for safe family living.
- No more dumping or washing agricultural chemicals to a single area. In cleaning spray equipment or disposing of unusable chemicals.
- Clean up junkyards which are not licensed.
- Population 10,000 slowly growing.
- A few more light-industry/factories.
- More confinement livestock operations but well-regulated so they don't dick everything up for all of us.
- Pursue value added opportunities where we put our ag land to use. Use the commodity as a raw material for the plant. Manufacture something from corn or soybeans.
- Quit using this prime farmland to raise the lowest value commodities we can find (corn and soybeans).

- At the current rate, excess tillage and larger flooding events will cause excess sediment loss.
- A fiber optic network available to all towns.
- Adequate drainage so town flooding didn't happen.
- Better cooperation between the county, its towns, and Tippecanoe Co.
- Attraction of support business to Purdue.
- More housing.
- Telecommunication.
- Fiber optic.
- Better drainage in Boswell.
- Better drainage in towns.
- Tech business support to Purdue.
- Suburbs of Lafayette; capitalize on bringing people out of the city. Bringing support businesses out by offering better tax benefits than the Lafayette area.
- Wind farms new revenue allowed county to get out of debt.
- Good financial policy to be careful with new resources.
- Need new resources, new business, some business is moving to another Benton location.

#### Written comment form responses:

If you have any comments about any of the questions, about the county in general, about your city / county government, or ideas about ways to increase public involvement in government, please offer them here.

- County wide leadership and commissioners need more input from the public on issue and decisions.
- Abandoned railroad to be used for recreation must be policed for designated use and safety.
- No public trails/pedestrian/bike paths outside of a sidewalk exist. Would be nice to have at least one.

- Lack of telecom coverages causes business to locate elsewhere.
- Better communication between units.
- Overall good place, sense of community -some people asked to do more.
- Want it to be: financial prosperous, increasing population.
- Council does a great job with finances. Areas needing more funding: public safety.
- Good leadership.



#### Written comment form responses:

#### Strength:

- Renewable energy.
- We all work together as a government and community's.
- EMS service.
- Productive soil.
- Windmills.
- Strong community.
- Good jail and police force.
- Great fire and EMS.
- Great Purdue Extension Office.
- Local Democrats

#### Weakness:

- Broadband service.
- Cell service.
- Local doctors are all gone.
- Distance to hospitals.
- Loss of younger generation due to numerous factors.
- Lack of jobs and entertainment.
- Lack of regulation on junk yards & "eyesores".
- Excessive tillage farming practices.
- Lack of communication from local citizens to leadership.
- Lack of telecommunication.

#### Opportunity

- WHIN grant brining some jobs.
- Alternative energy training groups.
- Changes in conventual farming methods, adding in cover crops as a result of new funding help with the Big Pine Watershed.
- Neighbor to Tippecanoe County.

#### Threat

- Environmental from farm run off.
- Lack of access to healthcare.
- Republicans don't know what's going on.





Sign-in Sheets

Benton County Comprehensive Plan Update					
Benton County, Indiana March 2					
Vo.	Name (Please print)	Address, City, State, Zip	Email Address		
1	MIKE SHAVER	Chema Hojv	wabsci Egol.com		
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4	Keri Breelle	attacker.	Kbarli 6 attaban 10-900		
5	Alan, Adurill	Frances	claugherellanchor 200		
6	Sam Fry	B222 5 SOO W Former IN	fry sam 18 Yahoo. can		
7	JAP Fry	Boswell			
8	Patlachar	Boswell			
9	Leslie Fisher	Forte	-		
10	Lizayne Crimboyh	Templeten	-		
11	A.R.	9411 W & H Z32			
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13	Mary Juckson	9092 The Drolen			
14	For Bully	909 EIOLA I realer	-		
15 '	Van Shitto	109 WTH Say Lat IN	Schutter Construction Co		
16	John Burmen	Otterber TN			
17	JUD BARKE	POBIX 252, FOWLER	ibarce @barceadams.com		

Page 1

RQAW Project No. 17S-700-028-1

Bent	on County, Indiana	March 27	7, 2018
lo,	Name (Please print)	Address, City, State, Zip	Email Address
18	MIKE FREELAND	986 EAST 6th ST FOULERS	TV
19	Shawn Cain	KIRPC	Shawn@kirpc.net
20	KYLE Boot	RRAW	Kboot ergen con
21	Genry White	OCRA	gentite ocreating
22	Jon Charles worth	10478 E 4005 Ottober IN	Charles Lo pundue ed.
23	PAUL JACKSON	BENTON CO. ED	PSICKSON® BC.ITY. GOL
24	STOR STONELL	Salo S. WILLEHMERORT RT	Locisid well of them MAN
25	STOP STAMEN	Vaco J. WILLEHMIKORT ET	ALOC SIG WEIL O FARM, COL
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Page 2

RQAW INTENTIONAL INNOVATION Wabash Scientific, inc. RQAW Project No. 175-700-028-1



#### Workshop Advertisements

Form Prescribed by State Board of Accounts RQAW Environmental General Form No. 99P (Revised 1995) To: The Benton Review P.O. Box 275, Fowler, Indiana 47944 Fed. ID: 45-2211406

Benton County Adv. Plan Comm. Meeting 3 27 2018 \_ PUBLISHER'S CLAIM

#### LINE COUNT

Display Matter (Must not exceed two actual lines, neither of which shall total more than four solid lines of type in which the body of the advertisement is set) -- number of equivalent lines Head - number of lines ..... Body — number of lines..... Tail - number of lines..... Total number of lines in notice COMPUTATION OF CHARGES 14 lines, 1 columns wide equals 14 equivalent lines at .4334 cents per line S 6.07 Additional charge for notices containing rule or tabular work. Charge for extra proofs of publication (\$1,00 for each proof in excess of two) ..... DATA FOR COMPUTING COST ...... Width of single column: 10.6 picas Size of type: 8 point Pursuant to the provisions and penaltics of Chapter 155, Acts 1953, I hereby certify that the foregoing account is just and correct, that the amount claimed is

legally due, after allowing all just credits, and that no part of the same has been paid.

PUBLISHER'S AFFIDAVIT

Personally appeared before me, a notary public in and for said county and state, the undersigned Don Hurd who, being duly sworn, says that he is publisher of the Benton Review newspaper of general circulation printed and published in the English language in the town of Fowler in state and county aforesaid, and that the printed matter attached hereto is a true copy, which was duly published in and paper for.

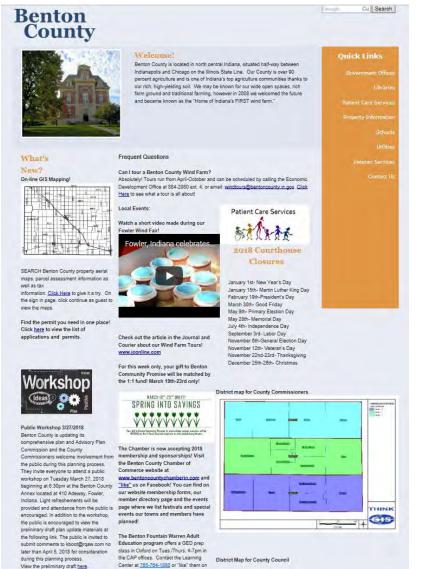
1 time(s) , the dates of publication being as follows: March 27, 2018 at 6:30 PM at the Public Notice March 14, 2018 The Beaton County Advisory Bennon County Annex Incaled at Plan Commission and the County 410 Adeway in Fowler, Indiana. Commissioners lavite everyone to Light refreshments will be provided Date: March 14, 2018 participate in the planning process for the update to the County Vo. Comprehensive Plan A public and attendance from the public is encouraged. 3/14/2018 Signed: Publisher workshop will be held on Tuesday. Subscribed and sworn to before me this 14 day of March 2018. Notary: My commission expires January 30, 2021

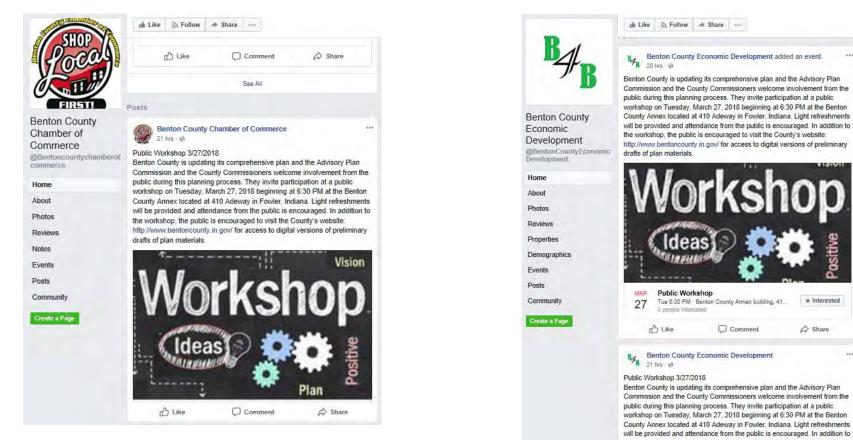


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### **APPENDIX A**





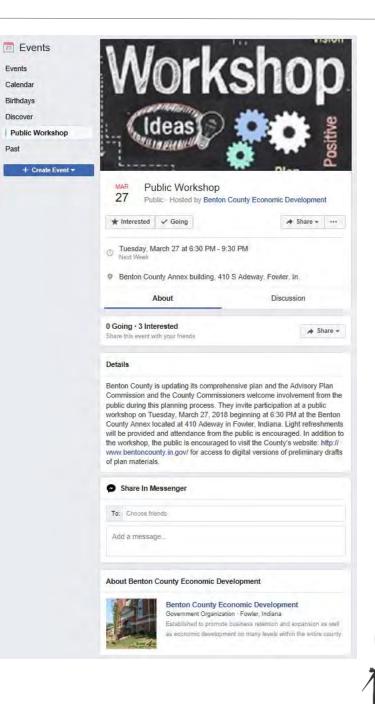


the workshop, the public is encouraged to visit the County's website: http://www.bentoncounty.in.gov/ for access to digital versions of preliminary drafts of plan materials.



RQAW INTERFERENCE INNOVATION Wabash Scientific, inc.





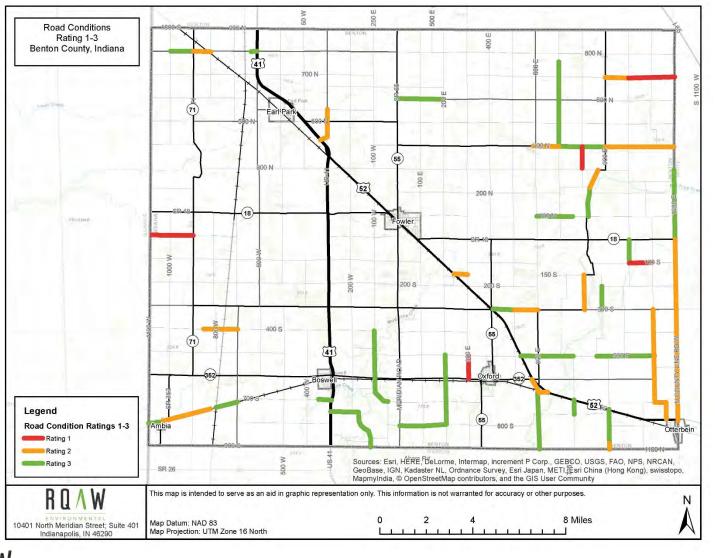




# **APPENDIX B: TRANSPORTATION**

### **APPENDIX B: TRANSPORTATION**

**Transportation Map, Road Ratings 1-3** 



### **APPENDIX B**

### Transportation Table, Road Ratings 1-3

esigna	Roadway	e	From	e. ite	To Name	Suffix	1	Width		e de la companya de la	Rating	year	Construct Characteria
tion	Name	Suffix	Name	Suffix	, 1977 March 19		Length		#Lanes	Surface Type		Rated	Functional Classificiation
115	300	E	500	5	600	5	1.0	20	2	CHIP N SEAL	1	2016	RURAL
120	800	E	300	N	400	N	1.0	20	2	CHIP N SEAL	. 1	2016	RURAL
126	700	N	1000	E	1200	E	2.0	20	2	CHIP N SEAL	1	2016	RURAL MINOR COLLECTOR
170	100	5	1000	E	1100	E	1.0	18	2	CHIP N SEAL	1	2016	RURAL
186	DIVISION	1	900	w	1100	w	2.0	18	2	CHIP N SEAL	1	2016	RURAL
20	300	W	425	N S	550	N	1.8	18	2	CHIP N SEAL		2016	RURAL MINOR COLLECTOR
29	OLD US 52		600	the second se	US 52		2.0	20	1	CHIP N SEAL	1	2016	RURAL MAJOR COLLECTOR
35	150	5	300	E	US 52		1.0	18	2	CHIP N SEAL		2016	RURAL
38	300	5	500	E	600	E	1.0	20	2	CHIP N SEAL	2	2016	RURAL MAJOR COLLECTOR
58	900	<u>s</u>	875	Ε	900	E	0.3	20	2	CHIP N SEAL	2	2016	RURAL
68	800	N	900	W	800	W	1.0	20	2	CHIP N SEAL	2	2016	RURAL MINOR COLLECTOR
74	425	N	US 52		300	W	1.0	20	2	CHIP N SEAL	2	2016	RURAL
119	850	E	250	N	300	N	0.8	20	2	CHIP N SEAL	2	2016	RURAL MAJOR COLLECTOR
125	700	N	900	E	1000	E	1.0	20	2	CHIP N SEAL		2016	RURAL MINOR COLLECTOR
133	400	N	600	E	700	E	1.0	20	2	CHIP N SEAL	2	2016	RURAL
135	400	N	900	E	1200	E	3.0	20	2	CHIP N SEAL	2	2016	RURAL MINOR COLLECTOR
156	1150	E	US 52		700	S	0.8	20	2	CHIP N SEAL	2	2016	RURAL
157	700	5	1150	E	1100	E	0.5	20	2	CHIP N SEAL	. 2	2016	RURAL MINOR COLLECTOR
160	1100	E	300	5	600	5	3.0	20	2	CHIP N SEAL	1	2016	RURAL
161	1100	E	600	S	700	5	1.0	20	2	CHIP N SEAL	2	2016	RURAL MINOR COLLECTOR
163	1200	E	ST RD 18		300	5	3.0	20	2	CHIP N SEAL	2	2016	RURAL MINOR COLLECTOR
164	1200	E	300	5	US 52		4.5	20	2	CHIP N SEAL	5	2016	RURAL MINOR COLLECTOR
169	800	j E	150	\$	300	5	1.5	18	2	CHIP N SEAL	2	2016	RURAL MAJOR COLLECTOR
178	750	5	850	W	ST RD 352		0.5	20	2	CHIP N SEAL	5	2016	RURAL
183	400	5	700	w	850	w	1.5	20	2	CHIP N SEAL	X	2016	RURAL
19	OLD US 41		US 41		EARL PARK		2.5	20	2	CHIP N SEAL	3	2016	RURAL
24	100	W	400	5	600	5	2.0	18	2	CHIP N SEAL	3	2016	RURAL
25	100	W	600	5	700	5	1.0	20	2	CHIP N SEAL	3	2016	RURAL
28	125	W	750	5	900	5	1.5	18	2	CHIP N SEAL	3	2016	KURAL
37	300	S	400	E	500	Ε	1.0	20	2	CHIP N SEAL	5	2017	RURAL MAJOR COLLECTOR
50	750	S	US	41	125	W	1.0	20	2	CHIP N SEAL	3	2016	RURAL
54	800	5	200	E	MERIDIAN		2.0	18	2	CHIP N SEAL	3	2016	RURAL
56	600	E	650	\$	900	\$	2.5	20	2	CHIP N SEAL	3	2016	RURAL MINOR COLLECTOR
59	900	i E	900	\$	US 52		2.0	20	2	CHIP N SEAL	5	2016	RURAL MINOR COLLECTOR
67	800	N	1000	₩	900	W	1.0	20	2	CHIP N SEAL	3	2016	RURAL MINOR COLLECTOR
70	800	N	US 41		WEST OF US 41		0,1	20	2	CHIP N SEAL	3	2016	RURAL MINOR COLLECTOR
80	600	N	ST RD 55		200	E	2.0	20	2	CHIP N SEAL	3	2016	RURAL MINOR COLLECTOR
89	100	i E	ST RD 18		US 52		0.3	20	2	CHIP N SEAL	3	2016	RURAL
118	200	E	500	S	800	5	3.0	18	2	CHIP N SEAL	3	2016	RURAL
129	/00	ΪĒ.	400	N	775	N	3.8	20	2	CHIP N SEAL	3	201.6	RURAL
134	400	N	700	E	900	E	2.0	20	2	CHIP N SEAL	3	2016	RUBAL MAJOR COLLECTOR
136	1200	E	ST RD 18		300	N	3.0	20	2	CHIP N SEAL	3	2016	RURAL
144	700	5	350	W	300	W	0.5	20	2	CHIP N SEAL	3	2016	RURAL
149	500	5	850	E	1100	E	2.5	20	2	CHIP N SEAL	3	2016	RURAL
150	750	E	500	S	US 52		1.8	20	2	CHIP N SEAL	3	2016	RURAL
154	750	E	US 52		750	5	0.8	20	2	CHIP N SEAL	3	2016	RURAL
165	975	E	200	S	300	5	1.0	20	2	CHIP N SEAL	3	2016	RURAL
172	1000	E	ST RD 18		100	5	1.0	20	2	CHIP N SEAL	3	2016	RURAL
174	100	N	600	F	750	F	2.5	20	2	CHIP N SEAL	3	2016	RURAL
175	850	E	100	N	250	N	1.5	20	2	CHIP N SEAL	1	2016	RURAL MAJOR COLLECTOR
176	750	S	700	W	800	W	1.0	20	2	CHIP N SEAL	3	2016	RURAL
179	800	1 5	1100	W	ST RD 352		0.5	20	2	CHIP N SEAL	3	2016	RURAL



Road Asset Inventory Table

# ROAD ASSET INVENTORY

						1							
Designation	Roadway		From		To		Length	Width	# Lanes	Surface Type	Rating	Year	Functional Classification
	Name	Suffix	Name	Suffix	Name	Suffix	1.1					Rated	
1	700	W	600	S	700	S	1 MILE	20	2	CHIP N SEAL	9	2016	RURAL
2	700	W	500	S	300	S	2 MILE	20	2	HOT MIX	9	2017	RURAL
3	500	W	300	S	500	5	2 MILE	20	2	HOT MIX	6	2016	RURAL
4	500	W	500	S	600	S	1 MILE	20	2	CHIP N SEAL	6	2016	RURAL
5	1000	w	600	S	300	S	3 MILE	20	2	HOT MIX	5	2016	RURAL
6	800	W	300	S	100	S	2 MILE	20	2	HOT MIX	8	2016	RURAL
7	800	W	100	5	100	N	2 MILE	20	2	CHIP N SEAL	6	2016	RURAL
8	500	W	100	N .	200	S	2 MILE	20	2	HOT MIX	8	2016	RURAL
9	500	W	300	N	OLD US 41		3 MILE	18	2	CHIP N SEAL	6	2016	RURAL
10	500	W	US 41		OLD US 41		0.5 MILE	20	2	HOT MIX	8	2016	RURAL
11	500	W	ST RD 18	- 10 million - 10	300	N	2 MILE	20	2	PAVED	10	2016	RURAL
12	600	W	300	N	US 41		3 MILE	20	2	CHIP N SEAL	6	2016	RURAL MINOR COLLECTO
13	1000	W	500	N	525	N	.25 MILE	20	2	CHIP N SEAL	6	2016	RURAL
14	1100	W	500	N	600	N	1 MILE	20	2	CHIP N SEAL	5	2016	RURAL
15	1100	W	600	N	700	N	1 MILE	20	2	CHIP N SEAL	4	2016	RURAL
16	700	W	800	N	900	N	1 MILE	20	2	CHIP N SEAL	6	2016	RURAL
17	500	W	900	N	800	N	1 MILE	18	2	CHIP N SEAL	4	2016	RURAL
18	500	W	800	N	US 41		2 MILE	18	2	CHIP N SEAL	5	2016	RURAL
19	OLD US 41		US 41		EARL PARK		2.5 MILE	20	2	CHIP N SEAL	3	2016	RURAL
20	300	W	425	N	550	N	1.75 MILE	18	2	CHIP N SEAL	2	2016	RURAL MINOR COLLECTO
21	300	W	550	N	650	N	1 MILE	18	2	CHIP N SEAL	5	2016	RURAL MINOR COLLECTO
22	300	W	650	N	900	N	2.5 MILE	20	2	CHIP N SEAL	6	2016	RURAL MINOR COLLECTO
23	100	W	300	S	400	S	1 MILE	18	2	HOT MIX	7	2016	RURAL
24	100	w	400	5	600	S	2 MILE	18	2	CHIP N SEAL	3	2016	RURAL
25	100	W	600	S	700	S	1 MILE	20	2	CHIP N SEAL	3	2016	RURAL
26	100	w	ST RD 18		US 52		.5 MILE	20	2	PAVED	10	2016	RURAL
27	200	W	600	S	750	S	1.5 MILE	20	2	CHIP N SEAL	5	2016	RURAL
28	125	W	750	S	900	S	1.5 MILE	18	2	CHIP N SEAL	3	2016	RURAL

### **ROAD ASSET INVENTORY**

Designation	Roadway		From		To		Length	Width	# Lanes	Surface Type	Rating	Year	Functional Classification	
	Name	Suffix	Name	Suffix	Name	Suffix			1			Rated		
61	900	E	US 52		500	E	2.5 MILE	20	2	CHIP N SEAL	4	2016	RURAL	
62	550	N	500	W	600	W	1 MILE	18	2	CHIP N SEAL	6	2016	RURAL	
63	500	N	1100	W	900	W	2 MILE	18	2	CHIP N SEAL	5	2016	RURAL	
64	500	N	600	W	900	W	3 MILE	20	2	CHIP N SEAL	7	2016	RURAL MINOR COLLECTO	
65	600	N	900	W	950	W	.5 MILE	20	2	CHIP N SEAL	5	2016	RURAL	
66	800	N	1100	W	1000	W	1 MILE	20	2	CHIP N SEAL	5	2016	RURAL MINOR COLLECTO	
67	800	N	1000	W	900	W	1 MILE	20	2	CHIP N SEAL	3	2016	RURAL MINOR COLLECTO	
68	800	N	900	W	800	w	1 MILE	20	2	CHIP N SEAL	2	2016	RURAL MINOR COLLECTO	
69	800	N	800	W	US 41	1	2 MILE	20	2	CHIP N SEAL	6	2016	RURAL MINOR COLLECTO	
70	800	N	US 41		WEST OF US 41		500 FOOT	20	2	CHIP N SEAL	3	2016	RURAL MINOR COLLECTO	
71	500	N	US 41		OLD US 41		1 MILE	20	2	CHIP N SEAL	9	2016	RURAL	
72	300	N	100	E	200	E	1 MILE	18FT	2	CHIP N SEAL	4	2016	RURAL	
73	300	N	ST RD 55		US 52	2-1	2.5 MILE	20	2	HOT MIX	4	2016	RURAL	
74	425	N	US 52		300	W	1 MILE	20	2	CHIP N SEAL	2	2016	RURAL	
75	800	N	300	W	ST RD 55		3 MILE	20	2	CHIP N SEAL	6	2016	RURAL MINOR COLLECTO	
76	650	N	300	w	ST RD 55	1 1	3 MILE	18	2	CHIP N SEAL	6	2016	RURAL	
77	550	N	300	W	US 41		3 MILE	18	2	CHIP N SEAL	5	2016	RURAL	
78	500	N	US 41	1	200	W	2 MILE	20	2	CHIP N SEAL	4	2016	RURAL	
79	500	N	200	W	ST RD 55		2 MILE	20	2	CHIP N SEAL	5	2016	RURAL MAJOR COLLECTO	
80	600	N	ST RD 55	1.5	200	E	2 MILE	20	2	CHIP N SEAL	3	2016	RURAL MINOR COLLECTO	
81	600	N	200	E	450	E	2.5 MILE	20	2	BLACK TOP	7	2017	RURAL MINOR COLLECTO	
82	600	N	450	E	600	E	1.5 MILE	20	2	CHIP N SEAL	5	2016	RURAL MINOR COLLECTO	
83	800	N	300	E	200	E	1 MILE	20	2	CHIP N SEAL	5	2016	RURAL	
84	800	N	200	E	ST RD 55	1 1 1	2 MILE	20	2	CHIP N SEAL	4	2016	RURAL	
85	100	N	100	E	200	E	1 MILE	20	2	HOT MIX	6	2017	RURAL	
86	100	N	200	E	300	E	1 MILE	20	2	HOT MIX	6	2016	RURAL	
87	100	N	300	E	600	E	3 MILE	20	2	HOT MIX	6	2017	RURAL	
88	200	E	ST RD 18		US 52		1 MILE	20	2	CHIP N SEAL	4	2016	RURAL	
89	100	E	ST RD 18		US 52		1/4 MILE	20	2	CHIP N SEAL	3	2016	RURAL	
90	300	E	ST RD 18		150	S	1.5 MILE	20	2	HOT MIX	6	2016	RURAL	
91	300	E	150	S	200	S	.5 MILE	20	2	HOT MIX	6	2016	RURAL	
92	200	E	800	N	600	N	2 MILE	20	2	CHIP N SEAL	6	2016	RURAL	

ROAD A	SSET IN\	<b>/ENTORY</b>

Designation	Roadway		From		To		Length	Width	# Lanes	Surface Type	Rating	Year	Functional Classification	
	Name	Suffix	Name	Suffix	Name	Suffix						Rated		
29	OLD US 52		600	5	US 52		2 MILE	20	2	CHIP N SEAL	2	2016	RURAL MAJOR COLLECTO	
30	300	S	875	E	800	E	0.75	20	2	HOT MIX	5	2016	RURAL MINOR COLLECTO	
31	400	S	US 41	1	500	W	2 MILE	20	2	HOT MIX	5	2016	RURAL	
32	300	S	US 41		1000	W	7MILE	20	2	HOT MIX	6	2016	RURAL	
33	300	S	1000	W	1100	w	1MILE	20	2	HOT MIX	7	2017	RURAL MINOR COLLECTOR	
34	100	S	500	W	US 41		2 MILE	20	2	HOT MIX	6	2017	RURAL	
35	150	S	300	E	US 52		1 MILE	18	2	CHIP N SEAL	2	2016	RURAL	
36	200	S	300	E	600	E	3 MILE	20	2	HOT MIX	6	2016	RURAL	
37	300	S	400	E	500	E	1 MILE	20	2	CHIP N SEAL	3	2017	RURAL MAJOR COLLECTO	
38	300	5	500	E	600	E	1 MILE	20	2	CHIP N SEAL	2	2016	RURAL MAJOR COLLECTO	
39	300	S	500	E	800	E	3MILE	20	2	CHIP N SEAL	10	2016	RURAL MAJOR COLLECTO	
40	300	S	875	E	1150	E	2.75 MILE	20	2	CHIP N SEAL	10	2016	RURAL MINOR COLLECTO	
41	300	S	1150	E	1200	E	.5 MILE	20	2	HOT MIX	5	2016	RURAL MINOR COLLECTO	
42	300	S	400	E	US 41		7 MILE	20	2	HOT MIX	8	2016	RURAL MAJOR COLLECTO	
43	500	S	400	E	MERIDIAN		4 MILE	20	2	HOT MIX	6	2016	RURAL	
44	200	S	300	E	200	E	1 MILE	20	2	HOT MIX	6	2016	RURAL	
45	200	S	MERIDIAN	1.00	US 41		3 MILE	20	2	HOT MIX	7	2017	RURAL	
46	100	S	US 41		MERIDIAN	-	3 MILE	20	2	HOT MIX	6	2016	RURAL	
47	DIVISION		MERIDIAN		75	W	.75 MILE	20	2	CHIP N SEAL	4	2016	RURAL	
48	DIVISION		75	W	US 41	10000	2.25 MILE	20	2	HOT MIX	6	2017	RURAL	
49	650	S	100	W	200	W	1 MILE	20	2	CHIP N SEAL	4	2016	RURAL	
50	750	S	US 41		125	W	1 MILE	20	2	CHIP N SEAL	3	2016	RURAL	
51	MERIDIAN	-	900	S	700	S	2 MILE	20	2	CHIP N SEAL	4	2016	RURAL MINOR COLLECTO	
52	MERIDIAN	1	700	5	600	S	1 MILE	20	2	CHIP N SEAL	6	2016	RURAL MAJOR COLLECTO	
53	MERIDIAN		600	5	DIVISION		6 MILE	20	2	CHIP N SEAL	5	2016	RURAL MAJOR COLLECTO	
54	800	S	200	E	MERIDIAN		2 MILE	18	2	CHIP N SEAL	3	2016	RURAL	
55	700	S	MERIDIAN	1.1	200	E	2 MILE	18	2	CHIP N SEAL	4	2016	RURAL	
56	600	E	650	S	900	S	2.5 MILE	20	2	CHIP N SEAL	3	2016	RURAL MINOR COLLECTOR	
57	600	8	100	N	ST RD 18	and the state	1 MILE	20	2	HOT MIX	6	2016	RURAL	
58	900	S	875	E	900	E	.25 MILE	20	2	CHIP N SEAL	2	2016	RURAL	
59	900	E	900	S	US 52		2 MILE	20	2	CHIP N SEAL	3	2016	RURAL MINOR COLLECTOR	
60	800	S	900	E	OLD US 52	1	2.5 MILE	20	2	CHIP N SEAL	5	2016	RURAL	

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Designation	Roadway	1	From		To		Length	Width	# Lanes	Surface Type	Rating	Year	Functional Classification
	Name	Suffix	Name	Suffix	Name	Suffix	A		0.00			Rated	A CONTRACTOR OF
93	200	E	600	N	400	N	2 MILE	18	2	CHIP N SEAL	6	2016	RURAL
94	400	N	ST RD 55		300	E	3 MILE	20	2	CHIP N SEAL	6	2016	RURAL
95	400	N	300	E	600	E	3 MILE	20	2	CHIP N SEAL	6	2016	RURAL
96	600	E	400	N	300	N	1 MILE	20	2	CHIP N SEAL	5	2016	RURAL
97	400	4	300	N	400	N	1 MILE	20	2	CHIP N SEAL	10	2016	RURAL
98	300	E	400	N	900	N	5 MILE	20	2	BLACK TOP	6	2017	RURAL
99	500	E	900	N	800	N	1 MILE	20	2	HOT MIX	7	2017	RURAL
100	500	E	800	N	750	N	.5 MILE	18	2	CHIP N SEAL	4	2016	RURAL
101	500	E	750	N	625	N	1.25 MILE	20	2	HOT MIX	7	2017	RURAL
102	500	E	600	N	625	N	.25 MILE	20	2	CHIP N SEAL	4	2016	RURAL
103	150	E	800	N	900	N	1 MILE	20	2	CHIP N SEAL	5	2016	RURAL
104	100	E	600	N	400	N	2 MILE	18	2	HOT MIX	6	2017	RURAL
105	100	E	400	N	300	N	1 MILE	20	2	CHIP N SEAL	6	2016	RURAL
106	100	E	300	N	ST RD 18	-	3.25 MILE	20	2	HOT MIX	6	2016	RURAL
107	600	E	100	Ň	200	N	1 MILE	20	2	HOT MIX	6	2016	RURAL
108	600	E	200	N	300	N	1 MILE	20	2	CHIP N SEAL	4	2016	RURAL
109	300	E	300	N	ST RD 18		3 MILE	20	2	HOT MIX	7	2016	RURAL
110	400	E	ST RD 18		US 52		3 MILE	20	2	HOT MIX	6	2016	RURAL
111	400	E	ST RD 18		200	N	2 MILE	20	2	HOT MIX	6	2016	RURAL
112	600	E	300	S	ST RD 18		3 MILE	20	2	HOT MIX	6	2017	RURAL
113	600	E	300	S	US 52	1	3 MILE	20	2	CHIP N SEAL	5	2016	RURAL MAJOR COLLECTO
114	300	E	200	S	500	S	3 MILE	20	2	HOT MIX	7	2017	RURAL
115	300	E	500	S	600	S	1 MILE	20	2	CHIP N SEAL	1	2016	RURAL
116	200	E	500	5	200	S	3 MILE	20	2	HOT MIX	7	2017	RURAL
117	200	E	200	S	US 52		1 MILE	20	2	HOT MIX	6	2016	RURAL
118	200	E	500	S	800	S	3 MILE	18	2	CHIP N SEAL	3	2016	RURAL
119	850	E	250	N	300	N	.75 MILE	20	2	CHIP N SEAL	2	2016	RURAL MAJOR COLLECTO
120	800	E	300	N	400	N	1 MILE	20	2	CHIP N SEAL	1	2016	RURAL
121	300	N	800	E	1000	E	2 MILE	20	2	CHIP N SEAL	4	2016	RURAL
122	300	N	US 52		500	W	2.25 MILE	20	2	PAVED	10	2016	RURAL
123	300	N	US 52		ST RD 55	- C	2.5 MILE	20	2	PAVED	10	2016	RURAL
124	900	E	300	N	900	N	6 MILE	20	2	HOT MIX	7	2017	RURAL MAJOR COLLECTOR

## **ROAD ASSET INVENTORY**



ROAD ASSET INVENTORY	ROAD	ASSET	INVER	NTORY
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Designation	Roadway		From		To		Length	Width	# Lanes	Surface Type	Rating	Year	Functional Classification	
	Name	Suffix	Name	Suffix	Name	Suffix						Rated		
125	700	N	900	E	1000	E	1 MILE	20	2	CHIP N SEAL	2	2016	RURAL MINOR COLLECTOR	
126	700	N	1000	E	1200	E	2 MILE	20	2	CHIP N SEAL	1	2016	RURAL MINOR COLLECTOR	
127	1000	E	700	N	900	N	2 MILE	20	2	CHIP N SEAL	5	2016	RURAL	
128	700	E	725	N	900	N	1.25 MILE	20	2	HOT MIX	7	2017	RURAL	
129	700	E	400	N	775	N	3.75 MILE	20	2	CHIP N SEAL	3	2016	RURAL	
130	600	N	600	E	700	E	1 MILE	20	2	CHIP N SEAL	6	2016	RURAL MINOR COLLECTOR	
131	600	N	700	E	800	E	1 MILE	20	2	PAVED	5	2016	RURAL MINOR COLLECTOR	
132	600	N	800	E	900	E	1 MILE	20	2	CHIP N SEAL	9	2017	RURAL MINOR COLLECTOR	
133	400	N	600	E	700	E	1 MILE	20	2	CHIP N SEAL	2	2016	RURAL	
134	400	N	700	E	900	E	2 MILE	20	2	CHIP N SEAL	3	2016	RURAL MAJOR COLLECTOR	
135	400	N	900	E	1200	E	3	20	2	CHIP N SEAL	2	2016	RURAL MINOR COLLECTOR	
136	1200	E	ST RD 18		300	N	3 MILE	20	2	CHIP N SEAL	3	2016	RURAL	
137	1200	E	300	N	400	N	1 MILE	20	2	CHIP N SEAL	4	2016	RURAL	
138	900	S	300	W	600	W	3 MILE	20	2	CHIP N SEAL	6	2016	RURAL	
139	900	S	600	W	700	W	1 MILE	20	2	CHIP N SEAL	4	2016	RURAL	
140	700	W	900	S	750	S	1.5 MILE	20	2	CHIP N SEAL	6	2016	RURAL MINOR COLLECTO	
141	700	W	750	S	700	S	.5 MILE	20	2	CHIP N SEAL	4	2016	RURAL MINOR COLLECTOR	
142	700	5	700	W	400	W	3 MILE	20	2	CHIP N SEAL	6	2016	RURAL	
143	700	S	400	W	350	W	.5 MILE	20	2	CHIP N SEAL	7	2016	RURAL	
144	700	S	350	W	300	W	.5 MILE	20	2	CHIP N SEAL	3	2016	RURAL	
145	800	S	US 41		400	W	1 MILE	20	2	CHIP N SEAL	4	2016	RURAL	
146	800	S	400	W	700	W	3 MILE	20	2	CHIP N SEAL	5	2016	RURAL	
147	500	S	US 52		ST RD 55		1.25 MILE	20	2	CHIP N SEAL	5	2016	RURAL	
148	500	S	US 52		850	E	3.25 MILE	20	2	CHIP N SEAL	5	2016	RURAL	
149	500	S	850	E	1100	E	2.5 MILE	20	2	CHIP N SEAL	3	2016	RURAL	
150	750	E	500	S	US 52	1.0	1.75 MILE	20	2	CHIP N SEAL	3	2016	RURAL	
151	600	S	600	E	750	E	1.5 MILE	20	2	CHIP N SEAL	4	2016	RURAL MINOR COLLECTOR	
152	600	S	600	E	US 52		.35 MILE	20	2	HOT MIX	4	2016	RURAL MAJOR COLLECTOR	
153	675	S	ST RD 55		HAWLEY ST		2 MILE	20FT	2	CHIP N SEAL	8	2017	RURAL	
154	750	E	US 52		750	S	.75 MILE	20	2	CHIP N SEAL	3	2016	RURAL	
155	900	S	1200	E	1100	E	1 MILE	20	2	CHIP N SEAL	5	2016	RURAL	
156	1150	E	US 52		700	S	.75 MILE	20	2	CHIP N SEAL	2	2016	RURAL	

Wabash Scientific, inc.

Benton County Comprehensive Plan

## **ROAD ASSET INVENTORY**

Designation	Roadway	1	From		To	1.1.1	Length	Width	# Lanes	Surface Type	Rating	Year	Functional Classification	
	Name	Suffix	Name	Suffix	Name	Suffix		1		· · · · · · · · · · · · · · · · · · ·		Rated		
157	700	S	1150	E	1100	E	.5 MILE	20	2	CHIP N SEAL	2	2016	RURAL MINOR COLLECTOR	
158	700	S	1050	E	1100	E	.5 MILE	20	2	CHIP N SEAL	6	2016	RURAL	
159	700	S	900	E	1050	E	1.5 MILE	20	2	CHIP N SEAL	4	2016	RURAL	
160	1100	E	300	S	600	5	3 MILE	20	2	CHIP N SEAL	2	2016	RURAL	
161	1100	E	600	S	700	S	1 MILE	20	2	CHIP N SEAL	2	2016	RURAL MINOR COLLECTOR	
162	1100	E	ST RD 18		300	S	3 MILE	20	2	CHIP N SEAL	9	2016	RURAL	
163	1200	E	ST RD 18	1	300	S	3 MILE	20	2	CHIP N SEAL	2	2016	RURAL MINOR COLLECTOR	
164	1200	E	300	S	US 52		4.5 MILE	20	2	CHIP N SEAL	2	2016	RURAL MINOR COLLECTOR	
165	975	E	200	S	300	S	1 MILE	20	2	CHIP N SEAL	3	2016	RURAL	
166	200	S	875	E	975	E	1 MILE	20	2	CHIP N SEAL	5	2016	RURAL	
167	875	E	150	5	300	S	1.5 MILE	20	2	CHIP N SEAL	5	2016	RURAL	
168	150	S	800	E	875	E	.75 MILE	20	2	CHIP N SEAL	5	2016	RURAL MAJOR COLLECTOR	
169	800	E	150	S	300	S	1.5 MILE	18	2	CHIP N SEAL	2	2016	RURAL MAJOR COLLECTOR	
170	100	S	1000	E	1100	E	1 MILE	18	2	CHIP N SEAL	1	2016	RURAL	
171	850	E	ST RD 18		150	5	1.5 MILE	20	2	CHIP N SEAL	4	2016	RURAL MAJOR COLLECTO	
172	1000	E	ST RD 18		100	S	1 MILE	20	2	CHIP N SEAL	3	2016	RURAL	
173	850	E	ST RD 18		100	N	1 MILE	20	2	CHIP N SEAL	4	2016	RURAL RURAL MAJOR COLLECTOR	
174	100	N	600	E	750	E	2.5 MILE	20	2	CHIP N SEAL	3	2016	RURAL	
175	850	E	100	N	250	N	1.5 MILE	20	2	CHIP N SEAL	3	2016	RURAL MAJOR COLLECTOR	
176	750	S	700	W	800	W	1 MILE	20	2	CHIP N SEAL	3	2016	RURAL	
177	750	5	800	W	850	W	.5 MILE	20	2	CHIP N SEAL	6	2016	RURAL	
178	750	S	850	W	ST RD 352		.5 MILE	20	2	CHIP N SEAL	2	2016	RURAL	
179	800	S	1100	W	ST RD 352	1	.5 MILE	20	2	CHIP N SEAL	3	2016	RURAL	
180	600	S	1000	W	1100	W	1 MILE	20	2	CHIP N SEAL	10	2016	RURAL MAJOR COLLECTOR	
181	700	w	600	S	500	S	1 MILE	20	2	CHIP N SEAL	6	2016	RURAL MINOR COLLECTOR	
182	700	W	500	S	300	S	2 MILE	20	2	BLACK TOP	6	2016	RURAL MINOR COLLECTOR	
183	400	S	700	W	850	W	1.5 MILE	20	2	CHIP N SEAL	2	2016	RURAL	
184	200	S	900	W	1100	W	2 MILE	20	2	CHIP N SEAL	5	2016	RURAL	
185	900	S	900	w	1100	W	2 MILE	18	2	CHIP N SEAL	5	2016	RURAL	
186	DIVISION		900	W	1100	W	2 MILE	18	2	CHIP N SEAL	1	2016	RURAL	
187	DIVISION		900	W	800	W	1 MILE	20	2	BLACK TOP	6	2016	RURAL	
188	300	S	500	E	1150	E	5 MILE	18	2	CHIP N SEAL	6	2016	RURAL	

### Statewide Transportation Improvement Plan

DNSOR	CONTR ACT#/ LEAD DES	STIP	ROUTE	WORK TYPE	LOCATION	DISTRICT	MLES	CATEGORY	Estimated Cost left to Complete Project	PROGRAM	PHASE	FTDENAL	MATCH	2018	2019	2020	2021
ton County	-	2.3.5		-	1		10				_						
	1500119	A D2	SR 18	Small Stutions Replacement	140 mile al SR71	Crawfindeville		astb.	\$963,000,00	Bndge Considing	HE.	\$120,000.00	\$39,000,00	150 000.00			
							1			Bindge ROW	ROM.	\$28,000.00	47 (000,00	\$35,000,00			111
-	I	Comments	No MPO	Add \$150 DIE PE & \$25	DOD ROW/FY18 Funds	_	-	-			-						
	1702138	A.06	SR 15	Bridge Deck Crieslay	Over Mud Creek	Confordantie		OISTP:	\$447,373.90	Bridge Consulting	PE	\$75,750.32	\$18,947 59	\$94 737 90			1
	0	Comments	No MPO	Add FY18 PE 504/37 9	0		-		1	-	-					-	-
	376747 1400962	And,	VAR.	Bhdge-Inspectrons	Countywelle Bridge Inspection and Inventory Pregram for Cycle Vaars 2015-2019	Crawforeavalo		01Molt Bib-		Local Bridge Program	PE	16,600.00	16.00	\$5,600.00			
			-				Ĉ.	3		TODIS LOCAT Frindli	.PS	\$0.00	11.40200	\$1,490.00	- 1		12.2
	377967 1400224	100.	58.66	Small Structure Replacement	010 m N of Si 262 N Jet	Crawtontsville	1	ONHER.		Bnitge Glevelracium	UN .	\$216,000.00	\$54,200.00		\$271,000,00	1.1	
	37786 / 1400224	A.00'	SR 55	Smill Structure Replacement	0.87 m Ne(SR 352 NJc)	Gravitondonite	1	0istp	4291,000.00	Bridge ROW	RW	\$16,000.00	14.000.00	\$20 000, 054		1.00	
	0	Comments	NaMPO;	Add \$20,000 Prow FV IB	3 Funds	1					-			-	-	-	
1.1	37785 / 140022/5	int.	SR 55-	Small Structure Reptacement	097 mi \$ at US 52 \$ Jet	Graviturësnito	110	OWHER.		Bridge Construction	CN	1216/00/00	\$54 <u>00</u> 300	1	\$270,000,000	1.1	12.7
100	37786 / 1400055	A 02	SR 65	Small Bractore Replacement	097 m Sch0552 S-1d	Crawforeeville	101	0STP	\$290,000 00	Bridge ROW	BW	\$15,000.00	\$4,000,00	\$20,000,00			1.1
	0	Somments	NaMPO	Ard \$20,000.00 ROW F	VI8 Funds		-				-	-	-				
	37766 / 1400249	1005	SR 162	Undge Replacement, Other Construction	0.51 mi Wini GR (5.	Chivifordsville	10=	OWHER		Binlge Construction	1510	\$406,400.00	\$101 200.00	1	M506(000000		
	37788./ 5400248	A 02	SR 362	Britige Replacement, Other Construction	0.51 mi W of SR 55	Crewfordicylife	1	0157P	\$648,000,00	Bridge ROW	RW	\$16,000,00	74.000.00	\$20,000.00			1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-
	10	omments	Na MPO,	Add \$20,000.00 ROW F1	Y18 Funds	-			-					-			
	38258 / 1500259	Int	VA	Bridge Inspections	Countywide Bridge Inspection and inventury Program for Cricke Verus 2019-2022	Crawfurdirellia	1	()Mangle-		Local Britge Program	PE	1181 536 (11)	- \$3,00		\$8803200	\$6,015.00	¥96,689.0
							1		1	100% Local Funds	PE .	\$0.00	\$45,384.00		\$22,008.00	\$1,754.00	E(1) (5/3 ()
	39666 / 1500005	ini.	0552	Bridge Dack Oveslay	Bridge over Mud Pine Creek, 1 19 m E of SR 17	Grewfordsville		ONHEP		Bindge Cronstruction	-014	\$497,600.00	8124,406,00	\$622,000-00			
-	1652637	108	0852	Bridde Dick Overlay	Mud Pine Creek 01 39 E 3R 18 WB	Gravitinesville		(INHER		Bridge Condition	CN -	\$360,000.00	\$91,000,00	\$450,000,00		1	
-	387647	Int	SR 71	Smith Structure Prov	1.3Emillion 58 19	Grawfindsville	-	0 MHEY		Endge Conditionant	CN	\$3.8,000.00	177 (000 100)			1385 000 00	

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"Fitm and Chan Mile Complete Properties and the case and may extend by contrast for the contrast con-flexely contrasted and of a sefere decigrapose c



ISOR	CONTR ACTS/ LEAD DES			icts FY 2015 - 2021 Work түре	LOCATION	DISTRICT	MEES	FEDERAL CATEGORY	Estimated Cost left to Complete Project'	PROGRAM	PHASE	FEDENAL	матсн	2018	2019	2020	2021
-	38764 / 1500105	inc	814 71	Smilt Studiore Pipe Living	1.36 m Not SP 15	Crawfindaville		DINHIM .		Bridge ROW	RM.	\$30,000,00	\$5,000,00	\$25,000.00			
-	38784 / 1500109	MOR	50,71	Small Shaplers Hyn Lynng	1 36 mi /l et 52 1/l	Crawfordsville	12	057P	\$4715174	Budge ROW	pw	\$0.00	\$200	(\$25,000,00)	\$25,000,00	1.1	E.
	0	Convinenta	NUMPO	move FYIS ROW to FYI	19,425,000	1		1			-		1				
	387717 1400217	Init.	SR 18	Bridge Repapement, Other Construction	245miv/of/US41	Crewlordsville		ONHER		Bridge Construction	CN	\$702,400.00	\$175,609,00			\$838,000.00	1.2
	39960 ( 1701584	ADA	USAI	Small Structure Replacement	US 41 over licoamed Dich/Groeli	Grawfundsville		NSTP:	361X 596 2	S Bridge Consulting	PE	\$96,035 40	124,58318	1122,919.25	1	(1	1
	10	Comments	NoMPO	Add \$122.919.25F ¥18.1	PE funds	-	-	-		-	-	_					_
	39976 / 1650805	ani	0362	Postment, Other	From U.S. 40, 5-Jact to 10,54, mil W of W Jact of SR 18	Crawfindsville	401	ENHER-		Réad Conduction	C10	\$3,287,200,00	\$821,800,00	\$4 109,000,00			
	40090/ 1602010	int'	59.71	Britige Thin Lleck Overlay	Bholge nver Mult Creek, 1 83 mi N of SR 10	Crawindsville		gamaes.		Bnilge Clansthiction	-CN	\$57,500.00	\$14,400.00	1.11		\$72,000.00	1
	40092 / 1602048	ins	SR:362	Bridge Thirr Deck Overlay	Bidge aver Lauck Dtd), 3106 mi 94 al US 41	Orawfundisville		0 MHEPP		Bridge Construction	CN.	\$36,400.00	\$630000	1221		\$33.000.00	5
1.1	40092 <i>1</i> 1602049	ani	SR 18	Bridge 7 hts Deck Overlay	Bridge over Greenwoold Ditch, 684 mi Elof V3.62	Crawlinicaville		din Hefe		Bridge Canenación	Cm	\$28,000.00	17,000.00	1.1		\$35,000.00	
	40536 / 1//00069	A.02	SR 362	Small Structure Pipe Lining	0.77 m W of 0.952	Crawfurdswille		OSTP	\$346,3000	D Bridge ROW	RW	\$20,000.00	16,000,00	\$25,000:00		(	
	-	Commonia	No MED	Add \$25 (0000) ROW P	Y 18 tunds						-	_	1		-		_
	40889.7 15707671	A Ø5	SR 18	Smit Structure Replacement	Over Unmitted Ditch/Creek	Crawforczylile		OSTP	\$965,776.0	0 Bridge Consulting	RE	\$127,436.80	891 (869-20)	1169 299 00			1
	1	cmmenta	Natio	Add F V18 FE \$159,296	· · · · · · · ·						-		-	-			-
	406637 1701971	A 14	SR 19	Great Stochure Roplacomont	SP-10, 465 mill of SP 10, Duar Greenwood Ditch	Clawfordsville	1	0SIF.	\$991,776.0	D Bridge ROW	RW	\$12,800.00	13,200,00		\$15,000,00	1	1
						-			1	Bindge Construction	CN	\$5,000.00	\$2/0.010		\$10,000,00		1
	10	anments	NUMPO	Add FY19 ROW \$16,000	0, Add FY19 CN \$10,000					-	-						_
	406787 1700215	A DE	3R 55	Road Rehibilitation (SR/4R Standards)	From US 52 N Ja to 0.59 mi N af US 52	Crawfineaville		USIP	\$3,782,500,71	D Bridge Comulting	PE.	\$372,580.56	\$68,172.74	\$340,863.70			
	0	Comments	No MPG	Add FY18 PE \$340,863	70	· · · · · · · · · · · · · · · · · · ·		5	1000		-	-		2			
	405787 1700215	A 10	8R55	Road Rehabilitation (3R/4R Standants)	Frank US 52 N Jet to 0.59 mi N of US 52	Crawfordsville		0157P	\$3,782,500,71	O Road ROW	BM	\$26,400.00	\$6,600.00		\$33,000.00	-	
	0	onmonte	Na MPO	AId FY19 ROW \$33,000	100				V.A.Y				1.00				-
	4057B / 1700215	MUB	SR 55	Rined Rehabilitation (3R/4R Standards)	From US 52 N Jet to 0 59 mi N of US 52	Ctawlonminile		OSTP	\$3,782,500 //	0 Road Consulting	PE	\$0,00	\$0.00	(\$\$40,663.70)	\$140,963.70		1

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**APPENDIX B** 

R	CONTR ACT#/ LEAD DES	STAP	ROUTE	WORK TYPE	LOCATION	DISTRICT	MILES	CATEGORY	Estimated Cost left to Complete Project	PROGRAM	PHASE	FEDERAL	MATCH	2018	2019	2020	202
	0	Inments	NoMPO	make + KIB PE In F Y19	\$340,883 70		-		1				1	-			
-	406797 160(083	ATE	SIR 360	Br Repl, Comp Cont Prex Conc , I-Deam	UF 51 E US \$1 in Mud Pine Ereek	Crawturdswille		951P	- \$77e1.18e70	D Bridge Consulting	PE	\$190,631,47	149.667 BD	\$349,298,00		-	1-2
	ç	'umment.	NAMPO)	Add E V18 PE \$248,288	Cashe and a second		- 25-		- Û					1			
	40579 ( 1601063	Atl	SR 362	Br Repl. Camp Gum Pres Conc. 1-Beem	01 61 E US 41 M Mud Pine Crawk	Crawferbavale		0STP	\$3,781,168.0	1) Bridge R/0VA	RW	Engana	-16 and D		\$75,000,00		
							1		1	Bridge Cerefraction	<u>EN</u>	E010000	15,000.00	111	\$25,000,00	1.1	1
	<	ommonia	NaMPO.	ALLEY 19 85W \$25,000	1, AM FY19 CN \$25,000			-									
	40580 / 1400290	A.06	03.52	Smill Studiote Pipe Uning	179miWoFUS41	Crewfordawlie		DISTP	6287 868.0	3 Bridge Conscibing	PE	163,144.00	\$13,286.20	\$86 A31 00	[]		
	0	Senanenia	NaMPO	Add # 710 FE 356 431		1			1.00		-	A	1	20 million (1997)			
	40682 / 5400230	A.14	0852	Smoll Structure Pipe Lining	479m WofUS21	Crayforeonio	1	USTP	\$292,368.0	9 Bindge ROW	RW	\$3,600,00	- 1906.00		\$4,500.00		1
	0	Comment	NaMPO;	Add FY19 ROW \$4,500	and the second second	à	1000		A		-	1. A. A.			-	-	-
	40582/ 1700104	A/06-	0852	HMA Overlay Minor Structural	Fram (7 45 mi W of SR 18 (Eyd) W SR 162	Clawforesvile	8.35	USTP	\$10.335,376.11	3 Bridge Consilbing	PE	\$685,069,68	\$19127242	\$866,362,10		1.00	1.00
	0	Sommenti	NáMROC	Add # 110 PIE \$656,352	0		1000		1		-						-
	40682 / 1700104	A.M.	0552	HMA Overlay Minor Structural	Emmi1 41 mi W of SR 16 (E )d) B 0 10 m E nr 5R 353	Crawfundswile	839	HSTP	\$10,346,376.1	Conduction	-CN -	10,000	12/00/00		\$10,000,00		1
	0	ommente	(Ho MPO)	Add FY19 CH \$10,000		-			1		-					_	-
	40582/ 1700104	MIS	0887	HMA Oreilay Mmor Structural	From 0.41 mil W of SR 19 (Eyd) to 0.10 mil E al SR 362	C. Hawfareavilla	839	HEIP-	\$10,346,376.1	1 Read Consilling	-IE-	\$0.00	2010	18656,362.10)	\$156,302 10	1	1.1
	e	Comments	NAMPO.	More EVIB PE to FY19	1996,362 10						-			1.			-
-	40582 / 1701557	AUS	USE	Smelt Shoclore Replacement	Over Unnamed Dilct/Creek	Crawlindeville		01S115	4929,227,28	7 Bridge Consulting	PE	\$123,836,36	\$31974.24	\$15\$ 871.20	_		
	c	Sammenta	No. MPD.	AUG FY18 PE \$154.671	pa		200					- T. 25. A		12.000			-
	40682.) 1781567	A 14	US57	Small Studiore Replacement	UE52, 149 mi N 6( SR 18 S Jot, Over UNT to Mue Creak	Crawfordirvilla		0579	\$85,727 %	Bindigo Cionainactinin	CN.	\$8,000,00	4230000		\$10,000,00		1
								-		Bridge ROW	RW	\$12,800.00	13,200,00		\$15,000,00		1
	- Ie	DOWNERS	No MPIC:	Add FV19 ROW \$16,000	0, Add FV19 PE \$10,000				1.0				-			-	-
	40682/ 1701572	×.06	US 52	Small Structure Reprincement	Over Unitsmed Ditch/Creek	Grawfordsville	1	DISTP	\$431,427.1	Bidge Consubing	PE	\$79,648.09	419,91202	<b>\$99,560,10</b>	-		1
	6	Comments	NotePic	Add 110 P0 \$99,560 1	0		-				-					_	-
	405827	7.14	0967	Smit Structure Regulacement	US 52, 0.35 mills at 59 TB 5 Job Over UIIT to Humbert Date	Grawfuneswile	1	nstp	<b>\$44</b> 83271	D.Bridge ROW	RW	15,360,00	11 340 00	1-24	\$6,700,00	1000	100

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**APPENDIX B** 

Indiana Department of Transportation (INDIOT)

	NAME	ROUTE	WORK TYPE	LOCATION	DISTRICT	MILES	FEDERAL CATEGORY	Estimated Cost left to Complete Project'	PROGRAM	PHASE	FEDERAL	MATCH	2018	2019	2020	2021
40582 / 1701572	CI INCOMENT	05.52	Smill Structure Replacement	US 52, 0.38 mi S of SR 18 S Jot, Over UNT to Humbert Dildi	Crawfordsville		91819	\$448,127.10	Bridge Crowstraction	CN.	\$8,000.00	42 goo ba		\$16,000.00		

Benton County Total Pederal \$8,377,159.40 Match \$2,094,289.85 2010 \$6,404,103.45 2019 \$2,547,465.00 2020 \$1,411,520.00 2021 \$108,360.00

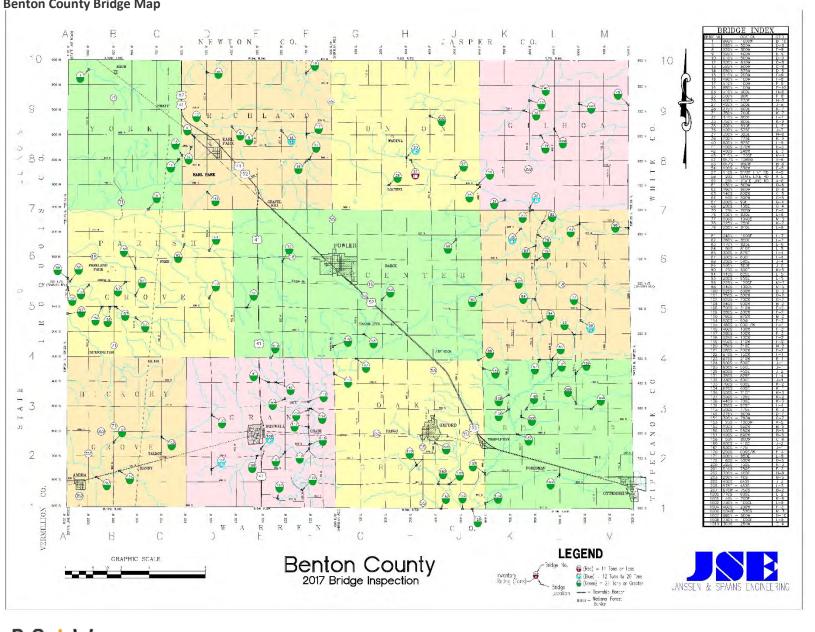
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"Estimated Costs (45) to Compile Project cultures is for costs live may actional beyond the Your years of 4 STIP. This column is not for ally contrained and is for inframelion purposes.





**APPENDIX B** 

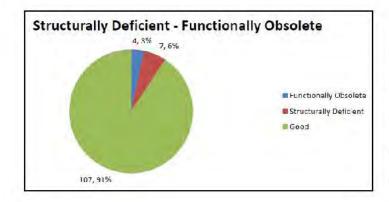


#### **Benton County Bridge Map**

 $RQ \wedge W$ Wabash Scientific, inc.

**APPENDIX B** 

### **Bridge Deficiencies and Priority**



Bridge Number	Type of Work	Posted Weight Limit	Unofficial Sufficiency Rating	Total Project Cost	Year Work Recommended
04-00101	Replacement by Contractor	12 ton	41.5	\$210,000	2018
04-00107	Replacement by Iroquois County	Narrow Bridge	48.4	\$320,000	2013
04-00157	Replace North Beam	Open	64.1	\$53,000	2015
04-00023	Rehabilitation by Contractor	14 Ton	50.0	\$100,000	2019
04-00104	Replacement by Contractor	Open	95.0	\$220,000	2020
04-00015	Replacement by Contractor	15 Ton One Lane	51.3	\$200,000	2020
04-00036	Rehabilitation by Contractor	Open	85.5	\$100,000	2021
04-00028	Rehabilitation by Contractor	Open	83.5	\$100,000	2021

#### PRIORITY SCHEDULE FOR BRIDGE REPLACEMENTS AND REHABILITATIONS

Total Cost:

\$1,303,000



### Bridge Information Tables

Bridge Number	Facility Carried	Feature Intersected	Location	Tons Posted	Date Posted
04-00015	CR 200W	Sugar Creek	00.40 S of CR 650N	15	11/01/2011
04-00023	CR 300E	Big Pine Creek Ditch	00.10 N of CR 500N	14	11/01/2011
04-00032	CR 800E	BIG PINE CREEK DITCH	00.10 N CR 300N	14	10/16/2015
04-00037	CR 500N	BIG PINE CREEK DITCH	00.10 E of CR 300E	11	09/01/1989
04-00060	CR 1100W	SALMON DITCH	00.30 N CR 100N	22	
04-00078	CR 225N	OWENS DITCH	00.60 E of CR 700E	13	08/01/1996
04-00098	CR 1000E	LITTLE PINE CREEK	00.40 S of CR 100S	20	04/27/2015
04-00101	CR 500W	Farrell Ditch	00.50 S of CR 700S	12	11/01/2011
04-00109	OLD US 41	GOOSE CREEK	00.30 N of CR 700S	15	11/01/2011
04-00153	CR 1000W	FINIGAN DITCH	00.10 S of Division Rd	19	04/27/2015

acility Carried	Feature Intersected	Location	Year of Work
D US 52, US 41			
D US 52, US 41			
the state of the s	SUGAR CREEK	00.40 N of CR 550N	2017
CR 500W	MUD CREEK	00.30 N CR 100N	2015
CR 200S	Little Pine Creek	00.10 W of CR 975E	2017
CR 300N	BIG PINE CREEK DITCH	00.10 E of CR 800E	2014
	CR 200S	CR 200S Little Pine Creek	CR 200S Little Pine Creek 00.10 W of CR 975E



NBI 43A Kind of Material and/or Design	NBI 43B Type of Design and/or Construction	Total	
1 - Concrete	01 - Slab	1	
1 - Concrete	02 - Stringer/Multi-beam or Girder	3	
1 - Concrete	03 - Girder and Floorbeam System	1	
1 - Concrete	19 - Culvert (includes frame culverts)	2	
1 - Concrete	22 - Channel Beam	1	
2 - Concrete continuous	01 - Slab	10	
3 - Steel	02 - Stringer/Multi-beam or Girder	16	
3 - Steel	10 - Truss - Thru	2	
3 - Steel	19 - Culvert (includes frame culverts)	7	
5 - Prestressed concrete	02 - Stringer/Multi-beam or Girder	6	
5 - Prestressed concrete	05 - Box Beam or Girders - Multiple	63	
6 - Prestressed concrete continuous	02 - Stringer/Multi-beam or Girder	3	
6 - Prestressed concrete continuous	05 - Box Beam or Girders - Multiple	1	
9 - Aluminum, Wrought Iron or Cast Iron	19 - Culvert (includes frame culverts)	2	



	(0)	(2) ELIGIBLE FOR	ONAL REGISTER OF HISTO	HISTORIC PLACES	
Brideg No.	(3) Year Built		E FOR NATIONAL REGISTEF terial NBI43B - Type of Design and/or Construction	Location	CES Features Intersected
CATEGOR	Y: 1				
Total Bridge	es for Catego	ry 1 : 0			
CATEGOR	Y: 2				
CATEGOR 04-00037	Y: 2 1920	3 - Steel	10 - Truss - Thru	00.10 E of CR 300E	BIG PINE CREEK DITCH
04-00037		3 - Steel 3 - Steel	10 - Truss - Thru 10 - Truss - Thru	00.10 E of CR 300E 00.60 E of CR 700E	BIG PINE CREEK DITCH OWENS DITCH
04-00037 04-00078	1920	3 - Steel			
04-00037 04-00078	1920 1920 es for Categor	3 - Steel			



Benton County Comprehensive Plan

Bridges and Small Structure Improvements, 2006-2017

Bridge, Small Structure, and Culvert Improvements 2006-2017

Туре	Structure #	Year
BRIDGE	98	2006
BRIDGE	63	2008
SMST	000	2006
SMST	276	2006
SMST	123	2007
SMST	355	2007
BRIDGE	62	2007
CULVERT	218	2007
CULVERT	102	2008
CULVERT	258	2008
CULVERT	218	2008
CULVERT	000	2008
SMST	700N 1000W	2008
BRIDGE	1007	2008
SMST	340	2008
BRIDGE	19	2008
BRIDGE	85	2008
SMST	266	2008
BRIDGE	110	2009
BRIDGE	17	2009
BRIDGE	17	2010
SMST	222	201.0
Bridge	27	2010
Bridge	137	2010
Bridge	133	2010
Bridge	135	2010
SMST	107	2010
BRIDGE	B	2011
BRIDGE	117	2011
BRIDGE	10	2011
BRIDGE	8	2011
BRIDGE	88	2011
BRIDGE	10	2011
CULVERT		2011
BRIDGE	1009	2011 & 2012
BRIDGE	123	2012
BRIDGE	170	2012
BRIDGE	17	2012
BRIDGE	1010	2013
BRIDGE	90	2013
SMST	329	2014
BRIDGE	35	2014
BRIDGE	61	2015

Туре	Structure #	Year	
SMST	359	2015	
CULVERT	278	2015	
SMST	178	2015	
BRIDGE	6	2016	
BRIDGE	95	2016	
BRIDGE (SMST)	14	2017	
BRIDGE	23	2017	
BRIDGE	37	2017	
BRIDGE	101	2017	
BRIDGE	104	2017	
SMST	393	2017	
SMST	394	2017	



# **APPENDIX C: ENVIRONMENTAL**

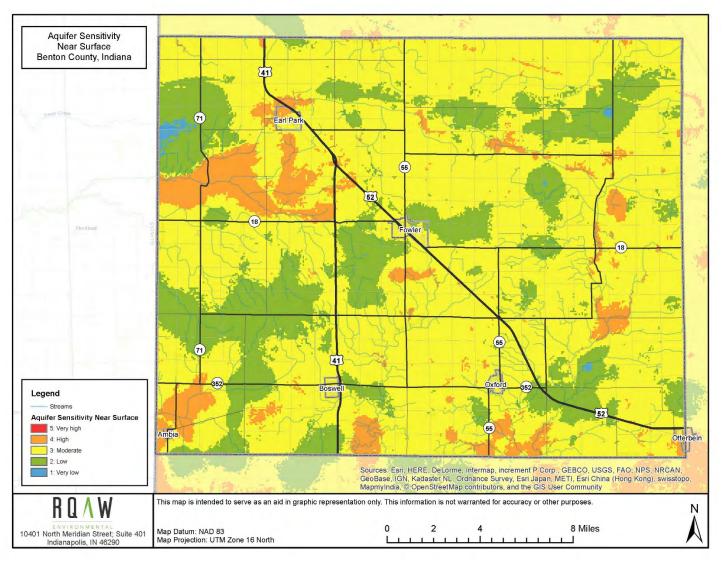


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### **APPENDIX C: ENVIRONMENTAL**

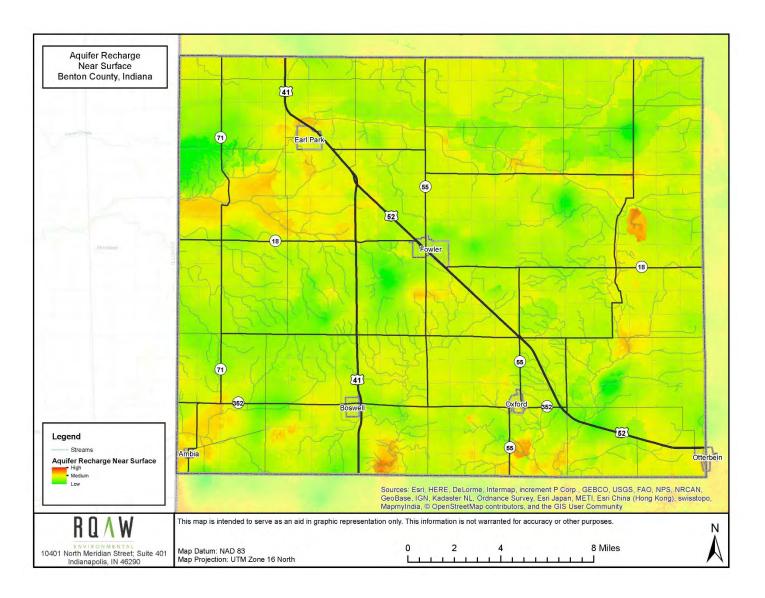
Aquifer Sensitivity Near Surface Map



RQ /W

**APPENDIX C** 

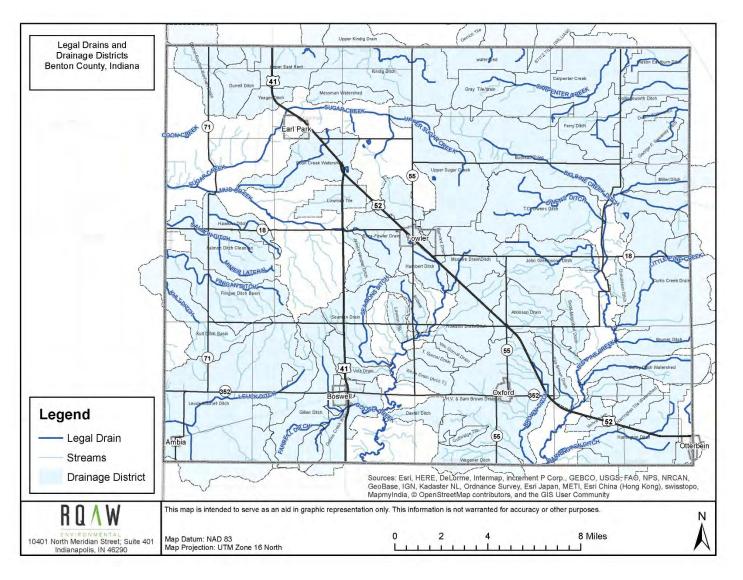
#### Aquifer Recharge Near Surface Map





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#### Legal Drains Map





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