Plan the Land 2030

Johnson County Comprehensive Plan February 28, 2011



















Acknowledgements

Funding Sources

INDOT I-69 Community Planning Grant Indianapolis MPO

Local Match

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Executive Summary













Executive Summary

Purpose of Plan

Plan the Land 2030 is a guide for the future. It's the result of years of study, debate, input and refinement. The plan is a vision of the desired future to make the county the place that current residents, local officials and others want it to be.

While the intent of the plan is to provide a blueprint for the future, understanding current conditions and historical trends provides the context needed for making decisions that shape the future. Therefore, the document contains instructive information about current and past conditions in Johnson County and surrounding areas.

The heart of the Plan is the vision and goals, the future land use and future thoroughfare maps, and the policies and recommendations specifically focused on helping decision-makers achieve the plan's desired outcome. Together, these form the desired direction for the future. Achieving the Plan's vision will require a concerted effort on many fronts. Specific actions, timing and responsibility for carrying them out are outlined in the document.

Regional Context

In many ways Johnson County has retained its rural character. However, the county's proximity to Indianapolis has had an influence on development patterns and population growth, especially in the northern one-third. The resulting changes have created both challenges and opportunities for Johnson County. Even though current economic conditions across the nation have temporarily halted the county's once rapid growth, resumption of that growth on some level can be expected when the economy improves. Therefore, the Plan remains relevant and provides the needed guidance for future decisions regarding land use, zoning and allocation of resources.

County Character

Most of its growth, development and population can be found in the northern one-third of the county, adjacent to Indianapolis. Much of the remainder is rural countryside defined by farms, woods and open fields, interspersed with scattered homes on acreage parcels. A few relatively small and isolated communities dot the county and are beginning to assert their own influence on the surrounding lands.

In addition to the urban/rural distinction, significant natural differences exist, as well. The large farms and open fields that characterize much of the interior of Johnson County are bordered near the south by deep

ravines, extensive woodlands and finger lakes lined with homes. Camp Atterbury, a major military installation, also in southern Johnson County, presents another significant influence relative to surrounding land use, economic stimulus and housing need.

Issues

All in all, this diversity presents both opportunities and challenges for planning the county. The spread of development to the south can be expected to continue. Johnson County will gradually transition from rural to suburban as more residents are drawn by its desirable character and convenient access to the attractions and opportunities in nearby Indianapolis. Recognizing the need to manage growth, maintain a desirable quality of life, retain the prized rural environment and provide needed services, the County, through this Plan, is attempting to address several critical issues:

- Infrastructure The systems that support growth roads, water, sewer, parks, and schools – often lag behind the pace of new development. Controlling the placement and extension of infrastructure is a fundamental tool to manage growth.
- Traffic One of the most apparent consequences of the county's growth is seen in traffic conditions in White River Township and neighboring Greenwood, where much of the suburban development has occurred over the past few decades.
- Housing Quality Overall, many housing options exist throughout the county, ranging from suburban homes on relatively small lots to country estates to lakefront homes and some apartments and condominiums. Concern has been expressed over the character and quality of some recent development. Higher standards may be desirable.
- Economic Development County-wide economic development
 efforts have been fairly aggressive, resulting in a number of light
 industrial facilities located mainly in Greenwood and Franklin.
 More land is needed to accommodate future expansion which is
 likely to remain within the incorporated communities, though
 the expanded I-69 corridor may present some new
 opportunities. Such non-residential development is critical to
 off-setting the high cost of servicing residential growth and
 providing employment close to home.
- Rural Preservation Despite substantial growth in the north, most of the county's land area remains essentially rural. As is common in many rural environments, there is some conflict between the newly arrived homeowners and the long-standing farmers. Loss of "rural character" also becomes a concern as more people move to the country in search of a rural lifestyle.

- Satellite Expansion While the growth in northern Johnson County has been the most expansive, other pockets of growth are surfacing around the small cities and towns dotting the county. Franklin, Edinburgh, Trafalgar, Bargarsville, Whiteland and New Whiteland are all experiencing change and seeking new development opportunities. As this becomes more prevalent, the pressures on surrounding unincorporated lands will escalate.
- Extraterritorial Jurisdiction (ETJ) Many of the individual municipalities in the county exert planning and zoning authority well beyond their boundaries. This has caused frustration among developers and others attempting to build within this overlapping jurisdiction. Delays in approvals, multiple permits and added costs have been cited repeatedly by property owners who find themselves within this ETJ boundary.

Vision/Goals

The core of the plan is the vision statement. Crafted by a diverse steering committee, representative of varied interests in the county and based, in part, on public input obtained from a series of meetings held across the county, the vision is the long-term view of Johnson County's desired future. The goals, policies, future land use designations and recommendations are all aimed at achieving that vision.

In 2030, Johnson County will be a distinctive place where we honor traditions and plan for tomorrow...by creating a comfortable quality of life with connected unique communities and cooperative and efficient governments.

While broad, the vision paints a picture of the future desired by Johnson County residents. Separate goals provide more specificity and aim to be achieved in individual arenas that collectively support the vision. Goals were defined by the steering committee and adopted by the plan commission and county commissioners as integral components of this plan. The goals of this plan are:

- 1. Protect the farmer's right to farm while preserving rural character.
- Support quality development in Johnson County.
- 3. Support Johnson County's culture/history.
- 4. Encourage intergovernmental coordination.

- Improve the general public awareness of Johnson
 County government programs, authority, and
 responsibilities and increase public involvement in
 county activities.
- 6. Protect the environment and natural resources within the county.
- 7. Provide opportunities for recreation.
- 8. Increase walk-ability and bike-ability.
- 9. Improve and require roads of quality.
- 10. Support mass/public transit.
- 11. Ensure quality non-transportation infrastructure.
- 12. Support a diverse economy.
- 13. Promote a healthy lifestyle.

Recommendations

The comprehensive plan contains a range of recommendations designed to support and achieve the stated goals. It is important to note, however, that the county does not fully control all aspects of development. Water and sewer decisions, for example, are made by others. Control of land use in unincorporated areas surrounding many of the cities and towns rests with those cities and towns, not the county, due to the municipalities' extraterritorial jurisdiction. This plan provides recommended actions that position the county to effectively manage change.

For the most part, the county's ability to manage growth and development comes from zoning and subdivision control regulations. Therefore, the plan recommends changes to both these ordinances to give the county the needed tools to achieve its goals and the pattern of development that is portrayed on the future land use map.

Communication and coordination with other jurisdictions within the county, state and federal agencies, and even among county departments is another key element in making the plan reality. Actions leading to more formal coordination mechanisms and improved cooperation are specified in the plan. Related to this is public education. More outreach and increased transparency are recommended to inform the county's population of current issues and

best practices. The county's web page should be used as one such vehicle. County-sponsored seminars on relevant planning and zoning topics is another example of an outreach tool.

More tangible actions are also recommended, specifically related to allocation of the county's available resources. Transportation is a major area in which the county can take a leadership role by allocating funds to those projects that are consistent with the plan and not supporting projects that will run counter to the plan (i.e., promoting premature development). Chapter 4 of the plan proposes many specific roadway and intersection improvements, as well as non-motorized activities. Consistency with the comprehensive plan should be one of the important considerations when assigning priorities to future road improvements.

Future Land Use

The comprehensive plan includes a future land use map which, essentially, is a graphic representation of the desired development pattern to be achieved over the next 20 years in conformance with the vision and goals. It should serve as an essential guide to the plan commission and commissioners in evaluating zoning requests and other land development proposals.

Implementation

Making the plan a reality requires a focused effort. Not all the needed tools are currently available, but the guidance is provided in the plan for creating those tools. While the plan contains background information about existing conditions, past trends and future prospects, that information is included to provide perspective and add to the overall understanding of the rationale for the plan's direction. The three fundamental elements of the plan, however, are the vision and goals, policies and actions, and the future land use and thoroughfare maps. Each supports the others and must be considered as a whole.

1: Introduction













A. Comprehensive Plan

The comprehensive plan is a policy document that conveys the county's vision for the future and how it will achieve that vision. It contains recommendations and action plans that provide guidance to the plan commission members and county commissioners as they are called upon to make land use decisions. The goals, recommendations, and future land use map need to be consulted and factored into these decisions. While the plan is an important and valuable tool, it is not law. It is adopted policy, intended to provide a foundation for the county zoning ordinance, which is the legal basis for regulating land use.

B. Implementation

The adoption of the plan does not signal the end of the process, but marks the beginning. In order to achieve the vision described in this document, the plan must serve as a fundamental decision-making tool. County leaders must be committed to the plan and its implementation.

Using the Plan

This document contains a wealth of information about Johnson County, its resources, its people, its communities, its strengths and opportunities, its challenges and, most importantly, its future. The plan should serve as a useful source of data and information; as a framework for coordination of county capital investments; and as a guide for land use and development decisions. While the plan should be relied upon by the public, the development community, county agencies and others, it will be the county plan commission that is primarily responsible for maintaining the plan, promoting its use and consistently following its guidance.

It is important to understand that the "plan" is more than the future land use map. The map is an illustration of intended land use patterns over the next 20 years. But the map is only a reflection of the goals and policies that have been adopted as the foundation of the plan. Therefore, decisions regarding development proposals, rezoning requests and public investments must be made in the context of those goals and policies, as well as the land uses designated on the future land use map.

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The goals, policies, actions and future land use recommendations must be regularly assessed to ensure that they still reflect the philosophy of the county's citizens and leaders; are consistent with economic and technological realities; and are being actively pursued or are no longer relevant.

Keeping it Relevant

Clearly, opportunities and challenges will arise during the course of the planning period that were unforeseen when the plan was crafted. Such circumstances should not necessarily be ignored in favor of rigid adherence to the plan. However, when conditions change significantly, neither should the plan be abandoned. It should be revised, as needed, to keep it current and relevant. Therefore, an annual review of the plan is recommended to ensure that it remains pertinent and does not fall into disuse over time.

There are many elements of the plan that should be routinely monitored. The goals, policies, actions and future land use recommendations must be regularly assessed to ensure that they still reflect the philosophy of the county's citizens and leaders; are consistent with economic and technological realities; and are being actively pursued or are no longer relevant.

Making Decisions

While the plan has many uses, frequent reliance on the plan will come as the Plan Commission is faced with development proposals and rezoning requests. The Indiana Code establishes several criteria to be considered in making such decisions. Either directly or indirectly, most of these criteria relate to the comprehensive plan. Specifically, IC36-7-4-603, states:

"In preparing and considering proposals under the 600 series [Zoning], the plan commission and the legislative body shall pay reasonable regard to:

comprehensive plan;

current conditions and the character of current structures and uses in each district;

the most desirable use for which the land in each district is adopted;

the conservation of property values throughout the jurisdiction; and

responsible development and growth."

The meaning of these criteria can be somewhat subjective and, in most cases, has not been illuminated by the legislation or court opinions. However, a consistent interpretation should be followed by the county to ensure fair, rational and sound decisions are

uniformly applied. Therefore, the following guidance is offered regarding the application of the criteria.

Comprehensive Plan

The comprehensive plan is this document, adopted by the county commissioners as its land use policy. As noted previously, the essential elements of the plan to consider in evaluating a zoning decision are the conformance of the proposal with the goals and policies of the plan and the specific land use designation depicted on the future land use map.

Current Conditions and Character in Each District

Put another way, this criterion considers the compatibility of the proposed development or allowed uses with the existing or intended character of the surrounding area. While the land use patterns reflected on the future land use map consider such compatibility in a broad sense, actual development of individual parcels and the compatibility of such development with surrounding properties requires closer scrutiny.

Most Desirable Use

Because the comprehensive plan considered transportation systems, natural features and related characteristics in formulating the recommended land use pattern, the appropriateness or adaptability of the land for various uses has already been considered. However, there may be other uses for which the land is suitable, as well. This criterion should be considered relative to suitability of the use (or zone district) in relation to the other criteria and the need for and availability of public infrastructure. Courts have routinely held that zoning must provide a "reasonable" use of property. Government may not "take" private property without just compensation. However, it is not appropriate to interpret this criterion as accommodating the "highest and best use," which may or may not be reasonable.

Conservation of Property Values

This criterion can be very subjective in the absence of site-specific studies that confirm or refute the impact of a proposed use or zoning district on the value of adjoining property. Neighboring property owners often argue against proposed developments based, at least in part, on a perceived negative impact on their property values. Though this is a common concern there is typically little or no empirical evidence to support such claims.

Highest and best use is a concept in real estate appraisal. It states that the value of a property is directly related to the use of that property; the highest and best use is the reasonably probable use that produces the highest property value. The highest and best use may or may not be the current use of the property.

Property rights do not guarantee a property owner the highest and best use, but rather an economically viable use.

Responsible Development and Growth

In many ways, this criterion is left to the interpretation of the county. Responsible development is essentially defined by the comprehensive plan through the future land use map and the goals and policies that have been adopted.

These general criteria must be applied to all zoning proposals, but other criteria may be considered relative to specific types of requests or forms of development. Some suggested criteria for locating non-residential development include the following:

Commercial

- is the proposal supported by the future land use map?
- is the proposal consistent with land use and economic development goals of the comprehensive plan? and

for neighborhood scale development...

- does the proposed site have access to at least one collector or minor arterial?
- is the proposed building smaller than 20,000 square feet?
- is the proposed site between two and six acres in lot size?
- does the proposed site have reasonable proximity to residential development?
- is the proposed site accessible by pedestrians?
- is the proposed site served by public utilities?
- would the proposed uses serve the day-to-day needs of residents in the area?
- are the adjacent land uses commercial (neighborhood scale), residential, institutional?

for community scale development...

- does the proposed site have access to at least one minor arterial or higher classification roadway?
- is the proposed building smaller than 100,000 square feet (may be in multiple structures)?
- is the proposed site served by public utilities?
- can the proposed site be adequately buffered from residential uses?
- are the adjacent land uses commercial, residential, institutional?

Industrial

- is the proposal supported by the future land use map?
- is the proposed site supported by public utilities?
- is the proposal consistent with the land use and economic development goals of the comprehensive plan? and

light industrial development...

- does the proposed site have access to a minor arterial or higher classification roadway?
- can the proposed site be adequately buffered from adjacent residential uses?
- are the adjacent land uses commercial, agricultural, industrial, institutional?

heavy industrial development...

- does the proposed site have access (though not direct) to a major arterial or higher classification roadway?
- can the proposed site be adequately buffered from adjacent residential or commercial uses?
- are adjacent land uses industrial or agricultural?

Planning/Zoning Relationship

It is critical to understand the difference between the comprehensive plan and future land use map and the zoning ordinance and zoning map and how they interrelate. The plan is county <u>policy</u>, but not law. It is a <u>long-range</u> guide to the physical development of the county as a means of achieving desired goals.

The zoning ordinance is <u>law</u> and is the primary tool available to implement the plan's recommendations. It regulates the use of property in support of the plan.

Confusion sometimes arises regarding the relationship of the future land use map and the zoning map. The future land use map illustrates the desired or recommended development patterns and use of property over the 20 year planning period. The zoning map shows how property is zoned today. The two will rarely, if ever, be exactly the same. For example, property may be designated for eventual commercial or industrial development on the future land use map; but actually be zoned as agricultural. This may be due to the current lack of utilities serving the area, though expansion of those utilities is foreseen sometime during

Comprehensive Plan	Zoning Ordinance
Policy / Guide	Law
Shows how land should be used in the future	Shows how land is regulated now
Decision-making	Implementation and Enforcement
Adopted by resolution	Adopted by ordinance

the planning period. Or it may be that there is a sufficient supply of available land already zoned for commercial or industrial purposes; but when that land is fully developed, there will be a need to open expanded opportunities elsewhere in planned locations.

Therefore, the rezoning of property is not necessarily inappropriate. Zoning classifications on individual parcels may change during the planning period; but should be consistent with the planning goals, policies and future land use recommendations. If not, the request most likely should be denied or the plan altered, based on new circumstances or changing conditions that favor an amendment.

C. Funding

Financial support for the preparation of this plan was provided from three sources:

Indiana Department of Transportation I-69 Community Planning Grant

The I-69 Community Planning Program grant funded \$100,000 of this comprehensive plan update.

Johnson County and the City of Greenwood were eligible for this grant. As an incentive to work collaboratively on the same project, the funding limit was increased to a combined \$100,000, instead of \$40,000 each, if the city and county were to work independently. Greenwood had recently completed an update to their comprehensive plan at the time Johnson County was preparing to update theirs. The decision to collaborate on the county plan flowed from this timing. Greenwood offered to apply for the grant with the county, to obtain the additional incentive funding, and share their funds by applying the \$100,000 to update the Johnson County comprehensive plan.

Greenwood benefited by having improved planning in the unincorporated areas adjacent to them and in particular the area between the city and the planned new I-69 route. Johnson County received additional funding for the project which provided for an improved planning process.

Indianapolis Metropolitan Planning Organization

The Indianapolis Metropolitan Planning Organization (MPO) contributed \$14,400 toward the comprehensive planning effort.

Local Match

Johnson County funded \$32,600 of the comprehensive planning process through its general budget.

2: Future Direction



A. Future Direction

This Chapter is the foundation of the Comprehensive Plan. It not only defines the long-term vision and related goals, but provides a step-by-step action plan for getting there.

The plan's vision serves as a common rallying point, a destination toward which the county is headed. It may seem like a stretch now, but is achievable within the comprehensive plan's 20 year planning horizon. The goals and policies of the plan flow from the vision and must support the county achieving the vision.

An extensive visioning process was undertaken by Johnson County beginning in 2007. The vision statement that ultimately evolved from that process is:

In 2030, Johnson County will be a distinctive place where we honor traditions and plan for tomorrow...by creating a comfortable quality of life with connected unique communities and cooperative and efficient governments.

The goals, policies and related actions are categorized by functional area as listed below. Note that only those actions for which the county may be primarily responsible are listed here. Additional actions, dependant on volunteers, private organizations and others are listed in Appendix C.

Goal

Goals are more narrowly focused than the vision, and are statements that relate to the vision. Generally they are focused around a topic area such as downtown, transportation, or growth management. However, there may be more than one goal related to a topic.

Policy

Policies or policy statements reflect how the government or various quasi-public agencies will act in order to implement the goals and ultimately the vision for the community. They guide the decision-making of departments, boards, and commissions without being specific actions that they are to undertake.

Action

Action steps or action statements are the detailed descriptions of how the goals are to be achieved. They are related to the goals, and support the vision. They should be concrete steps that have a responsible party, timeframe, and possibly a cost estimate linked to them. These form the work of the departments, boards, and commissions affected by the plan until the goal is achieved.

B. Land Use/Development

Goal 1: Protect the farmer's right to farm while preserving rural character.

Policies:

- Minimize intrusion of non-agricultural uses into designated agricultural areas
- Permit transition of land to suburban or urban uses when timing and adjacent uses are appropriate

	Responsible	
Action	Party	Timeframe
Require a "right to farm" declaration to be signed and attached to plats for non-farm uses in agricultural areas, consistent with the provisions of IC 32-30-6-9	Plan Commission and County Commissioners	Short-term
Promote conservation development	Plan Commission and County Commissioners	Short-term
Revise zoning ordinance to support farming and minimize non-farm intrusion into designated agricultural areas	Plan Commission and County Commissioners	Short-term
Explore the use of non- contiguous planned unit developments (see Appendix C: Tools) as a means of transferring development rights from areas to be protected to those locations designated for development	Plan Commission and County Commissioners	Short-term

Goal 2: Support quality development in Johnson County.

Policies:

- Implement mixed-use development in appropriate areas
- Designate focus areas which should require higher quality/design standards
- Maintain focus and commitment to corridor overlay zones throughout the county

Timeframe

Short-term – 1-5 years

Medium-term – 5-10 years

Long-term – 10-20 years

Action	Responsible	
Action	•	Timesfeets
	Party	Timeframe
Camp Atterbury: Encourage participation of Camp Atterbury in land use decisions through continued notification and/or membership in the Technical Review Board.	Planning Department, Plan Commission	Ongoing
Revise zoning ordinance to permit mixed-use development in specific districts	Plan Commission, County Commissioners	Short-term
Corridors: Establish enforceable access management standards including: driveway spacing, driveway distance from intersection, shared driveways, frontage roads	Highway Department, Plan Commission, County Commissioners	Short-term
Focus areas: Encourage use of frontage streets for residential and commercial development along arterials	Planning Department, Highway Department, Plan Commission, County Commissioners	Short-term
Focus areas: Adopt architectural standards including siding materials, roof pitch and overhang, window treatments, and articulated facades for appropriate areas	Plan Commission, County Commissioners	Mid-term
Corridors: Adopt corridor development regulations, such as an overlay district, that incorporate: architectural standards (siding materials, roof pitch and overhang, window treatments, and articulated facades); landscape requirements; signage requirements; and access management.	Plan Commission, County Commissioners	Mid-term
Focus areas: Explore the use of Form-Based Codes for development in select areas	Plan Commission, County Commissioners	Mid-term

Military Installations

Under a law adopted in 2005, communities with military installations have an obligation to notify the military installation of development plans and zoning activity (including subdivision of land) within three miles of the installation under IC 36-7-30.1-2; Notification requirement, requesting that the base commander comment on the action and its impacts to the installation. The base commander has 15 days to respond.

The intention of the notification and IC 36-7-30.1-3; Impact on military bases is to prevent development within three miles of the base that would have an adverse impact on operations at a military installation. While Camp Atterbury may not be officially considered a military insallation for purposes of the statute, following it would prevent land use conflicts between the installation and the surrounding communities. The Joint Land Use Study identified a one-mile study area, which is reflected in the future land use map.

Form-based Code is a zoning tool that emphasizes the scale (form) of development and encourages mixed uses rather than the traditional segregation of land uses in conventional zoning districts. It is becoming a popular technique for use in business districts, corridors and subareas where creation or enhancement of a specific character is desired.

C. Culture/History

Goal 3: Support Johnson County's culture/history.

Policies:

- Support awareness of Johnson County's culture and history
- Provide opportunities for people to learn about the county's history
- Continue to support and create more opportunities for social/community activities and volunteers in Johnson County
- Support the current unique unincorporated town centers while encouraging growing areas to create an identity of place

Action	Responsible Party	Timeframe
Host community clean-up days	County Commissioners or Solid Waste District(s)	Ongoing
Promote Johnson County's heritage at local events	Purdue Extension, Fair Board, Volunteers	Short-term
Support a tree-planting program	Non-profit	Short-term
Develop an "adopt-a-median" program for county roads	County highway department	Short-term

D. Intergovernmental Cooperation

Goal 4: Encourage intergovernmental coordination.

Policies:

- Collaborate with cities and towns on local planning efforts
- Provide opportunities for improved coordination between departments in county government and between levels of government

	Responsible	
Action	Party	Timeframe
Continue coordination meetings between the planning departments in the county	Planning Departments	Ongoing
Maintain current boundary files for municipalities in the Geographic Information System (GIS)	Planning Department/ GIS Department	Ongoing
Continue participation in regional planning efforts through the Indianapolis and Columbus MPOs and similar regional organizations	Planning Department	Ongoing
Continue to coordinate land use and economic development activities with Camp Atterbury	Planning Department, JCDC	Ongoing
Study the benefits and challenges of maintaining or eliminating the extra-territorial jurisdiction for some or all municipalities in the county	Planning Department, County Commissioners	Short-term

Goal 5: Improve the general public awareness of Johnson County government programs, authority, and responsibilities and increase public involvement in county activities.

Policies:

- Continue to find ways to encourage citizen participation in all aspects of local government
- Provide opportunities for citizens to better understand land use procedures for the county

Action	Responsible Party	Timeframe
Encourage creation of a	Planning	Ongoing
speaker's bureau for public	Department,	
events and educational	Plan	
opportunities	Commission	
Use County website to educate	Planning	Ongoing
public about planning practices,	Department, IT	
ongoing activity and seminars.	Department,	
	County	
	Commissioners	

E. Environment

Goal 6: Protect the environment and natural resources within the county.

Policies:

- Adopt standards to implement LEED or environmentally sensitive development including building, infrastructure, and land use
- Increase the opportunity for recycling within Johnson County
- Identify and preserve significant natural habitats

	Responsible	
Action	Party	Timeframe
Host medical, electronic, and hazardous waste recycling days at various locations in the county	County Commissioners, Health Department, Solid Waste Board	Ongoing
Continue to restrict development in the floodplain	Plan Commission, County Commissioners	Ongoing
Adopt tree preservation requirements in the zoning ordinance and provide incentives	Plan Commission, County Commissioners	Short-term
Encourage LEED alternatives in the zoning ordinance, subdivision control ordinance, and construction standards to support "green" development	Plan Commission, County Commissioners	Short-term
Prepare an open space plan to identify sensitive features, parks, cemeteries, habitats, and natural features, and means of ensuring their protection	Parks Department, Parks Board	Short-term
Create zoning techniques to promote sensitive development and preservation of important natural features	Plan Commission, County Commissioners	Short-term
Require wetland mitigation at least equal to state minimum standards	Plan Commission, County Commissioners	Mid-term
Obtain (through donation, or non- profits) easements along major streams and rivers in the county for trails and/or no-disturb zones	Parks Board, County Commissioners	Mid-term

LEED (Leadership in Energy and Environmental Design) is the internationally recognized "green" building certification system.

F. Parks & Recreation

Goal 7: Provide opportunities for recreation.

Policies:

- Support quality trails to connect recreational uses/land, while utilizing existing corridors
- Explore and implement funding options for the creation and maintenance of parks
- Explore and implement options for partnerships related to the creation and maintenance of parks

	Responsible	
Action	Party	Timeframe
Provide recreation opportunities within subdivisions	Plan Commission, County Commissioners	Ongoing
Engage in communication strategies that will inform various segments of the community	Parks Board	Ongoing
Update the county Parks and Recreation Plan every five years to qualify for grant funding opportunities	Parks Department, Parks Board	Ongoing
Research options including public and private (501(c)3) means of developing and maintaining parks and trails	Parks Board, Trail group	Short-term
Solicit input from the public regarding park management and maintenance options	Parks Board	Short-term
Plan future parks and preservation areas along natural corridors	Parks Department, Parks Board	Mid-term

G. Transportation

Goal 8: Increase walk-ability and bike-ability.

Policies:

- Limit waivers of sidewalk requirements in new subdivisions
- Support efforts to develop walkable communities
- Support efforts to close gaps in the sidewalk network in suburban areas
- Support development of "complete streets"
- Support efforts to develop a community trail system

	Responsible	
Action	Party	Timeframe
Support Safe Routes to School activities, groups interested in closing sidewalk gaps, and trail advocates in developing walkable communities	Plan Commission, County Commissioners, Highway Department	Ongoing
Require sidewalks for commercial and industrial development and along all collectors and arterials	Plan Commission, County Commissioners	Short-term
Continue and strengthen requirements for the installation of sidewalks in all major subdivisions and multi-family housing developments	Plan Commission, County Commissioners	Short-term
Implement a multi-modal approach to the design of new roads and major road redesign to accommodate vehicles, pedestrians, bicycles and transit	Highway Department, County Commissioners	Mid-term
Identify rural bike routes	Parks Department, Highway Department	Mid-term

Pedestrian Zone Bike Zone Motor Vehicle Zone Bike Green Zone Zone Zone Zone

Complete Streets

Complete Streets

States, cities and towns are asking their planners and engineers to build road networks that are safer, more livable, and welcoming to everyone.

policy ensures that transportation planners and engineers consistently design and operate the entire roadway with all users in mind - including bicyclists, public transportation vehicles and riders, and pedestrians of all ages and abilities.

Goal 9: Improve and require a quality transportation system.

Policies:

- Identify and develop needed transportation connections, including an east-west corridor
- Require adequate public transportation systems to be in place prior to development
- Ensure future interchange areas have needed right-of-way
- Provide for safe intersections

	Responsible	
Action	Party	Timeframe
Use traffic calming features in	Highway	Ongoing
residential areas and high	Department,	
pedestrian volume commercial	Planning	
areas	Department	
Design intersections according	Highway	Ongoing
to anticipated traffic volume	Department	
Implement the East-West	Highway	Short-term
Corridor	Department,	
	County	
	Commissioners	

Goal 10: Support mass/public transit.

Policies:

- Participate in regional coordination efforts
- Look for opportunities for transit supportive development

	Responsible	
Action	Party	Timeframe
Attend policy meetings, discussions, and workshops for regional transit options	Highway Department/ Planning Department	Ongoing
Develop ways for Access Johnson County to maximize service to rural areas	Access Johnson County, County Commissioners	Mid-term
Develop sub-area plans for transit supportive development as stop locations are identified	Planning Department, Plan Commission, County Commissioners	Long-term

H. Infrastructure

Goal 11: Ensure quality non-transportation infrastructure.

Policies:

- Coordinate utilities with other jurisdictions
- Require adequate public facilities (particularly sewer) for urban/suburban density development

Action	Responsible Party	Timeframe
Continue to require sewer service agreements prior to plat approval or development plan approval for commercial, industrial, and residential development (more than two units per acre)	Plan Commission, County Commissioners	Short-term
Continue to promote access to public water supply for commercial, industrial, and residential development (more than two units per acre)	Plan Commission	Short-term
Continue to require utilities to be coordinated and located in easements (either in road right-of-way or utility easement)	Plan Commission	Short-term
Support efforts to improve the telecommunications infrastructure in the county	Highway Department, County Commissioners, Johnson County Development Corporation	Mid-term

I. Economic Development

Goal 12: Support a diverse and high income employment economy.

Policies:

- Attract business and industry that pay above-average wages and provide upward economic mobility within the company.
- Develop cost/benefit analysis for attracting and assessing new businesses
- Identify and establish methods of financing desired public space
- Capitalize on Johnson County's economic strengths and opportunities.

Action	Responsible Party	Timeframe
Require a fiscal impact analysis for businesses requesting tax abatement or other county incentives	JCDC, County Commissioners	Ongoing
Continue to support manufacturing jobs through assistance and incentives	JCDC, County Commissioners	Ongoing
Support cottage industries with appropriate criteria through the zoning ordinance	Plan Commission, County Commissioners	Short-term
Provide incentives for businesses in desired industry sectors	County Commissioners	Short-term
Take advantage of the intensification of use at Camp Atterbury	JCDC, County Commissioners	Short-term
Study funding mechanisms to offset the costs of development (e.g., impact fees, tax increment financing and grants)	County Commissioners	Mid-term

3: Land Use













A. Existing Land Use

Johnson County covers a land area of 320 square miles, or 204,338 acres. The predominant land use, accounting for more than half of the county's land, is agriculture. The remainder of the county is essentially developed with residential (18 percent), institutional (8 percent) and other uses including commercial, industrial, and transportation.

Agriculture

Approximately 30 percent of Johnson County is in crop production and a similar percentage in agricultural/ vacant land. While there are other types of agricultural uses in the county (such as pasture land), they amount to a small percentage of the overall land use. This agricultural land is relatively flat and contains soils that support crop production. According to the 2007 Census of Agriculture, Johnson County ranked 466 out of 2,634 U.S. Counties (top 20 percent) for production of corn for grain. In Indiana, the county ranks roughly in the middle of the state's 92 counties for production of corn for grain, and in the top third of counties in production of corn for silage.

Agriculture continues to be very important to Johnson County in terms of land area, community identity, and economic opportunities. Though farm employment has declined in recent years, the amount of land being farmed and the average farm size have increased. In 2002, there were 598 farms in Johnson County, totaling 135,178 acres. By 2007, the number of farms had declined to 585, but there were 142,181 acres in farms, according to the U.S. Census of Agriculture. The average farm size, therefore increased from 226 acres in 2002 to 243 acres in 2007. The number of farms with more than 500 acres remained relatively constant – 84 farms in 2002 82 farms in 2007. Approximately 90 percent of the farm land in the county was in crop production in 2002 and 2007.



Grain elevator in Bargersville



Ponies near Trafalgar



Crop land in the southern half of Johnson County

Commercial strip development near



Industrial development along I-65 in the porthern part of Johnson County

Residential

Residential uses account for 18 percent of the total land area within the county. Much of the residential use would be considered suburban or urban and is found in the incorporated communities (particularly Greenwood and Franklin), and the urbanized area of White River Township. The majority of the residential uses are single-family homes in platted subdivisions. Other single-family homes are found on unplatted parcels under 10 acres, scattered throughout the rural areas of the county.

White River and Pleasant Townships have the highest concentrations of residential uses. In White River Township residential land use accounts for 28 percent of the land, while in Pleasant Township the residential uses occupy more than 15 percent of the land area. Blue River Township has the least land dedicated to residential use, with only four percent in residential use.

Multi-family housing, primarily apartments, is concentrated in the urban communities of Greenwood and Franklin and their immediate vicinities. These locations correspond with the availability of water and sanitary sewer service and the appropriate transitional character of the use.

Significant areas of residential development also exist in the area around the lakes in the extreme southern part of the county. Prince's and Lamb Lakes are bordered by extensive single family development, most of it year-round homes. Much of this development is on small lots in rolling terrain. Septic issues that posed severe limitations in the past have been addressed for Princes Lakes with the installation of public sanitary sewer but continue to pose an obstacle to development for Lamb Lake.

Commercial

Commercial uses occupy two percent of the total land area.

Again, much of this is concentrated in Greenwood, particularly the Greenwood Park Mall, the largest enclosed mall in metro Indianapolis, and commercial development along Madison Avenue. Other commercial corridors in the northern part of the county (US 31) and the downtown areas of Franklin and smaller towns contribute to the commercial uses in the county, as well.

Commercial uses are concentrated in Pleasant Township, where more than four percent of the land (1,766 acres) has been developed for businesses. The next largest concentration is in White River Township, with 986 acres, or more than two and one-half percent of the land. Union Township has the least commercial development, with approximately 26 acres of commercial land.

Industrial

Industrial development accounts for only about one percent of the land area in Johnson County. Most of this is concentrated in two areas – the north and east sides of Franklin, along or near the railroad tracks, and in Greenwood along the I-65 corridor near the Marion-Johnson County line. Parcels available for industrial development in Greenwood and the I-65 corridor are typically smaller than 10 acres. Larger parcels are available in Franklin.



More than 750 acres of industrial land are found in Franklin Township; and Pleasant Township contains nearly 600 acres. Secondary concentrations of industrial land use are in Blue River (350 acres), White River (300 acres), and Needham (nearly 200 acres) Townships.

Institutional

Institutional land uses include federal, state, and local government-owned land, cemeteries, schools, places of worship, and similar facilities. The institutional uses in Johnson County account for eight percent of the land use.

Other institutional uses include the county courthouse and annexes in Franklin, city and town halls, water and wastewater treatment facilities, Independence Park, local parks, cemeteries, libraries, school facilities, Franklin College, Ivy Tech and churches and other places of workshop.

The largest institutional facility in Johnson County is Camp Atterbury, located in the southeast corner of Johnson County on the Johnson-Bartholomew-Brown County line. Also in the vicinity are the US Fish and Wildlife Area and the Johnson County Park.



Atterbury Fish and Wildlife Area

Natural Resources

The natural resources land use category includes woodlands and water bodies (lakes, rivers, etc.). Approximately 11 percent of the lands are classified as natural resources.

Transportation

The roads, railroad tracks, their associated rights-of-way, and other transportation facilities account for three percent of the land in Johnson County.

General Existing Land Use Categories						
Existing Land Use	Area (sq. ft.)	Area (acres)	% of Total			
AGRICULTURE	5,024,302,878	115,342	56.45%			
COMMERCIAL	168,439,781	3,867	1.89%			
INDUSTRIAL	100,163,815	2,299	1.13%			
INSTITUTIONAL	694,952,633	15,954	7.81%			
NATURAL RESOURCES	1,022,494,867	23,473	11.49%			
RECREATION	62,025,078	1,424	0.70%			
RESIDENTIAL	1,576,491,336	36,191	17.71%			
TRANSPORTATION	252,109,892	5,788	2.83%			
TOTAL	8,900,980,279	204,338				

Area includes all land in Johnson County, both incorporated and unincorporated.

B. Land Use Analysis

Land Use Character and Trends

Character

There is no one predominant character to Johnson County. The land is an area of widely divergent contrasts – intensely urban/surprisingly rural, level farmland/rugged ravines, quiet country roads/bustling highways – that give it its character. A growth surge from Indianapolis has created suburban neighborhoods, shopping districts, and employment centers along the northern border of the county but, open farmland remains to the south and east. Unlike either the urbanized or agricultural sectors of the county, the southern region is an area of wooded ravines surrounding finger lakes that, decades ago, attracted year round and seasonal residents who sought a natural setting not too distant from the amenities of Indianapolis.

Recent development has been dominated by residential subdivisions that tend to have incorporated amenities including recreation facilities, walking paths, decorative lighting, landscaping, and detention ponds. Some have preserved significant open space or woodlands. However, they tend to lack connectivity with neighboring developments for either pedestrians or vehicles.

Single-site residential development in the rural parts of the county has been primarily larger homes on large lots. Rather than being located within small, clustered subdivisions, served by an interior street, these rural, non-farm homes are generally strung out along the main county roads.

Much of the US 31 corridor, a commercial ribbon from Franklin north to Greenwood, was developed during the 1970s and 1980s. The pattern was typical strip development with large parking lots in front of buildings, minimal or no landscaping, and individual driveways for each lot. During the 1990s and 2000s some of these sites experienced redevelopment. Newer structures generally continued the same overall pattern, but were required to meet new regulations requiring perimeter and parking lot landscaping, a modest but noticeable improvement.

Large Lot Zoning and Exempt Subdivisions

The current Johnson County practice of allowing one split per 10 acres (with a 2 acre minimum lot size) in the agricultural zoning district, or allowing an exempt subdivision of 2-4 parcels from the parent tract as long as they are at least 5 acres and have at least 300 feet of road frontage was an attempt at preserving farmland. The results have been almost the opposite, fragmenting land so that it is difficult to farm with modern equipment and techniques. This land use policy also encourages people to buy their own location in the "country" when they don't need that much land and forces urban/suburban services farther out into rural areas. Other approaches to farmland preservation are included in Appendix C.



Downtown Bargersville commercial building

More recent commercial development is still corridor-driven. The development pattern tends to be dominated by big-box retailers or anchored strip centers with outlots abutting the street. Parking is located between the outlots and the larger shopping centers. Architectural styles have improved somewhat with time, but lack a unified appearance along the corridor.

The original Greenwood Park Mall was developed in the 1960s and fully enclosed in the 1970s. The largest area of the mall is still this original center. A 2007 expansion introduced an outdoor lifestyle center component to the complex.

Historic downtown cores that include commercial uses — niche retail, professional offices, banks, and restaurants – are found in some of the incorporated communities.

Industrial uses in the county are primarily located within the incorporated communities, especially Greenwood and Franklin. Interstate access is a significant magnet in attracting these businesses, drawing much of the industrial development toward I-65. Industries that require rail access tend to locate in Franklin where access to short line rail service is available. Much of the newer industrial development has been located in one of the industrial parks. Regionally, master planned industrial and business parks incorporating infrastructure, development standards, a consistent image, and unified marketing have become a popular lure to major industrial tenants. Currently few, if any, of the industrial/business parks in Johnson County offer such coordinated amenities, site planning and management.

Trends

Johnson County has experienced tremendous residential growth in the past twenty years, much of which has been single-family homes in subdivisions located in Greenwood, Pleasant Township, and White River Township. The county averaged more than 1,300 new residential construction permits (85 percent for single family homes) annually in the 17 years prior to the economic recession beginning in 2008.

Building permits peaked in 1996, with 2,200 new residential construction permits being issued that year. A decade later, signs of local market saturation and early symptoms of a national housing and credit crisis became evident when, in 2006, residential development dropped off significantly. In 2007 construction plummeted further when fewer than 800 new residential permits were issued. Since then, building activity has generally held a plateau.

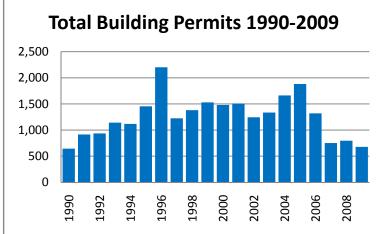
Residential vacancies, in 2000, were at six percent.

This is considered "typical," allowing for the normal flow of people in and out of housing. A higher rate is a sign of distress that people are not moving into the community and there is an oversupply of housing. Lower indicates a need for additional housing to accommodate people interested in moving into the community.

The national housing crisis emerged in 2008 and continued through the decade has changed the housing supply dynamic. New housing construction has slowed dramatically while a significant number of homeowners have entered foreclosure. In March 2009, there were nearly 200 properties in foreclosure in Johnson County (www.foreclosurefreesearch.com). Prices of those homes ranged from the mid \$30,000s to over \$500,000. All housing types and all communities in the county have been affected. Comparisons between communities are difficult since the data is not compiled using a methodology that supports such comparisons.

The American Communities Survey (Census Bureau) 2005-2007 figures for Johnson County estimated the housing vacancy rate was 7.1 percent. While this figure is higher than a few years earlier, it has, no doubt, risen even further in the past two years as the nationwide housing and banking crisis worsened in a deepening economic recession.

Though housing development has stagnated in recent years, other sectors of the county's economy have seen some growth. Cooper Tire & Rubber Company announced the location of a new warehouse operation in Franklin. The 808,500-square-foot building in Franklin Tech Park, near Interstate 65, will open in



2011 with 60 workers. It will be one of the largest LEED facilities in the state.

Future Land Needs

Land use needs for 2030 were projected based on the Indiana Business Research Center, the official Indiana state data center, population projection for 2030 (170,000 people). If land continues to be consumed at the current per capita rate, an additional 6,500 acres of development would be required by 2030 to accommodate those uses (commercial, industry, transportation, etc.) that support the added residential population, resulting in 72,000 acres of development throughout Johnson County. This would leave approximately 132,000 acres in undeveloped, natural resource and agricultural, land. Applying current per capita ratios of these non-residential land uses to the projected population growth, Johnson County would need* additional development of:

- 850 acres of commercial land
- 510 acres of industrial land
- 3,500 acres of institutional land
- 316 acres of recreational land
- 1,280 acres of transportation facilities

The amount of actual land needed for residential development will depend on household size and density of development.

^{*} The projected future land use needs are based on the existing per capita consumption of land and the projected 2030 population. This is a calculation based on existing patterns, not based on desired land consumption.

Development Assets and Constraints

Not all land is equally suited to all uses. Soil characteristics, natural features, accessibility, and other factors combine to either support or inhibit various uses. While, for example, some land in Johnson County is ideally suited for agriculture, other land is marginal at best, but well suited for urban/suburban development. Identifying the factors that support or constrain development and agriculture provides a framework for future land use alternatives.

Development Assets

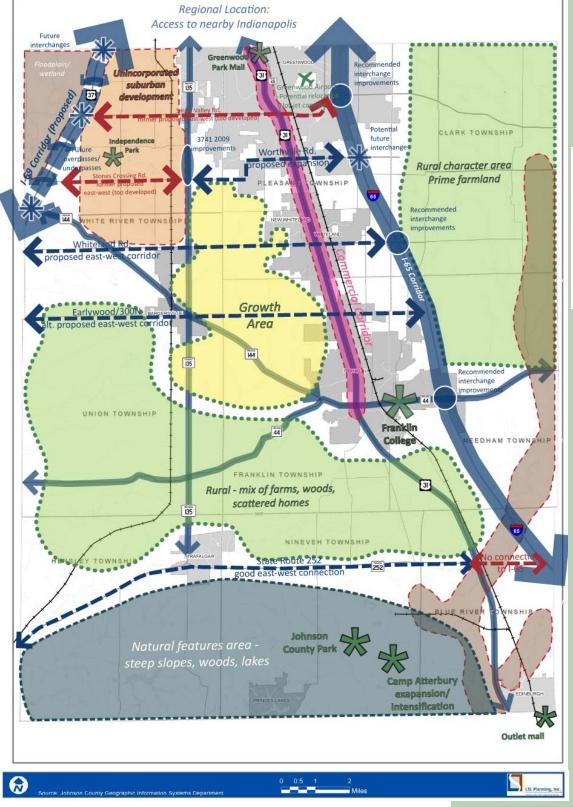
- Metropolitan location. Johnson County's adjacency to Indianapolis provides an ideal location for residential development, supporting both local businesses and jobs in the metro area and the City of Indianapolis. This proximity is also ideal for businesses that want a suburban location and workforce, but appreciate the amenities of a larger city (professional sports, cultural events, museums, and fine dining).
- Interstate access. Indianapolis is the crossroads of America and Johnson County has a direct connection to the web of interstates in central Indiana through I-65 in the eastern part of the county. In the coming decades Johnson County will have a second connection through the upgrade of SR 37 to be a part of the I-69 extensions connecting to I-465 in Indianapolis.
- Railroad access. As the cost of diesel fuel remains in flux many companies are returning to rail for shipping goods between locations. Johnson County's railroad spurs and short lines offer a competitive advantage.
- Public water and sewer. Public water and, especially, sanitary sewer systems are a driver of growth. Where water and sewer are available, development is likely to occur in the short- to mid-term. These systems need to have adequate capacity to accept additional connections in order to be a development asset.
- Lakes. The lakes in southern Johnson County provide recreation amenities and beautiful waterfront locations for residential development. Princes and Lamb Lakes are in private ownership and not accessible to the general public. The lakes are a draw for second homes, telecommuters, and those who are choose to commute to jobs in Indianapolis, Columbus, and Bloomington.

- Rural Character. In addition to its advantageous location near Indianapolis, the county also offers the rural character and open spaces that are prized by many. Though the intrusion of non-farm uses into the countryside can be a detriment to preserving agricultural practices and rural atmosphere, the lure of such areas to a segment of the population is undeniable.
- Camp Atterbury. The intensification of use planned for Camp Atterbury may be a catalyst for additional opportunities such as off-base residential and commercial development.

Development Constraints

- Prime farmland. Once prime farmland is removed from production, it is lost for agricultural uses. Farmland provides food, energy, and feed that is needed by the state and nation. It is a significant, and often overlooked, part of the economy. The location and extent of prime farmland in the county may influence development patterns and the path of infrastructure improvements.
- Steep slopes. The steep slopes in the southern and western portion of Johnson County create beautiful landscapes, not readily found in central Indiana. The slopes, however, decrease the development potential of the land and increase the relative cost of development. Limited residential development can be supported in areas of steep slope, but these areas are generally not suitable for commercial or industrial development.
- Lack of infrastructure. Outside of the incorporated communities (except Trafalgar) and their immediate environs, infrastructure is not available to support urban/suburban development. Transportation, water and sewer availability typically determine the location of growth. While these elements can be used to limit growth where it is inappropriate, they are also tools for directing growth to where it should occur. Capacity of the transportation, water, and sewer systems in desirable communities (like Bargersville) can be a factor limiting future development.
- Lack of available land. Industrial development in the northern portion of the county, near I-65 and the City of Greenwood, is constrained by lack of land that is zoned and served by appropriate infrastructure for industrial development. Most of the remaining parcels are small (under 10 acres) and do not have a shape that is desirable for most industrial users.

Figure 3-1: Development Opportunities and Constraints





The map and the vision, goals, and policies should be consulted together to determine if a particular petition is consistent with the comprehensive plan.

C. Future Land Use

The future land use map is essentially a graphic illustration of how the plan's goals and policies are translated into land use patterns. While the map is an important part of the plan and serves as a decision-making tool for the planning staff, plan commission members, and county commissioners in making land use decisions, it is not the whole plan. It must be viewed in the context of the text. The map and the vision, goals, and policies should be consulted together to determine if a particular petition is consistent with the comprehensive plan.

If a project is proposed that is determined to be good for the community, but not consistent with the comprehensive plan, the appropriate procedure is to amend the plan to reflect the new opportunity.

Key considerations relative to the future land use map are:

- Preservation of riparian corridors and other key environmental features;
- Transition of density between suburban areas and rural areas;
- Continued industrial development in the I-65 corridor, the planned I-69 corridor, and other comparable locations;
- Commercial development and mixed-use development opportunities at key intersections; interstate interchanges; and locations to serve growth;
- Suburban residential development focused in the northwest corner of the county; and
- Opportunity for rural residential to accommodate preferences for rural lifestyle.

Future Land Use Map

The designations used on the future land use map are described below. These, however, are not zoning districts and, while they may share similarities with one or more zoning classifications, they do not directly coincide with zoning districts or boundaries. Decisions regarding zoning of property, however, should rely heavily for guidance on the comprehensive plan and the proposed land uses illustrated on the future land use map.

Agriculture

This land use designation is intended to support modern agricultural practices on large tracts of land with minimal land use conflicts. Mainly, it encompasses lands where farming is the principal use and can reasonably be protected from intrusion by incompatible land uses. This category includes crops, animal production and woodlands. Farmsteads, barns, stables, grain elevators, related agricultural buildings, agri-businesses and common accessory structures would be appropriate, as well. Cottage industries may also be desirable uses in the area. Limited non-farm residential may occur, but at very low densities. Subdivisions (major and non-agricultural subdivisions of land) should not be permitted.

Rural Residential

The rural residential designation is intended primarily to provide appropriate locations for a "country" lifestyle, to protect significant natural features, and to retain the rural character and open spaces that many Johnson County residents seek. While they may also contain farms, these areas may be less conducive to long-term agriculture due to soil conditions, encroaching development or other factors. Single family residences should be permitted at a low density no greater than one unit per acre, since these lands typically will not be served by municipal utilities and preservation of open spaces is desired. While most development is generally not in subdivisions, shared driveways and frontage roads should be used to limit driveway cuts onto county collectors and arterials where possible. Small farms and keeping of horses or similar animals would be appropriate, along with a range of other uses (golf courses, airstrips, etc.) that require large tracts of land and/or more rural settings.

Suburban Residential

Suburban residential uses are generally in subdivisions, having a density of more than one unit per acre, and may even include other forms of housing such as multiple family developments. Most suburban residential areas, however, will be typified by single family neighborhoods. All areas within this designation should be served by municipal sewers and have access to the county road network only through shared local streets (no individual driveways on a county road (collector or arterial)). To the extent possible, subdivisions should interconnect with one

another in a manner that facilitates both pedestrian and vehicular movement without using the arterial road network.

Commercial

Commercial development includes retail, restaurant, office, and general business uses. Large scale commercial development sites require transportation access and municipal services. Small scale commercial nodes, serving rural populations, may not need access to municipal services as long as they conform to health department and state regulations.

Commercial uses on key transportation corridors should employ access management techniques (see Chapter 5) to minimize conflicts between through traffic and turning movements in order to protect the traffic-carrying function of the street. Design standards and higher landscaping standards should also be considered for corridor overlay districts, particularly on SR 135 and SR 37.

Mixed-Use

The mixed-use area is intended for a combination of commercial, residential, public/institutional, and possibly light industrial uses that may be appropriate at specific locations. Not all uses would be desirable in each location, though. An interstate interchange, for example, may have office, hotel, restaurant, college campus, and a technology research center in the area. Crossroads of two arterial roads may have retail with residential above and some multi-family housing. The concept promotes combinations of uses at certain locations, though the desirable mix will be dependent on the transportation network, availability of municipal services, and other considerations. Mixed use development is not intended to be a catch-all but a well planned, integrated mix of compatible uses that relate well and support one another.

Industrial

Industrial uses include manufacturing facilities, warehousing and distribution facilities, and other types of assembly or production uses. These uses generally require excellent transportation access and municipal services such as water, sewer, and fire protection.

intended to be a catch-all but a well planned, integrated mix of compatible uses that relate well and support one another.

Institutional/Public

Institutional and public uses are generally open and accessible to the public such as libraries, government offices, churches, schools, and government land. Future school locations or locations of future churches or government offices are not shown on the future land use map, but the large portion of land dedicated to Camp Atterbury is shown as an institutional use.

Parks, Recreation, and Conservation

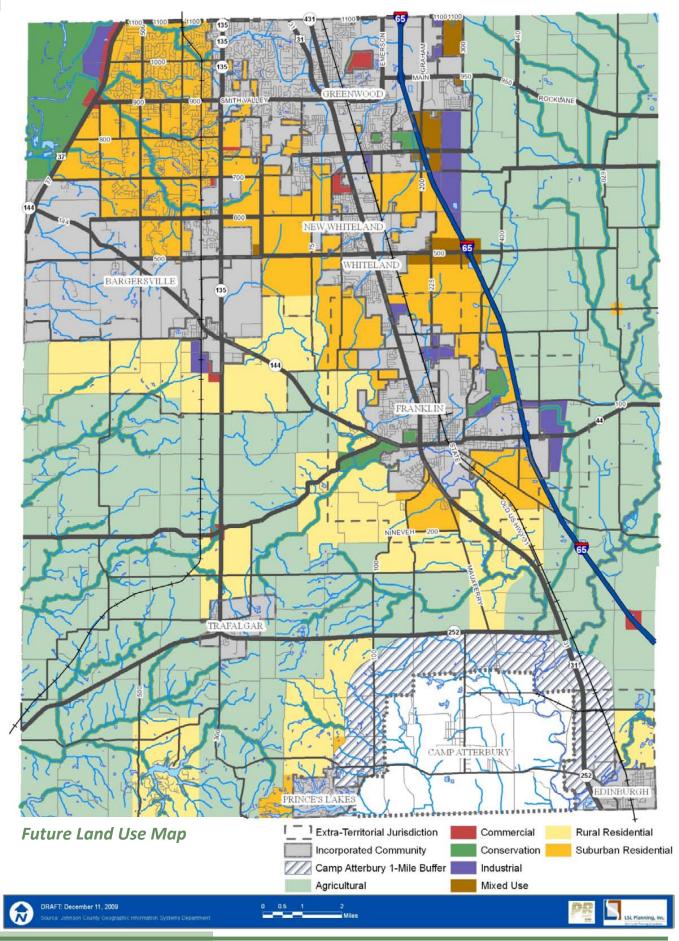
Areas designated for parks, recreation, and conservation are intended to be locations for county or community-based public park space, recreational trail connections, and places for the preservation of streams, wetlands, and other natural resources. These locations are not intended to be site specific but designate a general area or a corridor that should be used in this manner. Riparian corridors should conform to regulations for state and federal programs, but generally should be protected to a distance of sixty (60) feet on either side of a streambed.

Incorporated Communities and Extra-territorial Jurisdiction

Incorporated communities are shown on the future land use map in light gray. The planning for these areas is the responsibility of the local municipality. However, each of the incorporated communities also exercises extra-territorial jurisdiction (outlined in a gray dashed line), i.e., land use and zoning control over unincorporated lands surrounding the community. The future land use map shows land use designations for these areas, even though they are currently included in municipal comprehensive plans. For more information about extra-territorial jurisdiction, see Appendix C: Tools.

For the White River Township unincorporated area, the land use pattern is not expected to be different regardless of whether the area is incorporated by Greenwood, incorporated by Bargersville, incorporated as a new municipality, or remains unincorporated.

Figure 3-2: Future Land Use Map



4: Transportation and Infrastructure













Transportation & Infrastructure

Johnson County's transportation system is a significant element in the public infrastructure that supports the social, economic and built environment. The efficient movement of people, goods and services within the county is essential to residents' quality of life and economic well-being. This includes travel between origins and destinations within the county, between Johnson County and points outside the county, and travel through the county.

In addition, the interdependent relationship between transportation planning and land use is well established. A transportation network must provide sufficient mobility to address the travel demand generated by land development and population growth; conversely, the planning of new or improved transportation facilities will have significant effects on land use and development. While planning for an efficient highway network is critical, planning for other transportation modes – transit, bicycles and pedestrians – will provide travel options to better serve the county's growing population.

The Indianapolis Metropolitan Planning Organization (IndyMPO), the regional agency responsible for transportation planning in the metro area encompasses the northern two-thirds of Johnson County, including Franklin, Greenwood, Bargersville, Whiteland and New Whiteland. One township — Blue River, in the southeast corner of the county — is included in the Columbus Area Metropolitan Planning Organization (CAMPO).

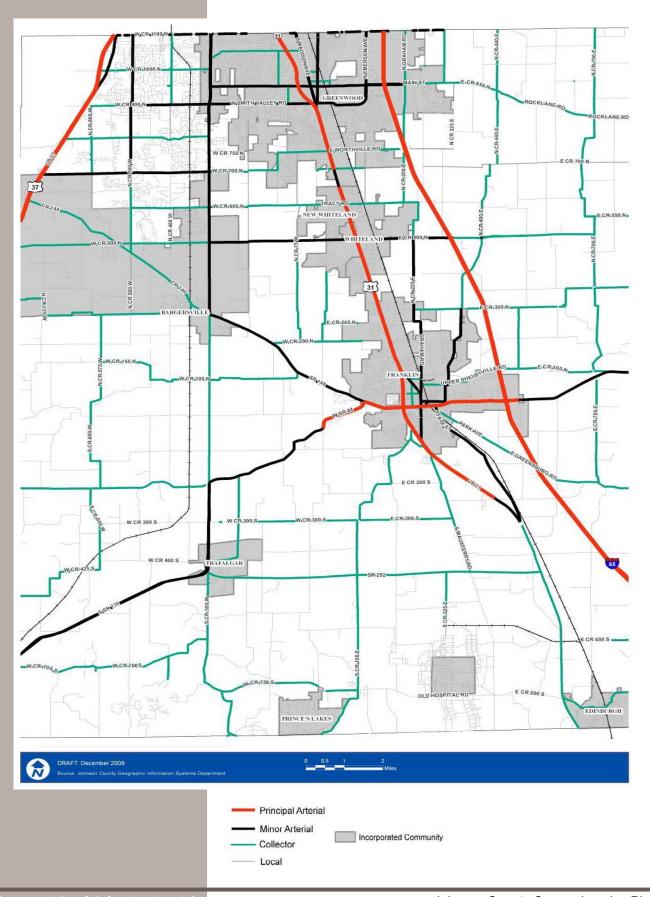
A. Existing Conditions

Existing Roads

Johnson County's highway system is similar to those of many other central Indiana counties. Most county roads are aligned along section lines at one-mile intervals, while several state highways, a US highway, and an interstate highway provide access to adjacent cities and counties, including Indianapolis in Marion County, and the surrounding region. The county highway network originally accommodated mostly rural and agriculture-related traffic, but urban growth and development, especially in northern Johnson County, has significantly transformed the character of surface transportation. Current travel patterns and trends reflect the growing suburban character of northern Johnson County.

A transportation network must provide sufficient mobility to address the travel demand generated by land development and population growth; conversely, the planning of new o improved transportation facilities will have significant effects on land use and development.

Figure 4-1: Existing Thoroughfare Map



Safety

The Johnson County Highway Department does not currently have a formal monitoring program for crash statistics within the county. State crash statistics, however, are monitored by the Indiana Department of Transportation (INDOT) for summary and inclusion in a Five Percent Report, which was most recently published in 2007. The Five Percent Report is compiled by the INDOT as part of a larger effort to reduce highway crashes in the state. The locations listed in the report account for the top 5% of fatality or serious injury crashes in the state. Of the 96 intersections and 14 road segments listed in the 2007 report, three are located within Johnson County:

- US 31 at Stop 18 (CR 800 N)
- SR 44 at Hospital Road / Centerline Road
- US 31 at SR 252

Although these intersections include highways under the jurisdiction of INDOT, the cross-streets of Stop 18 and Hospital Road / Centerline Road are both within local jurisdiction. Safety improvements for these locations should be coordinated with the state and prioritized for immediate action.

Locally, the following intersections have been identified as exhibiting higher-than-average crash rates and/or experiencing crashes of a greater severity than others in the county. These locations were identified by the Johnson County Sherriff's Department and the Johnson County Highway Department. They are not listed in order of priority.

Figure 4-2: High Crash Locations

Location Description	Identified Deficiencies
County Line Road at Morgantown Road (CR 500 W) ¹	Vertical alignment on W and S approaches
Center Line Road at SR 44	Vertical and horizontal alignment
CR 500 N (Whiteland Rd) and SR 144 ²	Capacity and sight distance
CR 500 W (Morgantown Rd) and SR 144 ²	Sight distance
CR 700 N (Stones Crossing) to west of SR 135 ²	Capacity / narrow lanes
Olive Branch Road from SR 135 to west of Indiana RR ²	Vertical and horizontal alignment
Whiteland Road at Honey Creek Road ²	Capacity and Skew
CR 200 N from west of Center Line Road to SR 144	Geometry / narrow lanes / narrow bridge
SR 135 and CR 600 N (Smokey Row)	Access management / stop control

The locations identified in Figure 4-3 correspond with a numbered location on the *Existing Intersection Improvements* map. These locations have been identified by the Johnson County Highway Department as existing transportation network intersection improvement needs that are unrelated to future growth plans.

¹ The west approach to this intersection is within Marion County's jurisdiction.

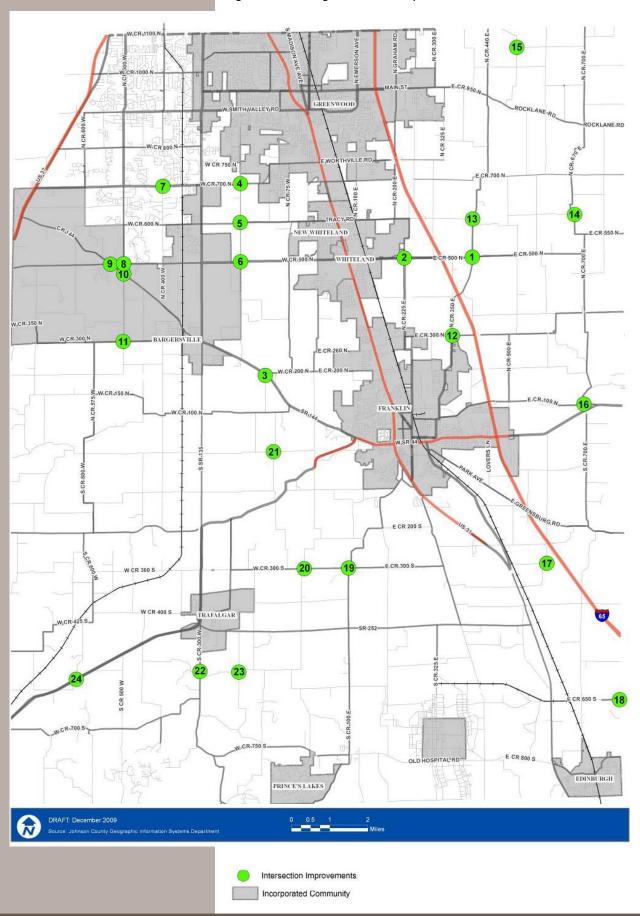
² The Johnson County Highway Department currently has responsibility for this location. Future annexation or changes in governance could, however, result in this changing jurisdiction.

These locations have not been prioritized. Three of these locations correspond with high crash locations listed in Figure 4-2.

Figure 4-3: Existing Intersection Improvement Needs

Location ID	Location
1	CR 400E and 500N
2	Graham Rd. at Whiteland Rd.
3	SR 144 at CR 125W and CR 200 N
4	700N and 200W
5	600N and 200W
6	500N and 200W
7	700N and 400W
8	500N and 500W
9	500N and SR 144
10	SR 144 and 500W
11	300N and 500W
12	350E and 300N (Hurricane Rd)
13	600N and 400E
14	670E and 600N
15	1050N and 525E
16	700E and 100N
17	600E and 300S
18	800E and Shelby 600S
19	300S and 100E
20	300S and 25W
21	Division and 100W
22	525S and 300W
23	550S and 200W
24	SR 135-252 & 600 W

Figure 4-4: Existing Intersection Improvement



The locations listed in the Figure 4-5 have been identified by the Johnson County Highway Department as existing transportation network needs that are unrelated to future growth plans. Most of these improvement areas address roadway realignments and corridor safety concerns. The location ID's listed below in this table correspond to a specific location on Figure 4-6: Existing Roadway Needs.

Figure 4-5: Existing Roadway Improvement Needs

Location ID	Location Description
1	Graham Rd. south of Whiteland
2	Mauxferry Rd. south of US 31
3	525E, 1000N to Rocklane Road
4	700N, West of 400E
5	670E/700E, 700N to Rocklane Road
6	670E, 650N to 600N
7	Intersection: 670E at 550N
8	Hopewell Road, SW of Hopewell/SR 144
9	700W/425S, 475S to 575W
10	700S, 400W to 300W
11	750S, 300W to 250W
12	250W, Three Notch Intersection
13	700E, S of 350N
14	700E, 175N to 100N
15	Nineveh Rd., S of 750S
16	100N, E of SR 135
17	Haymaker Road, 450W to 600W
18	800N, 450W to RR
19	Intersection: 600N at 625W
20	350N, County Line to 725W
21	400 S at Blue River/Nineveh Township Line
22	300 S, west of Blue River/Nineveh Township Line
23	750 S between Center Line Rd and 100 E
24	575 W between Hensley/Union Township Line and 250 S

Figure 4-6: Existing Roadway Needs A GREENWOOD 5 6 TRACY, RD CR-550.N-V.CRI 20 W.CR-150 N W CR 300 S TRAFALGAR 10 28 EDINBURGH DRAFT: December 2009
Source: Johnson County Geographic Information Systems Department

Roadway Improvement
Incorporated Community

Capacity

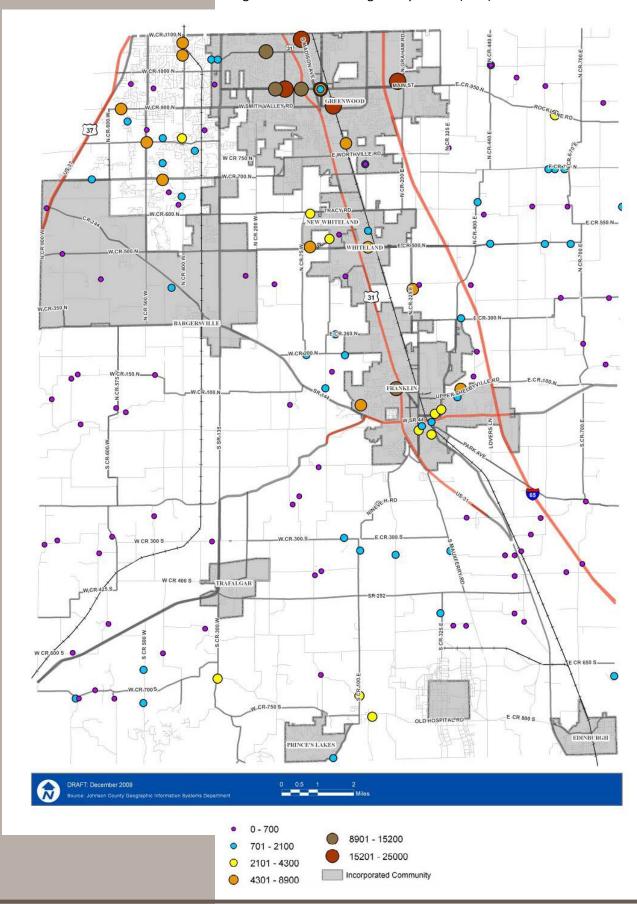
Insufficient capacity on county-controlled roadways is predominantly an issue in the northwest portion of the county, i.e., White River Township. Here, residential development and growth have outpaced infrastructure development, resulting in suburban residential communities located along narrow roadways of limited right-of-way. Peak hour levels of service and safety are concerns throughout this township.

Outside of White River Township, county roads operate with sufficient capacity to handle demand, though some peak conditions such as traffic to and from the casino in neighboring Shelby County can cause delays. The predominant transportation concerns outside White River Township include narrow width roadways, offset intersections, skewed intersections, and horizontal and vertical curvature. Peak hour capacity issues are not noted as a concern in these areas.

Roadways outside the jurisdiction of the county – I-65, US 31, and SR 135 – frequently experience congestion during the peak hours of the average weekday. Inadequate capacity is one reason for this; however, poor access management is also contributing to delays on many segments of US 31 and SR 135. Additional growth pressures will exacerbate this problem.

Access management introduces a set of proven techniques to help reduce congestion, preserve traffic flow, improve safety, minimize crash potential, maintain road capacity, and preserve existing investment in roads by managing the location, design and type of access.

Figure 4-7: 2008 Average Daily Traffic (ADT)



Transit

Conventional fixed-route transit services in Johnson County have mostly been limited to northern suburban areas. Most of the county, however, is served by paratransit services that are more typical of rural and small urban counties.

Current Transit Services

Johnson County is served primarily by two public transit systems, with additional paratransit services offered by other providers. IndyGo (Indianapolis Public Transportation Corporation) provides fixed route bus service between Indianapolis and Greenwood, and Access Johnson County provides flexible fixed-route "connectors" and demand-response paratransit service throughout the county.

IndyGo operates three routes serving

Greenwood. The IndyGo bus routes provide service between Greenwood and downtown Indianapolis. Local service routes include: 31 – Greenwood, 22 – Shelby, and 16 – Beech Grove. Routes 31 and 22 connect to Access Johnson County's Greenwood Connector, which provides service between the Greenwood Park Mall (a transit center/park-and-ride location) and Greenwood K-Mart. All three routes serve major educational, health care, commercial and employment destinations and operate full-day schedules on weekdays, with weekend/holiday service varying among the routes.

Figure 4-8: System Map



The Greenwood route of the Indiana Commuter Express system (ICE 204) was recently cancelled by IndyGo due to funding constraints and lower-than-expected ridership. IndyGo hopes to reinstate a commuter route to Johnson County in the future, although the exact timing, configuration, and stop locations are yet to be determined.

Paratransit operations provided by Access Johnson County emphasize service to the elderly, disabled, low-income and other mobility-disadvantaged citizens. Reservations for demand-response service are made by phone for weekday or weekend service.

In addition to the connections noted above, Access Johnson County has informal drop-offs where passengers may access Shelby Senior Services (ShelbyGo) paratransit service to Shelby County. The agency has also sought to establish a similar arrangement with paratransit providers in Columbus (Bartholomew County).

At least six commercial providers operate demand-response paratransit services in Johnson County: CARE Transportation, Comfort Keepers, Medicab, Radiocab of Greenwood, STAT, and Yellow Cab Wheelchair Service. Four nonprofit providers (American Cancer Society, Franklin Senior Center, Independent Residential Living of Central Indiana, and Johnson County Senior Services) also offer limited demand-response paratransit services. These agencies all provide specialized services that are limited to passengers meeting certain criteria based on age (55 and over, 65 and over, etc.), disability, trip purpose (medical, etc.), and/or place of residence. For the most part, they restrict their service to within Johnson County. Four providers offer service at night and throughout the weekend, and four operators offer wheelchair service.

No rail transit services currently operate in Johnson County.

Ridership Characteristics

Ridership on the four IndyGO bus lines that operate within Johnson County is shown in the two tables below. The first table shows ridership information for Routes 16-Beech Grove, 22-Shelby, and 31-Greenwood, from years 2004 through 2008. Route 16 increased the most over the five-year period, with a 97.7 percent change between 2004 and 2008, an average annual growth rate of 19.5 percent. Both routes 22 and 31 changed about the same amount (percentage-wise) over the five-year period. Overall, the total ridership between 2004 and 2008 changed increased by 63.3 percent, an annual growth rate of 15.8 percent. This trend demonstrates increasing demand each year for transit services. However, as noted above, the ICE 204 route has recently been cancelled.

2004-2008 IndyGO Johnson County Transit Ridership

Route	2004	2005	2006	2007	2008	% Change from 2004- 2008	Average Annual Growth Rate from 2004-2008
16 - Beech Grove	75,459	98,060	111,274	110,087	149,146	97.7%	19.5%
22 - Shelby	55,091	70,091	76,229	80,597	84,307	53.0%	11.6%
31 - Greenwood	225,038	243,986	269,831	287,618	347,055	54.2%	11.6%
ICE 204	NA	NA	NA	NA	NA	NA	NA
Total Annual							
Ridership	355,588	412,137	457,334	478,302	580,508	63.3%	15.8%

2009 IndyGO Johnson County Ridership by Month

_	-					
Route	January	February	March	April	May	Total for 2009
16 - Beech Grove	9,145	8,769	9,925	10,663	10,357	48,859
22 - Shelby	5,667	5,861	6,816	7,319	6,827	32,490
31 - Greenwood	21,752	20,841	24,230	24,904	23,542	115,269
ICE 204	NA*	NA*	1,160	1,378	1,401	3,939
Total Ridership 2009	36,564	35,471	42,131	44,264	42,127	200,557

^{*} The IndyGo Commuter Express (ICE) did not begin service until March, 2009.

Land Use and Density

Urban land use is a significant factor in planning for public transit services. Areas of considerable population and employment density are where the demand for transit will be greatest and where fixed-route transit services can be implemented most effectively. The major urban centers where future transit services could most effectively be deployed and which currently support a limited range of transit operations are the communities of Greenwood, Franklin, and Edinburgh, and the heavily developed unincorporated areas west of Greenwood in White River Township.

Despite the historic increase in ridership, in the long-term, mixed use development nodes and higher residential densities will be required if transit is to become a significant alternative mode of travel.

Airports

Indianapolis International Airport, approximately 30 minutes away for most county residents, provides convenient airline service to the county. Franklin Flying Field and Greenwood Municipal Airport are located in the county. Franklin Flying Field has a 2,400 foot runway and provides airplane rentals, skydiving and airport services for small planes. Greenwood Municipal Airport has a 4,901 foot runway and provides service to local residents, as well as transient users.

Rail

The Indiana Rail Road line crosses Johnson County in a north-south direction from Indianapolis to Morgantown, Beanblossom, and other points south. The Louisville and Indiana Railway, a regional/short line system, also runs north-south and passes through Greenwood, New Whiteland, Whiteland, Franklin, and Edinburgh.



Greenwood Municipal Airport

B. Future Thoroughfare Development

Highways

Johnson County's growing population and continuing land development obviously demand increased capacity of the county's highway network. This will be especially true for northern areas of the county most affected by growth and activity in the Indianapolis area. These are not unforeseen trends. Johnson County, the IndyMPO, and local communities have been planning needed additions and improvements. The future thoroughfare plan is a compilation of the County's existing thoroughfare network, identified needs within that network, Indianapolis MPO Regional Transportation Plan components, and future needs as identified through this planning process.

Planned Highway Network Improvements

The IndyMPO Draft Regional Transportation Plan (RTP) includes a Needs Plan that identifies highway network improvements for each county in the region. From that list, a Cost-Feasible Plan was developed for projects with identified funding sources. The projects from the Needs Plan that were not included in the Cost-Feasible Plan are listed in the RTP Amendments as "illustrative projects."

Highway improvements for Johnson County in the RTP Cost-Feasible Plan are listed below and include the facility, location, description, responsible agency, and time period:

- Graham Road, from Main Street to County Line Road: widen from 2 lanes to 5 lanes, City of Greenwood, 2006-2010 3
- Main Street, from I-65 to Graham Road: widen from 2 lanes to 4 lanes, City of Greenwood, 2006-2010
- Smith Valley Road, from Meridian Street (SR 135) to South Emerson Avenue: widen from 2 lanes to 4 lanes divided, City of Greenwood, 2011-2020
- Worthsville Road, from I-65 to US 31: widen from 2 lanes to 4 lanes divided, City of Greenwood, 2011-2020
- I-65, at Main Street/Greenwood Road interchange, from southbound exit ramp to Sheek Road: interchange modifications, INDOT, 2006-2010

³ These project have been completed or are in the final stages of construction

⁴ These project have been completed or are in the final stages of construction

- I-65, from 0.5 mile south of Main Street to 0.5 mile south of County Line Road plus 1 interchange: widen from 6 lanes divided to 8 lanes divided, INDOT, 2011-2020
- SR 135 (Meridian St.), from SR 144 to CR 850 N: widen from 2 lanes to 4 lanes divided, INDOT, 2011-2020
- I-69 , from Marion County line to SR 144: new 6-lane freeway generally aligned along existing SR 37, INDOT, 2011-2020
- I-65 , from 0.5 mile south of SR 44 to 0.5 mile south of Greenwood Road: widen from 4 lanes divided to 6 lanes divided, INDOT, 2021-2030

The following projects will be identified in the latest update to the MPO's RTP Needs Plan as illustrative projects, meaning funds have not yet been identified for their development:

- Smith Valley Road, from Mann Road to SR 37: new location 2-lane roadway on 4-lane divided right-of-way, Johnson County
- East-West Corridor, Johnson County
 - Along existing CR 144; from SR 37 to CR 500 N: widen from 2 lanes to 4 lanes divided
 - Along existing CR 500 N; from CR 144 to SR 135: widen from 2 lanes to 4 lanes divided
 - Along existing CR 700 N; From SR 135 to CR 125
 W; widen from 2 lanes to 4 lanes divided
 - Along existing CR 750 N; CR 125 W to CR 100 W; 4 lanes divided ⁵
 - Along existing CR 750 N; CR 100 W to US 31; widen from 2 lanes to 4 lanes divided ⁵
 - Along existing CR 750 N; I-65 to CR 325 E; widen from 2 lanes to 4 lanes divided
 - o From CR 325 E to CR 400 E; 4 lanes divided
 - Along existing CR 700 N; CR 400 E to Shelby Co. Line; widen from 2 lanes to 4 lanes divided
- SR 135, from SR 252 to SR 144: widen from 2 lanes to 4 lanes, INDOT
- SR 144, from Johnson Road (CR 400 E) to CR 200 N: widen from 2 lanes to 4 lanes, INDOT
- SR 44, from SR 144 at CR 200 N to SR 44 at Eastview Drive: new 4-lane roadway, INDOT

Also included in the Needs Plan was the proposed widening by INDOT of I-65 from 4 lanes divided to 6 lanes divided from 0.5 mile south of SR 44 to the Shelby County line. This project is also

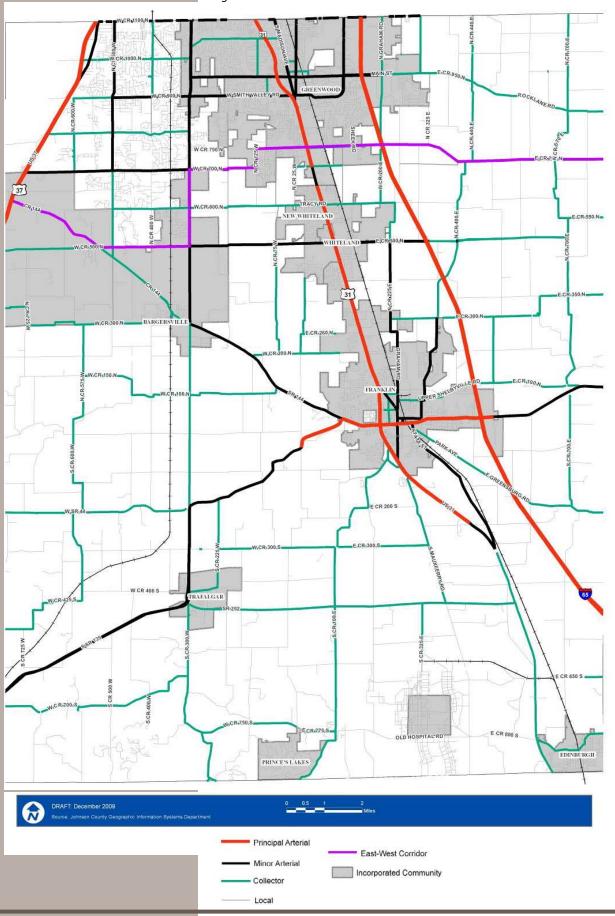
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⁵ The Johnson County Highway Department currently has responsibility for these locations. Future annexation or changes in governance could, however, result in this changing jurisdiction.

included in the CAMPO Transportation Plan as an illustrative project. An additional Plan Amendment in the IndyMPO RTP includes a proposed new I-65 interchange on Worthsville Road (INDOT).

The East-West Corridor, as described above, has been through an extensive planning process over the past decade or more to determine its alignment, cross-section, and other characteristics. At its completion, it will provide east-west access across Johnson County and continuing into Shelby County. Portions are currently under design and construction, including the section along Worthsville Road from US 31 to I-65. An Interchange Justification Study has been submitted to INDOT for the development of an interchange at its crossing of I-65. Preliminary design has been completed for the section between Combs Road and the Shelby County Line and 30 percent plans have been completed on the CR 144 section. Overall, the project continues to move forward along the alignment shown in Figure 4-9.

Figure 4-9: East-West Corridor



Plans to design and construct I-69 through northwestern Johnson County are part of a larger multistate planning effort to extend that facility—which currently runs from Port Huron, Michigan, to Indianapolis—southwestward through the central regions of the nation to the Mexican border with Texas. This effort is intended, in part, to facilitate the flow of freight generated by increasing trade with Mexico resulting from the North American Free Trade Agreement and other economic activity.

Projected Transportation Needs

The recommended land use concept incorporates compact development while focusing growth within areas around existing communities and subdivisions (especially in the northern third of Johnson County). Consequently, the highway system improvements most suitable for this scenario would be concentrated in that area of the county.

Obviously, fewer improvements would be needed in areas designated for agriculture, natural resource conservation, or large-lot rural residential use. For these areas, the focus would be on maintenance, capacity, and safety improvements on existing roadways, as opposed to construction of new roadways or additional capacity in currently undeveloped areas. This shift in resources encourages a more sustainable development pattern in most instances. Active farming, on the other hand, may require some roadway improvements (wider shoulders and pavement) to accommodate large farm equipment.

Roadway Network Development

In addition to the roadway network improvements included in the IndyMPO's RTP Cost-Feasible Plan, further recommended improvements are listed to support the future land use plan and projected transportation needs.

Current Average Daily Traffic (ADT) volumes and existing identified needs were considered alongside the future land use plan to identify future needs. In addition to meeting the traffic demand resulting from areas of higher density development, additional improvements were identified to support economic development goals, overall connectivity, and future development potential.

The following map shows future roadway needs based on the recommended future land use map and resulting travel demands. The improvements on the map depict the aforementioned projects from the RTP as well as specific locations where need is anticipated due to projected future land uses. Intersection improvements are identified where new developments may occur, such as commercial and mixed-use developments, as well as with suburban/residential expansions. Major thoroughfare improvements connect the cities within the county, as well as add capacity at specific locations depending on the anticipated future development.

The future I-69, currently planned for alignment along existing SR 37 in the northwest corner of the county, will be a major driver of transportation needs in Johnson County, and specifically in White River Township. Interchanges with the new I-69 are anticipated at its crossings with County Line Road, Smith Valley Road, and SR 144. Roadway improvements have been identified in the future thoroughfare plan for each of these cross-streets in order to handle the anticipated demand.

As a result of the I-69 extension and its interchanges, a greater demand will result for travel between these three roadways, as traffic will distribute through White River Township's roadway network. CR 600W was identified as requiring additional capacity to handle this distribution of traffic between the proposed interchanges at SR 144 and Smith Valley. CR 600W is preferred over CR 500 W to provide north-south access between the interchanges because of the existing constraints along CR 500 W, most notably the adjacent schools.

Improvements to CR 400E between CR 700N and Franklin limits have also been identified, in order to provide better access to the Franklin Industrial Park, especially from I-65. Economic development plans for this industrial area, combined with land use recommendations, will require additional roadway capacity. Improvements to CR 325E, south of SR 252, have been identified to provide improved access and additional capacity to facilitate the Camp Atterbury expansion.

Additional transportation needs are focused on upgrades to existing highways, including US 31, SR 144, SR 135, and completion of the proposed East-West Connector. The proposed land use plan encourages growth in areas of the county where infrastructure is already present; within and adjacent to incorporated areas and along major transportation corridors. The result is that facilities already in place must be designed to accommodate this growth. This can happen through widening and added travel lanes, but other options should also be investigated. Access management will be a key tool that the county, together with the state and local jurisdictions, can and should use to maximize the efficiency and cost-effectiveness of its roadway network. SR 135 is a key corridor for implementing access management principles, along with US 31 and approaching the SR 37 corridor.

The following improvements are recommended in addition to those described above or listed in the RTP Cost-Feasible Plan:

- SR 44 / SR 144: widening of SR 44 from east of I-65 to SR 144 (in Franklin), and widening SR 144 from SR 44 in Franklin to I-69;
- County Line Road (CR 1100 N): widening from SR 135 to I-69 ⁶:
- Smith Valley Road (CR 900 N): widening from SR 135 to I-69 7:
- CR 500 W: widening from County Line Road to CR 144 ⁷;
- CR 600 W: widening from Smith Valley Road to Tracy Road (CR 600 N);
- Tracy Road (CR 600 N): widening from SR 135 to CR 625 W;
- CR 625 W: widening from Tracy Road to CR 144;
- Graham Road (CR 225E) from Whiteland city limits to I-65
- Intersection improvements: in addition to the Interstate highway improvements noted above, improvements to intersections at:
 - East-West Corridor at: SR 135 and Stones Crossing Road, SR 135 and Whiteland Road; Whiteland Road and CR 144;
 - Fairview Road and Morgantown Road; and

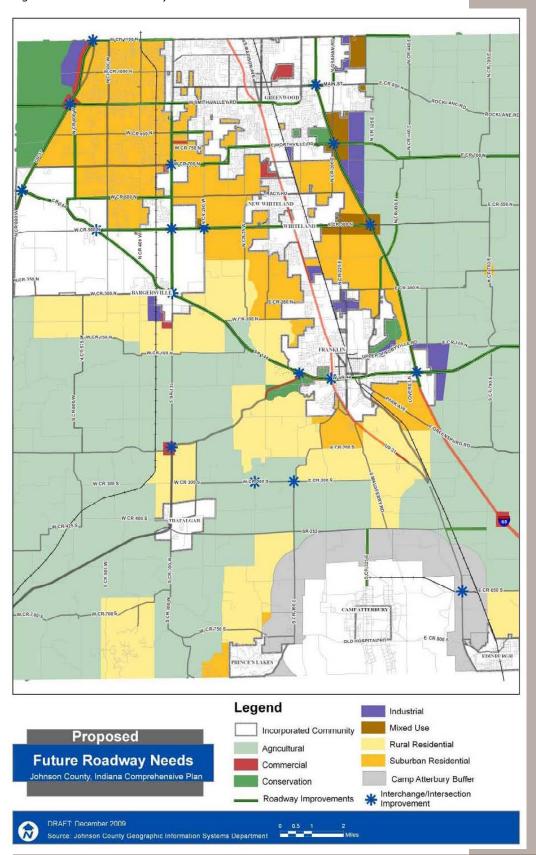
⁶ These improvements are on the Johnson County line and serve Johnson County transportation needs, but are within Marion County's jurisdiction for improvements and maintenance.

⁷ The Johnson County Highway Department currently has responsibility for this location. Future annexation or changes in governance could, however, result in this changing jurisdiction.

o CR 300 S, at CR 100 E and CR 25 W.

These roadway improvements are illustrated in the Future Roadway Needs Map. The proposed functional classifications to correspond to these improvements are shown on the Future Thoroughfare Map.

Figure 4-10: Future Roadway Needs



Proposed Functional Classification

The following table identifies the recommended functional classification system for the proposed transportation network. The functional classification categories are consistent with Federal Highway and Indiana Department of Transportation guidelines.

Classification		Definition ⁸	Examples
Principal Arterial	• !	Serves corridor movements having trip length and travel density characteristics indicative of substantial statewide or interstate travel; Serves all, or virtually all, urban areas of 50,000 and over and a large majority of those with population of 25,000 and over; Provides an integrated network without stub connections except where unusual geographic or traffic flow conditions dictate; Carries the major portion of trips entering and leaving an urban area	 Inters tate Highway 65 High way 31 High way 37
Minor Arterial	•	Links cities and larger towns as well as other traffic generators that are capable of attracting traffic over long distances and form an integrated network providing interstate and intercounty service; Are spaced at such intervals, consistent with population density, so that all developed areas of the county are within a reasonable distance of an arterial highway Constitute routes whose design should be expected to provide relatively high overall travel speeds with minimum interference to through movement.	 State Highway 44 State Highway 135 State Highway 144 State Highway 252 East- West Corridor Grah am Road Smith Valley Road State Street (Old U.S. 31)
Collector	•	Provides land access service and traffic circulation within residential neighborhoods, commercial, and industrial areas. Collects traffic from arterials and distributes through the area to the ultimate destinations. May include the central business district street grid which forms a logical entity for traffic circulation.	 Gree nsburg Road Mauxferry Road Ninev ah Road County Road 700 E
Local	•	Comprises all facilities not on one of the higher systems Provides direct access to abutting land and access to the higher order systems Offers lowest level of mobility and usually contains no bus routes.	Old Hospital RoadDiv ision RoadCounty Road 200 E

 $^{^{\}rm 8}$ Source: American Association of State Highway and Transportation Officials (AAHSTO) Green Book

Figure 4-11: Future Thoroughfare Map

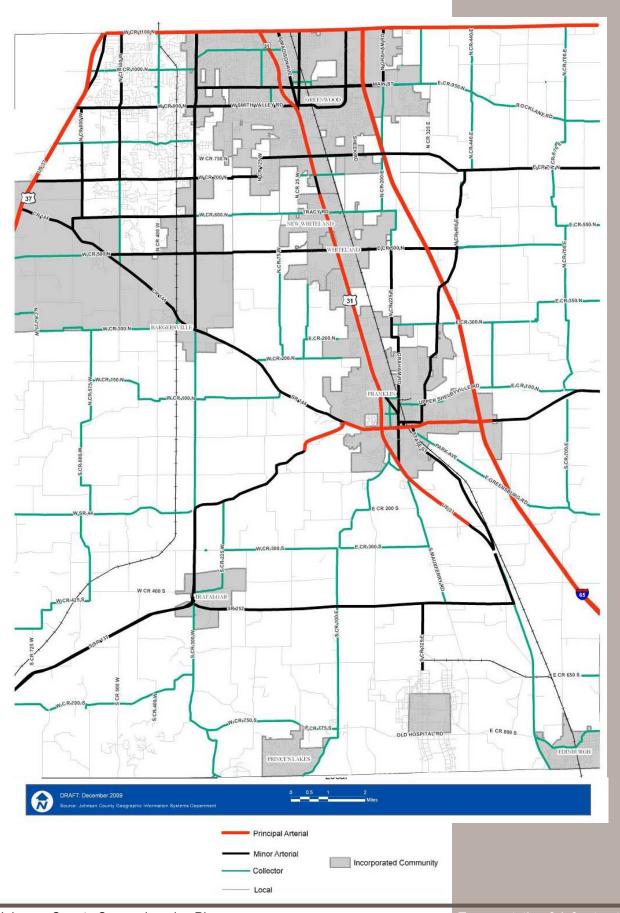


Figure 4-12: Route 22



Route 22. Proposed Service. Source: IndyGo COA

Transit

As growth and development continue to impact travel demand and traffic on Johnson County's highway network, the need to provide travel options will increase. Public transit presents a range of opportunities for providing alternatives to automobile usage. In addition, current planning practices encourage the development of denser, mixed-use, "walkable" neighborhoods and communities that facilitate the use of transit services. Transit is also being used as a tool to provide additional travel options to automobile use on our increasingly busy roadways.

Planned and Proposed Transit Services

IndyMPO's Comprehensive Operational Analysis (2005) recommended near-term (2006-2008), short-term (2009-2014), and long-term (2015-2020) service improvements to IndyGo routes serving Johnson County. The Greenwood Express—ICE Route 204—was proposed as a long-term improvement at the time of the analysis, but has since been implemented and, recently, cancelled. The Comprehensive Operational Analysis (COA) also proposed establishment of express service to Franklin on I-65 (Route 211) as a short-term improvement. This has not yet been implemented. The COA envisions that park-and-ride facilities would be developed for this route along I-65 at Main Street in Greenwood, Whiteland Road, and SR 44 in Franklin. One new local service route (94 – South County Circulator) was also included in near-term improvements but has not yet been implemented. If included as a short-term or long-term improvement, it would operate partly on County Line Road and serve the Greenwood Park Mall. Near-term extensions of existing local routes have been implemented. The recommendations for short- and long-term improvements to local service routes include increased levels of service (headways, number of trips/buses) and expanded hours of service. Service affected will include: Route 16 Beech Grove, Route 22 – Shelby, and Route 31 – Greenwood.

IndyMPO's Coordinated Public Transit Human Services Transportation Plan (2007) identified certain needs for future paratansit services in Johnson County. These needs include: expanded hours into the early morning, night, and weekend; additional wheelchair paratransit vehicles to meet service demand; more

individuals throughout the county; increased provider coordination as a key to providing more intercounty public transit; and improved job access through public transportation, particularly for disabled individuals.

affordable services for non-elderly and non-disabled

The IndyMPO has been conducting *DIRECTIONS*, a multi-phase study of potential rapid transit corridors in the Indianapolis region. Previous phases of the study identified seven radial corridors extending from downtown Indianapolis, including the South Corridor, which extends into the Greenwood area of northern Johnson County. However, the Northeast Corridor (in Marion and Hamilton counties) was approved as the initial focus of further study and investment. That study is intended not only to identify a preferred transit technology and route alignment for the Northeast Corridor, but also to provide a foundation for the planning and implementation of transit-

supportive land use and station-area development in each of the proposed rapid transit corridors. Consequently, regional strategies that are developed and recommended for the Northeast Corridor could apply in the South Corridor.

Effects of Regional Growth and Development

Regional land use policies are critical to ensuring the success of transit supportive development/redevelopment in Johnson County and in helping to qualify transit-related projects for federal funding.

The proposed land use concept facilitates the use of transit services because of it advocates high-density, mixed use development near intersections and interchanges. The expansion of fixed-route transit services would be feasible under this scenario to provide an alternative mode of travel between major

Figure 4-13: Route 94



Route 94 Proposed Service. Source: IndyGo COA

destinations within Johnson County and between origins/destinations in the county and in the Indianapolis area. This type of development would be compatible with possible future development of regional rapid transit in the designated south corridor.

Greater dispersal of development and lower densities would be less supportive of transit services than a more compact, higher-density scenario. Under the former circumstances, and as development catches up to the visioned plan, continued reliance on demand-response transit services would be likely, with potential development of park-and-ride facilities along major north-south highways to facilitate possible extension of express bus service from Indianapolis or operation of fixed-route service connecting with Indianapolis-bound express routes.

C. Trail Plan

Bicycles and Pedestrians

Non-motorized travel links transportation with recreation. Many of the bicycle and pedestrian facilities in Johnson County are recreational in nature. Nevertheless, expanding networks of bicycle/pedestrian paths and trails can often provide another modal alternative to automobile use.

Johnson County is included in the 2006 MPO Regional Pedestrian Plan. This plan outlines various pedestrian projects, both existing and proposed.

Existing Facilities

Johnson County has not developed a written comprehensive plan specifically for pedestrian or alternative transportation connectivity. However, subdivision ordinances require sidewalk implementation for new commercial and residential developments. There are existing or planned facilities within some of Johnson County's incorporated municipalities including Franklin and Greenwood. Both of these municipalities require new residential or commercial developments to install sidewalks or multi-use pathways. Greenwood has a 20-mile network of trails, pathways and greenways, with more in design and development.

One example of a Greenwood trail under development is a tenfoot wide asphalt multi-use trail called Tracy Trail. This is a 2.5-mile trail that runs along Tracy Ditch. The trail will connect Southwest Elementary School, Greenwood Middle School, and Greenwood High School. Additionally, the trail will connect six neighborhoods, four apartment complexes, a bowling alley, and two retail areas.

Other facilities include the Historic Greenway Trail in Franklin, approximately 5 miles of hiking trails in Johnson County Park, and a ¾-mile trail in Independence Park (also a county park).

Current Demand and Recent Trends

Opportunities for future pedestrian facilities and their potential locations are based on demand and determined by the location of destinations throughout Johnson County. For example, residential neighborhoods, school campuses, commercial centers, and recreation areas are all destinations that could be reached by walking, if adequate facilities are available between and among these destinations. Within the *Regional Pedestrian Plan*, it is determined that sidewalks are preferred within city or town limits by residents. Along major county thoroughfares, separated, parallel, multi-use paths are preferred. Within natural corridors, railroads or utility corridors, a more multi-use path is preferred.

As Johnson County continues to grow and travel demand increases on the county's highway network, residents and employees will seek other transportation options. In addition, current planning practices increasingly encourage "walkable" neighborhoods and communities, where motorized travel is not always necessary to address local travel needs. Consequently, the importance of bicycle and pedestrian transportation will grow.

Future Bicycle and Trail Plans

Designated conservation greenbelts along the county's streams under the future land use plan would facilitate development of a bicycle and pedestrian trail network connecting parks, other recreational resources, and high-pedestrian use areas (such as Franklin College). A trail network could potentially extend from Independence Park to the Johnson County Park and could

Current planning practices increasingly encourage "walkable" neighborhoods and communities, where motorized travel is not always necessary to address local travel needs.

Consequently, the importance of bicycle and pedestrian transportation will grow.

connect to existing trail facilities such as the Greenwood and Franklin trail systems.

The Regional Pedestrian Plan recommends several pedestrian/bike corridors that would be feasible for the county. Additionally, the Johnson County Bike-Ped Subcommittee has prepared a detailed plan for proposed bicycle and pedestrian facilities. Together, the two sources form the basis for these recommendations in this chapter.

Development of an East-West Connector through the county creates an opportunity for a multi-use path adjacent to the corridor or within the right-of-way. Where this corridor enters Greenwood, a trail could potentially connect with the existing pedestrian infrastructure.

Within the *Regional Pedestrian Plan*, three major facility types are recommended for new or improved pedestrian (and bicycle) facilities: 1) the collector sidewalk; 2) multi-use paths; and 3) urban greenways.

- Collector sidewalks are recommended in Greenwood, particularly located near businesses at the Marion County line.
 This type of facility is the preferred multi-use facility throughout the county.
- Multi-use paths including those within road right-of-way and off-street right-of-way are recommended within Johnson County. Paths within road rights-of-way accommodate both pedestrians and bicyclists along major roads, and would be located along major vehicular routes at an approximate half- to one-mile grid in the growing areas of the Metropolitan Planning Area. Four-foot sidewalk standards apply throughout Johnson County—along and within residential areas and commercial developments and have typically been installed by developers. The Regional Pedestrian Plan recommends that road right-of-way paths be implemented adjacent to the County's important non-interstate transportation routes including: U.S. 31; SR 44, 135, and 144; County Line Road; Rocklane Road; Smith Valley Road; Whiteland Road; and Morgantown Road.
- A multi-use path within off-street right-of-way is a pathway not directly connected to a vehicular thoroughfare, and often times

is located along natural features, active or unused rail lines, or utility corridors. An example of this is the development of the Tracy Trail in Greenwood. A few other identified off-street opportunities include: White River in northwestern Johnson County; Messersmith Creek, Pleasant Run Creek and Honey Creek in White River Township and Greenwood; Grassy Creek in Greenwood; Crooked Creek in White River Township entering from Morgan County; Youngs Creek and Ray Creek in Franklin; and Hurricane Creek and Little Sugar Creek in Clark and Needham Townships.

Overhead utility corridors provide additional off-street opportunities to create trails. Two potential projects include a utility corridor entering from Morgan County through White River Township and a utility corridor in Clark Township in northeast Johnson County. In addition, an area between Franklin and Fairland in Shelby County is identified as an opportunity for crosscounty pedestrian/bicycle connections. Lastly, a parallel trail to an active rail line adjacent to US 31 between Greenwood, New Whiteland, Whiteland, and Franklin would provide another addition to the county's trail system.

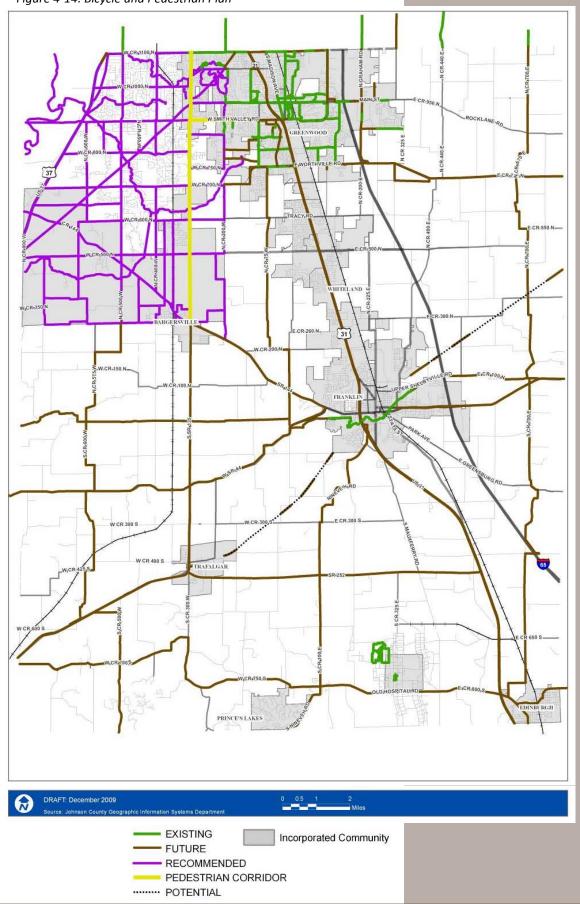
Currently, there are no proposed urban greenways in Johnson County. There is, however, concern about increased traffic movement, and the safety of pedestrians and bicyclists along busy corridors. Design that considers the pedestrians and bicyclists interests and safety is critical in developing non-motorized transportation facilities, especially along major thoroughfares.

It is important to link land use planning with regional non-motorized planning. Mixed uses supported by residential, transit, and proper transportation corridors should be adjacent to the pedestrian/bicycle route, as a pedestrian district. There are six recommended pedestrian corridors in Johnson County based on these land use conditions, including: 1) County Line Road from SR 135 to Emerson Avenue; 2) Main Street (Greenwood) from SR 135 to I-65; 3) Smith Valley Road from SR 135 to Emerson Avenue; 4) SR 44 from Franklin western city limits to I-65; 5) SR 135 from County Line Road to the Bargersville southern town limits; and 6) U.S. 31 from County Line Road to the Franklin southern city limits. As pedestrian districts develop, it is important

to consider the connectivity of pedestrian and bicycle facilities throughout the region.

Figure 4-14 shows the current and projected pedestrian projects in Johnson County including sidewalks, multi-use paths, urban greenways, and pedestrian corridors.

Figure 4-14: Bicycle and Pedestrian Plan



PRINCE'S

The incorporated communities and some unincorporated areas are served by public water

D. Community Facilities

Community infrastructure

Water

Water service in the urbanized areas of the county is primarily provided by the Indiana-American Water Company. Well fields are located around the county, with new well fields being developed in Blue River Township and a new treatment plant in adjacent Shelby County. The cities of Greenwood and Franklin and the towns of Bargersville, Edinburgh and Whiteland have municipal water treatment and distribution systems.

- Bargersville's water treatment system has a design capacity of 5.1 million gallons per day (mgd), with average daily production of 1.9 mgd. The town has significant excess capacity.
- Edinburgh's system has a design capacity of 1.4 mgd. The town's four wells vary from 81 to 109 feet deep. The water treatment plant was built in 2007.
- Prince's Lakes system has a plant capacity of 2.8 mgd and was built in 2003.
- Whiteland purchases water from Indiana American Water Company and may purchase as much as 750,000 gallons per day. The town is planning to build a second water storage tank to improve its water system in the southwest and throughout the town.
- Franklin is served by Indiana-American Water Company.
 Greenwood is served by Bargersville Utilities and Indiana
 American Water Company for water.

Most rural areas rely on private wells for water supply.

Groundwater is plentiful in the northwest and southeast portions of the county.

Wastewater

Wastewater collection and treatment is provided by the incorporated communities. Like water, private on-site septic systems serve most rural areas of the county. An exception would be the unincorporated town of Nineveh, which has a wastewater

collection system provided by the Nineveh Conservancy District. Effluent is conveyed to the Prince's Lakes system for treatment. Other systems include:

- Bargersville has a wastewater treatment design capacity of .5 mgd, with an average flow of .25 mgd. Effluent from the Bargersville wastewater treatment plant is discharged into Stott's Creek.
- Edinburgh has a wastewater treatment design flow of 1.5 mgd with a peak flow of 3 mgd. The system was renovated in 2004-2005. The Edinburgh wastewater treatment plant discharges into Blue River.
- Prince's Lakes has a wastewater treatment plant located on Hendricks Ford Road and has a design capacity of 3.5 MGD.
 Upgrades are planned for the facility by 2011.
- Trafalgar has a wastewater treatment plant has a capacity of 0.11 mgd and discharges effluent into Stott's Creek.
- New Whiteland's wastewater treatment plant is located on West 500 North. The effluent from the New Whiteland wastewater treatment plant is discharged into Grassy Creek.
- Whiteland has an activated sludge system with a design capacity of 840,000 gallons per day. Effluent from the Whiteland wastewater treatment plant is discharged into Brewer Ditch.
- Franklin's wastewater treatment is under the Department of Public Works. The treatment plant has a design capacity of 5.12 mgd and an average flow of 3.75 mgd. The Franklin wastewater treatment plant discharges into Young's Creek. Improvements were last made to the facility in 2003.
- Greenwood contracts with the wastewater treatment plant in Southport (Marion County) for treatment of municipal sewerage. The City of Greenwood owns and maintains its own sanitary sewage collection system. The city's sanitary sewer system extends past the corporate limits to the east. Sanitary sewer is only available as far south as Stones Crossing Road. After the effluent from Greenwood is treated in Southport it is discharged into the White River approximately two miles north of the Marion-Johnson county line.

Utility Coordination

Johnson County does not control any of the utilities in the county, they are either privately held or are municipal utilities. This can cause challenges for developers when bringing a project together and for the county (particularly highway department) in maintaining and expanding infrastructure. The ability to share easements and rights-of-way would streamline the development process and would save resources during projects.

Stormwater

Currently urban/suburban stormwater management is addressed through a combination of on-site detention/retention ponds and combined sewer systems. Rural stormwater and drainage is handled through a system of legal drains and swales. The drains and swales empty into the network of tributaries of the White River and the Blue River. Stormwater management varies among some jurisdictions:

- Franklin is a Municipal Separated Storm Sewer System (MS4) community, and the city's activities are coordinated by the Department of Public Works.
- Greenwood is also a MS4 community and the city engineering department is responsible for MS4 operations. The city does not have a stormwater utility.
- Bargersville has a stormwater utility, and a drainage standards manual.
- Johnson County is also a MS4 community. The Planning and Zoning Department coordinates the county's MS4 activities.

Gas, Electric

Much of the unincorporated area of the county receives electricity through the Johnson County REMC. Johnson County REMC located in Franklin is a cooperative electric utility supplying service to more than 16,000 members in Johnson County and portions of Morgan, Shelby and Brown counties. Other service includes:

- Bargersville and Edinburgh have their own electric utilities and are members of the Indiana Municipal Power Agency.
 Bargersville has a 948 MW power system and serves the Bargersville and Whiteland areas. Edinburgh has a 914 MW system. Both communities receive natural gas service through Vectren Corporation.
- Franklin is served by Duke Energy and Johnson County REMC for electric service and gas service is provided by Vectren Corporation.
- Greenwood has electric service through Duke Energy, Johnson County REMC, and the Indianapolis Power and Light Company (IPALCO). Gas service is provided by Vectren.
- Whiteland's electric service is provided by Bargersville Utilities (86 percent), Duke Energy (11 percent), Johnson County



Large utility corridors in the

REMC (3 percent). The gas utility that serves Whiteland is Vectren Energy Delivery.

Telecommunications

In Greenwood local phone service is provided by AT&T. Telephone service in Franklin, Whiteland, and generally throughout the unincorporated part of the county is provided by Embarg.

Public Safety

Police protection in the unincorporated areas of the county is the responsibility of the Johnson County Sheriff's Department. The department has 50 merit deputies and a jail staff of approximately 40. Johnson County dispatch provides services to Whiteland Police, Bargersville Police, Trafalgar Police, Princes Lakes Police, Needham Fire Stations #1 & #2, White River Fire Stations #1, #2, & #3, Trafalgar Fire, and Nineveh Fire Departments.

Separate police departments are maintained in Greenwood, Franklin, Bargersville, Edinburgh, New Whiteland, Prince's Lakes, Trafalgar, and Whiteland.

Fire

Fire protection is provided by a variety of jurisdictions throughout the County. Township fire departments provide protection in Needham, Nineveh, and White River Townships. The Needham Township fire department also serves Clark Township.

Bargersville Community Fire Department serves 64 square miles including part of Union Township from two stations. The Edinburgh Fire and Rescue, a volunteer department, provides service to an area of 30 square miles in Johnson, Shelby, and Bartholomew Counties. New Whiteland, Trafalgar and Whiteland each maintain a volunteer fire department serving the community. The Trafalgar volunteer fire department provides service to southern Union Township and all of Hensley Township.

Franklin has a city fire department with two stations and Greenwood's fire department operates from four stations.





Bargersville Community Fire Department

Medical Facilities

Johnson Memorial Hospital, located in Franklin, is a 149-bed hospital that serves residents of Johnson County and surrounding areas. It offers a 24-hour emergency department and is staffed by approximately 80 primary care and specialist physicians, plus a network of over 100 consulting specialists who also practice at other area hospitals.

Community South Hospital in Greenwood is a 110-bed hospital that offers a comprehensive range of medical services. The hospital is completing a \$130 million expansion in response to significant increases in inpatient volumes and the anticipated continued population growth in northern Johnson County. The expansion will include a five-story patient tower with all-private rooms; six new operating suites; and expanded outpatient services. The new patient tower will increase hospital capacity from 110 beds to 150 all-private rooms. Construction of the surgical suites will be followed by the completion of the patient tower in mid-2010.

St. Francis Hospital, just north of the Marion-Johnson County line, is also expanding and will provide additional services to residents of the region.

Public Buildings

The county courthouse and related annexes are located in Franklin on the courthouse square. The park department office is located at the county park. The highway department has a facility on Hospital Road near Drake Road. Community Corrections, the Sheriff's Department, and the Juvenile Detention Facility are also located on Hospital Road.

The Johnson County Public Library has four branches:

- Clark Pleasant, 530 Tracy Road, New Whiteland
- Franklin, 401 State Street, Franklin
- Trafalgar, 424 Tower Street, Trafalgar
- White River, 1664 Library Boulevard, Greenwood

Schools

Schools are a source of pride in the community and gathering places for social and cultural events. Six public school districts serve Johnson County – Edinburgh Community School



Johnson County Library branch in Trafalaa

Corporation, Franklin Community School Corporation, Greenwood Community School Corporation, Center Grove Community School Corporation, Clark-Pleasant Community School Corporation, and Nineveh-Hensley-Jackson United Community School Corporation.

There are 21 public elementary schools, distributed among the six school districts. Most of these average approximately 500 students. The largest elementary school is Maple Grove Elementary School, with a 2008-2009 enrollment of 714 students. The smallest is Union Elementary in the Franklin district with an enrollment of 181 for 2008-2009.

Six high schools and seven middle schools are also distributed among the county's public school districts. Center Grove High School is the largest of these, with a 2008-2009 enrollment of 2,294.

5: County Character













A. Natural Features

Johnson County possesses a wealth of natural assets. While the northern portion of the county has been largely developed, a segment of the White River flows through the northwest corner. The county's mid section and east end contain prime agricultural lands and a maze of creeks and drains. Abundant lakes and rugged, wooded hillsides are the norm in the southern quarter, producing an environment far different in character than the balance of the county. The Big Blue River also passes through the southeast portion of the county near Edinburgh.

Woodlands

The remaining woodlands in Johnson County provide critical habitat for plants and animals that thrive in a woody environment. According to the Central Indiana Land Trust, the woodlands at the southern edge of the county form the northern edge of the largest unbroken forest block in Indiana. Migrating songbirds use these areas for nesting grounds.

Lakes

The Town of Prince's Lakes encompasses the water body of Prince's Lakes. The various finger lakes that comprise Prince's Lakes are privately owned by the abutting property owners.

Additionally, several other lakes are found in the southern third of the county outside the incorporated town of Prince's Lakes and constitute what is known as Lamb Lake.

Watershed

The Young's Creek watershed is wholly contained within Johnson County and drains much of the central part of the county. Young's Creek watershed is part of a larger watershed, known as the Driftwood watershed, which straddles parts of Bartholomew, Brown, Hancock, Henry, Johnson, Marion, and Shelby counties. The Atterbury Fish and Wildlife Area is located in the southern portion of the Young's Creek watershed.

In 2002 Young's Creek was included in the 303(d) list of Indiana impaired waterways. Among the principal reasons for its inclusion were PCBs and pathogens, particularly *e Coli*, in the water. The *e Coli* is attributed to septic failures, agricultural runoff, and livestock access to streams. Conventional tillage was widely used for the



Abundant wooded areas exist in the county



Hardwoods in flatwoods area



East Lake in Prince's Lakes



Mud flats along White River



2008 Johnson County flooding

county's corn crops in 2002 and considered a factor in the agricultural runoff.

Floodplain

The western end of Johnson County is drained by the east and west forks of the White River. Eastern Johnson County is primarily drained by Sugar Creek and Young's Creek which join the Blue River in the southeast. The Blue River and its tributaries form the Driftwood River at Edinburgh. The Driftwood River and other tributaries eventually form the East Fork of the White River in Columbus, Indiana.

Extensive floodplains lie along the Big Blue River, West Fork White River, Auburn Branch, East Grassy Creek, Fountain Creek, Grassy Creek, Honey Creek, Hurricane Creek, Messersmith Creek, Pleasant Creek, Pleasant Creek South Branch, Pleasant Run Creek, Sugar Creek, Turkey Pen Creek, Young's Creek, as well as their associated ditches and swales.

Wetlands in oxbows and old channels of Sugar Creek serve as floodwater storage during storms. Floodplains are important natural features that should be respected in order to protect the natural systems and avoid excessive damage to structures.

Topography

The topography of Johnson County ranges from relatively flat to very steep terrain in the southwest portion of the county. The hilly areas also tend to be heavily wooded. The highest elevations are found near Peoga. The lowest elevations in the county are located in the northwestern corner where the White River flows into Morgan County and the southeastern corner of the countynear Edinburgh where Sugar Creek meets with the Big Blue and Driftwood Rivers.

Riparian Corridors

A riparian zone (also called a riparian corridor or buffer) is an area, adjacent to a waterbody, which is often vegetated and constitutes a bufferzone between the nearby land and water. Riparian buffers are beneficial because they slow water runoff, trap sediment, and enhance infiltration. Water quality problems from agricultural and urban runoff can be minimized by

managing or restoring vegetated riparian buffer zones. Row crop agriculture constitutes the largest landuse in the Youngs Creek watershed by area, and moststreams in the watershed are surrounded, at least in part, by agricultural land. Thus, riparian bufferson agricultural land offer perhaps the greatest opportunity to protect stream segments in the watershed from run-off water.

The Indiana Conservation Reserve Enhancement Program requires riparian buffers to have a minimum average width of 35 feet and a maximum average width of 120 feet and use filter strips.



Trails, like the Monon rail-trail
in Indianapolis, provide
recreation opportunities and
alternative transportation to
key destinations.

B. Leisure and Cultural Assets

The Johnson County Park and Recreation Department manages the Johnson County Park, Hoosier Horse Park, Independence Park, and Whispering Pines Golf Course.

- The Johnson County Park has 15 shelters for rent and camping facilities for up to 50 RVs and tent campers. The park has four playgrounds, a beach, an outdoor amphitheater, and five meeting rooms. Recreational opportunities include six basketball courts and four sand volleyball courts, a baseball diamond, and tennis courts. The park also has five miles of hiking trails and several acres of wetlands.
- Independence Park, located in White River Township, contains picnic areas, hiking trails, and an accessible playground.
- Hoosier Horse Park, located adjacent to the Johnson County Park on Schoolhouse Road, contains over 200 acres and has a Level Four Cross Country Course. More than 300 stalls, an indoor arena, and two outdoor practice arenas are available within the park. And a restaurant has recently been added. In 1987, the facility hosted the Pan Am Games equestrian events.
- Whispering Pines Golf Course is a nine-hole course with par three, four, and five holes.

Edinburgh, Franklin, and Greenwood have their own parks and recreation departments and facilities.

Franklin College

Founded in 1824, Franklin College is a four-year residential, private liberal arts school. The student body is approximately 1,000, nearly 80 percent of whom live on or near campus. Franklin College sits on 156 acres of land, which includes 86 acres of campus and 70 acres of athletic fields. The college was the first institution of higher education in Indiana to admit women and maintains a voluntary association with the American Baptist Churches USA.

Camp Atterbury

Camp Atterbury is a Joint Maneuver Training Center serving as a mobilization site for the National Guard and Army Reserve and as a training site for military and non-military agencies such as the Department of Homeland Security and state and local police. The installation is located on the southern edge of Johnson County, west of the Town of Edinburgh. During the WWII years, the U.S. government purchased 40,000 acres for Camp Atterbury, which served as an internment camp for Italian and German prisoners-of-war from 1943 to 1946 in addition to the other functions of the base.

C. Historic Sites

Johnson County was settled early in the 19th Century and became an agricultural and manufacturing center. The earliest settlement was in the southern half of the county and Edinburgh was the first town in the county. Johnson County was officially formed on December 31, 1822 and had a population of 550 at the time. Franklin became the county seat. Interurban service was available beginning in 1900 from Greenwood to Indianapolis. In 1901 service was extended to Franklin, and by 1902 the Interurban reached Edinburgh.

Several properties in the county are on the National Register of Historic Places. These buildings serve as examples and reminders of the county's rich history and should continue to be preserved with respect for that history. They include:

- Franklin College library (Shirk Hall)
- Franklin College Old Main
- Herriott House (696 North Main, Franklin)
- Johnson County Courthouse Square

Within the cities and towns, several historic districts have been established to protect and celebrate the history of the area. The Greenwood Commercial, Martin Place (Franklin), Franklin Westside, Franklin Commercial, Franklin Southside, Indiana Masonic Home (Franklin), Franklin Northside, Franklin Eastside, Franklin College, Edinburgh Commercial, Tilford (Edinburgh), and Toner (Edinburgh) historic districts are locally designated areas for historic preservation.



Camp Atterbury main gate



Additionally, several single-site locations which are outstanding examples of period architecture or are significant to local history are found throughout the county and its municipalities.

D. Economic Development

Most of the county's industrial and business park activities are centered around Franklin and Greenwood. Both communities offer locational advantages suited to industrial growth. Franklin has rail access (short line) and proximity to I-65, while Greenwood has interstate access and a regional airport. Both communities are able to provide water and sewer services to industrial and commercial sites.

While Franklin has several industrial parks with available land and vacant industrial space, Greenwood's business and industrial parks have fewer parcels, mostly small, available for development. The Franklin Business Park, Franklin Tech Park, and Franklin Eastside Business Park are tax increment finance (TIF) districts. The Franklin Tech Park is also in the state of Indiana Shovel Ready program.

In addition to scattered site available buildings and land for industrial development, Johnson County's business and industrial parks include:

- Franklin Business Park
- Franklin Tech Park
- Hurricane Industrial Park (Franklin)
- Franklin Eastside Business Park
- Johnson County Industrial Park (Franklin)
- Precedent South Business Park (Greenwood)
- Southpoint One (Greenwood)
- Bargersville Industrial Park

Cluster Analysis

An analysis of the local employment data was performed to determine the key business sectors in the county. The location quotient and change in location quotient over time can be used to identify industries toward which economic development activities should focus. This is called "industry cluster analysis." The



The Franklin Tech Park is an Indiana Shovel Ready location

industries are graphed using their location quotient to determine which are stars, emerging, mature, and transforming industries.

Stars

The "stars" are those industries that have location quotients greater than 1.0 (exporting industries) and have increased in location quotient over time, in this case, between 1999 and 2007, the last business cycle. These are industries that are strong locally and continue to get stronger. None of the stars in Johnson County has seen a significant increase in location quotient during the last business cycle. These industries include some of the county's largest employers, including manufacturing, accommodation and food service.

Emerging

"Emerging" industries are those not yet exporting industries for the county (location quotient under 1.0), but have experienced an increase in their location quotient during the last business cycle. A number of industries are emerging in Johnson County, including wholesale trade; administration, support, waste, and remediation services; educational services, and health and social services. These are industries where investment should continue to be made to advance the industries into local stars.

Mature

The "mature" industries are those with location quotients greater than 1.0, but have experienced a decline in location quotient during the past business cycle. These are retail and construction. Not surprisingly, construction experienced the greatestdecline in location quotient, but it is a cyclical industry and the housing market in central Indiana had already begun to slow by the end of 2007. Much of the construction employment in the early 2000s was related to the boom in residential development.

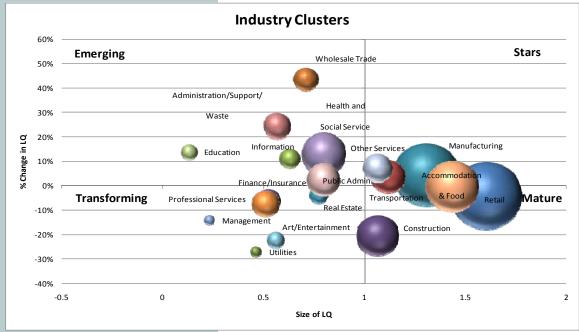


Figure 5-1: Cluster Analysis

Source: Bureau of Economic Analysis and LSL Planning, Inc.

Transforming

"Transforming" industries are those undergoing significant changes. They have location quotients under 1.0 and have declined in location quotient during the last business cycle. These include utilities; arts and entertainment; management; and similar industries. Many of these are experiencing decline in Johnson County, at least in part, because of the suburban nature of the County relative to Indianapolis.

E. Housing

Housing data analysis

Consistent with the trend in Indiana and nationally, the number of housing units in the county has increased faster than the rate of population growth. Between 1990 and 2000, Johnson County (including the incorporated communities) experienced an 18 percent increase in its population, but a 35 percent increase in the number of housing units. One of the primary drivers of this movement is the decline in household size that has been occurring over the past several decades. The county's average household size declined from 2.71 in 1990 to 2.63 in 2000 and the average family size declined from 3.12 to 3.06. This trend is likely to continue as the county's population ages and families with children constitute a smaller proportion of the population.

According to the U.S. Census in 2000, approximately 84 percent of Johnson County households were considered urban. This percentage has likely increased as new suburban residential development continued in the county between 2000 and 2007.

In the past few years, however, foreclosures have been an issue in several Indiana communities and Johnson County is not expected to be immune from this situation. Housing growth can be expected to slow significantly while the available housing stock is absorbed.

Building Permits

Building permits are another way to evaluate the housing growth in a community. Almost 87percent of the new residential building permits issued throughout Johnson County from 1990 to 2007 were for single family homes. Just over two percent of the permits were for two-family dwellings and almost 11 percent were for dwellings containing five or more units. The largest number of building permits was issued in 1996 and the county averaged just over 1,300 new residential construction permits per year since 1990. There was a significant decline in building permits in 2007, reflecting the national economic and housing crisis. The decline in single-family permits continued in 2008 and 2009, with only 294 single-family permits issued in 2009. Multi-family construction, however, increased. In 2006 only 120 multi-family (5+ units) were issued permits, by 2009 that number increased to 411.

Figure 5-2: Building Permits, 1990 - 2009

Source: Indiana Business Research Center



Moderately priced newer home in a White River Townshin subdivision



Rural subdivisio

Choice

Housing issues vary widely, owing to the size and diversity of the county, as well as the variety of housing types.

Nearly 80 percent of the residential building permits issued in the past ten years in unincorporated Johnson County have been in White River Township. A common concern expressed about the housing in this area relates to the "sameness" of the developments. A number of residential subdivisions developed in the 1990s and 2000s lack the character of earlier custom built homes. These homes are often at suburban densities (approximately three units per acre) and tend to look relatively similar, perhaps a response to the desire for "affordable" housing.

While some very large, upscale homes have been developed in Clark Township, the poor soils for septic and lack of available sewer service has limited their development.

Nineveh and Hensley townships have witnessed a significant amount of residential growth in the past ten years, accounting for nearly ten percent of the permits in the county's jurisdiction. Much of that development occurred in the late 1990s and early 2000s

and has slowed since then. New residential development in the Bargersville area has been similar to that in White River Township. Franklin has experienced less new residential development than Greenwood, Bargersville, and White River Township.

Housing Trends

In 2008 the County's average cost of construction per single family building permit was \$250,951. Pleasant, Clark, Union, Franklin, and Hensley Townships had average construction costs above \$300,000 in 2008 (Hensley above \$400,000). In Blue River Township, the average cost was \$135,666.

Single-family residential building permits have declined since the housing boom of the early 2000s, and permits for 2009 lagged 2008 or 2007 by approximately 1/3, due to the national housing and credit crisis.

According to the 2000 Census of Population and Housing, more than 70 percent of the housing in the county was owner-occupied. Only six percent of the housing stock was vacant, which is considered a healthy vacancy rate, allowing for houses to turn over from one owner to another and new people to have options to move into the community. More recent numbers from the Census Bureau show that in a recent three year average (2005-2007) the percentage of home ownership was relatively unchanged, but that the residential vacancy rate had increased to just over seven percent. The percentage of renter occupants and vacant units is likely to have increased since that time as the housing market has changed locally and nationally.

The type of vacancy in various sectors of the county is also useful to consider as a part of the local housing dynamic. In 2000, the vacant homes in White River Township were primarily for sale, while in Pleasant, Franklin, and Blue River Townships most vacant units were for rent. Needham Township's vacancies, on the other hand, were evenly mixed between for sale and for rent. In Clark Township, most of the vacant homes were rented or sold, just not occupied at the time of the Census. Union Township had relatively few vacancies. In Hensley and Nineveh Townships the vacant homes were primarily for seasonal use.



an important consideration in evaluating local housing



Appendix A: County Profile









County Profile

Johnson County, located in central Indiana immediately south of Indianapolis/Marion County, is 320 square miles in area. The county seat is the city of Franklin. Several other incorporated communities — the city of Greenwood and the towns of Edinburgh, Bargersville, New Whiteland, Princes Lakes, Trafalgar, and Whiteland — are located in the county and have their own municipal governments. Townships in the county include Blue River, Clark, Hensley, Franklin, Needham, Nineveh, Pleasant, Union and White River.

As one of the Indianapolis metropolitan counties, Johnson County interacts with and is greatly influenced by the growth and activities of its northern neighbor. Other adjacent counties—Bartholomew, Brown, Morgan and Shelby – also have a significant effect on the Johnson County economy and will be discussed later.

A. Demographics

Population

For decades the county has been steadily growing. However, around 1990 that growth began to accelerate, jumping from a population of 88,109 in 1990 to 115,209 in 2000 and to an estimated 141,501 in 2009. In the ten years between 1990 and 2000, the county grew by nearly one-third (30.8%).

As shown in Figure A-1, Greenwood, the largest community in the county, contains about 31 percent of the county population or 36,037 people, according to the 2000 Census. Franklin had a population of 19,463 and New Whiteland had a population of 4,579. Edinburgh was next with a population of 4,505 in 2000. Whiteland had a population of 3,958, Bargersville a population of 2,120, and Princes Lakes had 1,506 residents in 2000. Trafalgar was the smallest town in Johnson County with only 798 residents.

According to estimates prepared by the U.S. Census Bureau, all communities in Johnson County grew in population since 2000. The greatest growth, on a percentage basis, has been in Bargersville (up 63.3% to 3,462), though Bargersville has completed some significant annexations. The smallest was in Edinburgh with an increase of 219 people or 4.9 percent.

Among the metro area counties, Johnson County was the fourth most populous in 2000 and is expected to retain that position through 2030, though its proportion of the metro population is expected to increase from 7.2% in 2000 to 9.2% in 2030.

Likewise, the overall population of Johnson County is increasing, according to these same estimates. In terms of actual population change, the Census estimates that Greenwood grew by 12,283 (34.1%) between 2000 and 2009. Franklin is estimated to have grown by 4,132 (21.2%) and New Whiteland by 1,287 (28.1%). All other cities and towns have grown by fewer than 1,000 persons. Similarly, all of the townships experienced growth. Township estimated growth from April 2000 to July 2009 is presented in Figure A-2. Of course, the period since then is unlikely to have experienced much, if any, growth due to the severe economic downturn.

Figure A-1: Population Change 1990 to 2009

			Change 1990 to		Change 2000 to	% Change	% Change 2000 -
	1990	2000	2000	2009	2009	1990 - 2000	2009
Johnson County	88,109	115,209	27,100	141,501	26,292	30.8%	22.8%
Franklin	12,907	19,463	6,556	23,595	4,132	50.8%	21.2%
Greenwood	26,625	36,037	9,412	48,320	12,283	35.4%	34.1%
New Whiteland	4,097	4,579	482	5,866	1,287	11.8%	28.1%
Trafalgar	531	798	267	1,150	352	50.3%	44.1%
Bargersville	1,681	2,120	439	3,462	1,342	26.1%	63.3%
Princes Lakes	1,055	1,506	451	1,626	120	42.7%	8.0%
Edinburgh	4,536	4,505	-31	4,724	219	-0.7%	4.9%
Whiteland	2,446	3,958	1,512	4,502	544	61.8%	22.2%

Source: Indiana Business Research Center, US Bureau of the Census

Population Change April 2000 to July 2009 50% 45% 40% 35% 30% 25% 20% 15% 10% 5% 0% White River township Blue River township Clark township Franklin township Hensley township Needham township Nineveh township Pleasant township Union township Johnson County

Figure A-2: Population Change in Townships, 2000 to 2009

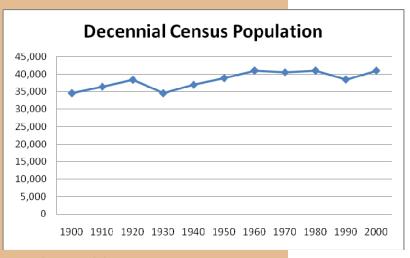
Source: Indiana Business Research Center

Figure A-3: Population Projections for Indianapolis Metropolitan Counties

County	2000	2005	2010	2015	2020	2025	2030
Boone 46,100		48,600	53,200	57,800	62,500	67,100	71,700
Hamilton 182,	70 0	202,500	238,200	273,700	308,900	344,200	379,430
Hancock 55,4	00	56,900	62,000	64,600	71,700	78,800	85,900
Hendricks 104	,10 0	112,600	130,600	148,300	165,900	183,600	201,230
Johnson	115,200	122,000	135,200	148,400	161,600	174,700	187,870
Madison 133,4	0 0	130,000	128,500	127,000	125,500	124,000	122,500
Marion 860,50	0	871,700	867,600	866,300	860,700	854,000	848,030
Morgan 66,70	0	69,200	72,900	76,600	80,200	85,000	89,000

Source: Indiana Business Research Center

Figure A-4: Decennial Census Population



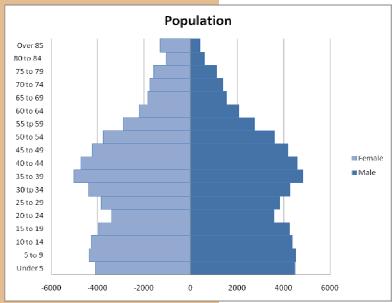
Source: US Census Bureau

As seen in Figure A-3, the population of Johnson County is expected to continue to grow for every period up to 2030. The comprehensive plan is considering a roughly 20 year horizon and will use the 2030 population projections as a basis for decision making in the plan. The projected population for the county in 2030 is 187,870, a 63 percent increase over the 2000 figure. The state is projected to grow nearly 12 percent between 2005 and 2030. Hendricks County is the only county adjacent to Johnson County expected to grow more in this time period. Projections used were the official state data center projections by the Indiana Business Research Center, the Metropolitan Planning Organization has not completed updated projections and has stated that the official projections are still the best

available at this time.

The population in 2030 is projected to be older. There will be fewer school aged children and a larger older adult and senior population in the county. This age shift has implications for housing, schools, and transportation, as well as recreation and other community services.

Figure A-4: Johnson County Population Pyramid



Source: U.S. Census Bureau

Age

The population pyramid for Johnson County, which demonstrates age and gender at a single point in time, is typical of most Indiana communities. The pyramid is based on the 2000 Census. In the 2010 Census, the shape of the pyramid will change as the Baby Boom population ages. The number of people moving into the 65+ age groups now and in years to come is larger than previous (and later) groups. Better healthcare and increased access to healthcare will improve longevity of this group. Women will continue to comprise a larger

proportion of this cohort, as women tend to outlive men.

The aging population will require access to continuum of care housing, resulting in an opportunity for different housing types to be provided within the county. In recent years, businesses have begun to tap into this age group for employees, especially for part-time jobs in the retail and service sectors. This trend is likely to intensify in the future.

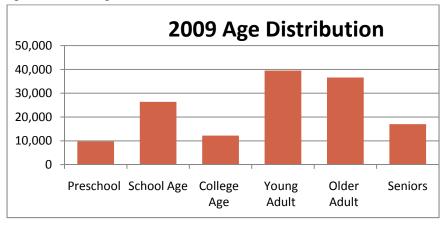
Functional Age Groups

There are currently a large number of older adults in the workforce (age 44 to 65) who will be retiring in the next several years, creating a significant increase in the number of senior citizens in the county by 2030. This group will expect recreational, social, transportation and health services oriented to its age.

Despite the continued population growth, the school age population is expected to decline by 2030. This will require careful consideration of the resources and facilities that are allocated to this age group.

A significant number of college age people live in Johnson County. Residents making up this component of the population create a range of unique planning issues for the county. For example, college residents typically require rental housing. While much of the housing will be needed in the city of Franklin, other county communities will be impacted by such demand. Many college students rely on transit and non-motorized means of transportation. The county road department and regional transit agencies may be called upon to satisfy these needs.

Figure A-5: 2009 Age Distribution



Source: Indiana Business Research Center

Race and Ethnicity

Johnson County has not changed significantly between 1990 and 2000, with 97 percent of people in the county identifying themselves as Caucasian in 2000, compared with 87 percent statewide. No other race accounted for more than one percent of the county's population.

B. Income Data Analysis

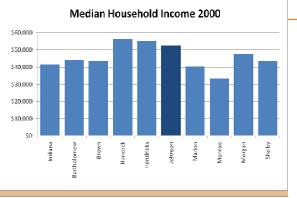
Income is one measure used to describe the economic health of a community. It is related to the cost of living, housing costs, and purchasing power of community residents.

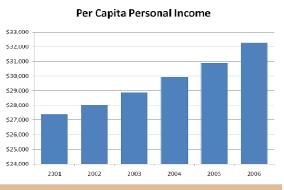
Income

Median household income is a measure of wealth. The median household income in Johnson County in 1999 (Census 2000) was \$52,693, significantly higher than the state median, fifth highest for all Indiana counties and third highest for metro Indianapolis counties. Estimated 2005 and 2007 median household income in the county was \$58,854 and \$60,381, respectively.

Most adjacent counties had a lower median household income, except for Hancock County and Hendricks County.

Figures A-6 and A-7: Median Household Income and Per Capita Personal Income





PCPI

Per capita personal income measures the total income in the community against the total population. In Johnson County the per capita personal income has grown from \$22,976 in 1999 to \$33,329 in 2006. These values were higher than the state's averages. The per capita personal income in Johnson County has grown by more than three percent annually. This rate of growth has allowed residents' average incomes to keep pace with inflation. This also allows residents to retain their purchasing power for goods and services.

Poverty

Poverty measures provide a picture of the number of people living below a government defined income threshold and are generally not getting by on that income. In 2005, the proportion of people in Johnson County in poverty was estimated to be 7.1 percent. Statewide approximately 12.2 percent of people were living in poverty. There were increases in poverty at both the state and county level between 2000 and 2005. These rates are expected to have risen due to the economic challenges facing the country. County social agencies will be increasingly relied upon to help provide the services, facilities and resources needed by this segment of the population.

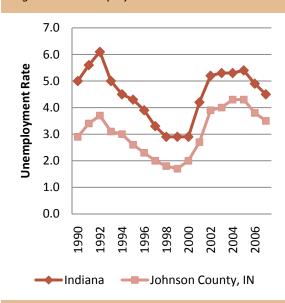
C. Employment Issues & Factors

Labor Force and the Business Cycle

Labor force, sometimes called the resident labor force, is the number of workers who live in the county regardless of where they work. The resident labor force in Johnson County has been increasing since 2000. In 2007 this number was 73,090, up from 62,226 in 2000. Again, however, the subsequent recession has altered that trend.

The resident labor force includes both the people who are working and those who are unemployed, but actively seeking employment. Sometimes people drop out of the labor force when they don't have a job because they are no longer seeking employment (decided to retire, given up on finding a job, etc.).

Figure A-8: Unemployment Rate



Source: Indiana Business Research Center

In 2000, Johnson County's unemployment rate was just over two percent, but increased to three and a half percent in 2007, consistent with national trends. As the global economic downturn became apparent in 2008 the unemployment rate in Johnson County increased from 3.9 percent in January 2008 to 6.2 percent in December 2008. Statewide the unemployment rate grew from 5.1 percent in January to 8.1 percent in December.

Commuting Patterns

Commuting patterns reveal information about employment and transportation network needs by showing where workers at local businesses live and where local residents work. Johnson County exports workers every day. In other words, the county looses more workers to other counties than it brings in. Not surprising, the largest outflow of workers is to Marion County (Indianapolis). The next largest outflow is to Bartholomew County, most likely associated with employment opportunities offered in Columbus.

Johnson County imports some workers from adjacent counties. Adjacent rural counties, in particular, are sending workers to Johnson County, though the largest number comes from Marion, followed by Morgan County.

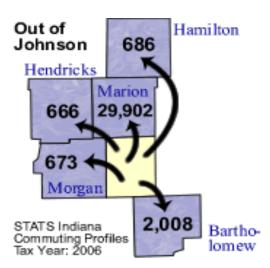
Into Johnson Marion 5,460 Shelby 1,231 956 Morgan 725 1,119 STATS Indiana Bartho-Commuting Profiles Tax Year: 2006

Figure A-9: Commuting patterns

Source: Indiana Business Research Center

Brown

lomew



Major Employers

Large employers can have a significant impact on the area when they create new jobs or lay off workers, eliminating jobs. While small businesses create most of the new jobs in aggregate, the large employers can have a more dramatic impact in a short period of time. The largest employers in Johnson County are listed in Figure A-14.

Government, health, and food related businesses are generally considered to be more stable in the current economy than auto manufacturers or suppliers. The large number of employers in the automotive and manufacturing sectors gives reason for concern regarding the stability of the county's economic base over the next few years. As shown in Figure A-14, 2,270 (49.1%) of the workers in the top 17 employers in the County are in an auto-related capacity.

Figure A-10: Major Employers in Johnson County

Employer	Product	Employment
KYB Industries	Automotive Struts	600
Mitsubishi	Automotive Air Conditioning Units	400
Best Buy	Distributor-Cds, Videos, Cassettes	400
Davidson Industries	Building Components	400
NSK Corp/NSK Precision America	Automotive Bearing Components	400
Leer Corporation	Automotive-Injected Molded Parts	385
David R. Webb	Veneer Manufacturing	350
Endress + Hauser, Inc.	Level & Flow Detection Devices	280
Franklin Power Products	Remanufactured Engines	250
Sonoco Flexibile Packaging	Flexible Packaging	200
United Natural Foods	Food Distribution	200
Amcor PET Packaging	Plastic Bottles for Beverages	165
Amos Hill Associates	Veneer Manufacturing	155
Casting Technologies	Automotive Aluminum Components	125
Nachi Technology, Inc.	Automotive Ball bearings	110
Manar, Inc.	Custom Plastic Injection Molding	100
Aldi Inc.	Food Warehouse	100

Source: Johnson County Development Corporation

Employment by Industry

The impact of the national and global economy on local employment depends in large part on the type of industries located in the community. A community heavily dependent on one industry will thrive when that industry is performing well and will suffer when that industry is in decline. A well diversified local economy is more likely to be able to weather the fluctuations in the business cycle.

As seen in Figure A-11: Employment by Industry, the largest sectors in Johnson County are retail trade, manufacturing, and accommodations and food service. The sectors of retail trade with the highest employment are auto parts and vehicle retail sales, and general merchandise.

Within the manufacturing industry, the sectors with the highest employment are wood products manufacturing; plastics and rubber products manufacturing; primary metal manufacturing; fabricated metal products manufacturing; machinery manufacturing; computer and electronic product manufacturing; transportation equipment manufacturing; and miscellaneous manufacturing. In accommodations and food service, the majority of the employment is in food service.

Employment by Industry 9,000 8,000 **Number of Employees** 7,000 6,000 5,000 4,000 3,000 2,000 1,000 0 Management of Companies and... Agriculture, Forestry, Fishing... Real Estate and Rental and... Professional, Scientific, and... Arts, Entertainment, and... Other Services (Except Public... Accommodation and Food... Utilities Admin. & Support & Waste.. Mining Manufacturing Wholesale Trade **Retail Trade** Transportation & Warehousing Finance and Insurance **Educational Services** Health Care and Social Services Construction Information Public Administration

Figure A-11: Employment by Industry

Source: Indiana Business Research Center

Employment Analysis

Economic Base Analysis

Economic base analysis simply considers the employment in the local economy and how it has changed during the business cycle. During the business cycle from 1999 to 2007, Johnson County experienced growth in a number of industries and decline in relatively few. Growing industries included:

- Wholesale trade (+60%)
- Health care and social services (+43%)
- Administration, support, waste, and remediation services (+42%)
- Educational services (+38%)
- Other services (+21%)

- Accommodation and food services (+21%)
- Public administration (+16%)
- Professional, scientific, and technical services (+14%)
- Transportation and warehousing (+10%)

These are the sectors where Johnson County should focus its economic development strategy. While retail was the largest employment sector in 2007, it has not been growing; doesn't export beyond the immediate region; and its continued growth is not supported by industry mix factors. Therefore, it should not be a major focus of the county's economic development strategy.

Declining industries were utilities (-27%) and manufacturing (-13%). This suggests that the local economy has been diversifying away from a manufacturing base and concentrating in other areas, not surprisingly service industries.

Location Quotient

Economic base analysis only tells part of the local economic story. To understand how the local economy performed relative to the larger economy, location quotient analysis is needed. Johnson County's economic performance was measured relative to the U.S. national economy and the Indianapolis Metropolitan Statistical Area (MSA) economy. A location quotient between 0.75 and 1.25 indicates that the local economy is producing enough of a good or service to meet local needs. A location quotient below 0.75 would indicate that the local area is importing those goods and services from other areas, while a location quotient above 1.25 indicates that the local economy is producing enough to export to other communities.

Compared to the U.S. economy, Johnson County performed well in manufacturing; retail; and, accommodations and food service, indicating that the county produces enough of these goods and services to export them to other communities. These are the local economic strengths. When comparing Johnson County to the Indianapolis MSA, the strengths are retail; management of companies and enterprises; educational services; arts, entertainment, and recreational services; and other services. Since Johnson County is the retail and entertainment hub for the

southern part of the metropolitan area, these strengths are not surprising.

Johnson County also exhibited some weaknesses relative to the U.S. economy, where the county is likely importing goods and services from other places. These included: utilities; information; finance and insurance; professional services; management of companies and enterprises; administrative, support, waste and remediation services; educational services; and, arts, entertainment, and recreation services. Several of these goods and services are provided in the larger Indianapolis metropolitan area and would not necessarily be a significant portion of the economy in Johnson County.

Wages

The average wages in an industry are also a measure of the economic performance of the sector locally. The average annual wages for Johnson County industries in 2007 are provided in Figure A-16: Average Annual Wage.

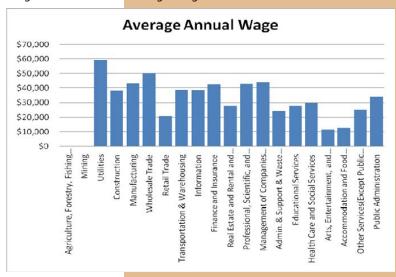
The industries with wages growing relative to the average annual wage for all industries are:

- Utilities
- Constructio n
- Wholesale trade
- Transportation and warehousing
- Information
- Finance and insurance
- Administration, support, waste and remediation services
- Public administration

Industries with wages shrinking relative to the average annual wage for all industries are:

- Real estate, rental, and leasing
- Management of companies and enterprises
- Educational services
- Health care and social services
- Arts, entertainment, and recreation services
- Other services

Figure A-12: Annual Average Wage



Source: Indiana Business Research Center

Appendix B: The People's Plan











The People's Plan

The size, complexity and diversity of Johnson County require that a wide array of stakeholders be heard during the course of preparing the plan. Eliciting the thoughts, ideas, concerns, insights and fears of those who live and work in the county is essential to the plan's success.

Beginning in 2007, long before actual work began on the plan, the county initiated a series of public workshops in nine locations across the county. These workshops were designed to obtain input from the public that could be used as the foundation for planning goals that could be incorporated into this comprehensive plan.

The vision statement and goals found in this document are essentially the result of that series of countywide meetings. Later, during the formulation of the plan, a number of other efforts were made to obtain input and test assumptions prior to actually formulating the plan. These efforts are described below.

Interviews

A dozen interviews were conducted with key stakeholders from different sectors of the county, including economic development, public agencies, cities in the county, agriculture, recreation and development. The interviews were conducted over a two day period in April 2009 at the Johnson County Courthouse Annex in Franklin.

Several issues emerged from the interviews. Some consistent themes expressed were:

- Need for improvements to existing roads and for new road connections
- State Road 37 has potential even without I-69 being completed
- Camp Atterbury's intensification is going to be a major factor in the future development of Johnson County
- Location of sewers and areas without sewers are a major issue
- White River Township's future plays a major role in the northern third of the county
- East-west connector road seems to be needed, but the location is still disputed







- Potential new interchanges on I-65
- Sewer infrastructure is very important, but there are so many providers competing for the same areas

Focus Groups

Focus group sessions were held April 30, 2009 at the Johnson County Courthouse Annex. Invited individuals gathered for a common presentation of the proposed goals and some general information related to issue topics. The focus groups then broke out by topic: development/economic development, agriculture, transportation and parks/recreation/natural resources. Following a discussion period with the smaller group, the larger group assembled to report back the highlights of their discussion.

Open Houses

Two open houses were conducted early in the planning process to receive comments on the base data and information and on the draft goals. Exhibits included growth, agriculture, economic development, transportation, and infrastructure. Each exhibit included maps, data, and other information in addition to the proposed goals.

The first open house was held April 20, 2009 at the Johnson County Fairgrounds in Franklin. Many people commented on the information presented. A second open house covering the same topics was held on April 22, 2009 at the Center Grove Middle School and, again, public comment was helpful and informative.

Agency Day

An Agency Day was conducted during the afternoon of May 7, 2009. Representatives from various state and local agencies were invited to attend this session and share information about their agency, its role in Johnson County and future plans that may affect or influence the county's comprehensive plan. Agencies represented included INDOT, the Indianapolis MPO, DNR, Purdue Extension, and local governments. The primary topics of conversation were transportation and wastewater treatment.

Open Houses – Future Land Use

A second round of open houses was held in July 2009 to provide the public with an opportunity to comment on three future land use concepts.

The first open house was held on July 8, 2009 at Beeson Hall in Franklin. A second was held July 15, 2009 at the Center Grove Educational Services Center in White River Township. Comments and opinions expressed at each of these sessions helped the steering committee in its consideration of the three concepts and the formulation of a future land use map.



Appendix C: Collaborative Actions













Collaborative Actions

While the county commissioners, plan commission and various county departments will be responsible for taking the lead on much of the plan's implementation, they cannot achieve the vision and goals without the aid of others. Implementation of this plan must be a collaborative effort. Therefore, those recommended actions for which others will have significant responsibility are listed below:

Culture/History

Action	Representative Organization	Timeframe
Identify appropriate locations for farmers markets, craft markets, and other places to sell and buy locally crafted foods, furniture, and art	Volunteers	Ongoing
Promote Johnson County's heritage at local events	Purdue Extension, Fair Board, Volunteers	Short-term
Host community clean-up days	Solid Waste District(s)	Ongoing
Support a tree-planting program	Non-profit Short-te	rm

Intergovernmental Cooperation

Action	Representative Organization	Timeframe
Continue to coordinate land use and economic development activities with Camp Atterbury	JCDC Ongoi	ng

Environment

Action	Representative Organization	Timeframe
Support protection of ground and surface water resources	Natural Resource Conservation Service, Purdue Extension, Heath Department	Ongoing
Prepare an open space plan to identify sensitive features, parks, cemeteries, habitats, and natural features, and means of ensuring their protection	NRCS, SWCD	Short-term

Parks & Recreation

Action	Representative Organization	Timeframe
Identify available funding for trails and funding criteria	Johnson County Bike Route or other trail group	Mid-term
Design a trail network	Johnson County Bike Route or other trail group	Mid-term
Build the trail network	Johnson County Bike Route or other trail group	Long-term
Provide routine maintenance	Johnson County Bike Route or other trail group	Long-term
Host events to support the trail	Johnson County Bike Route or other trail group	Long-term
Research options including public and private (501(c)3) means of developing and maintaining parks and trails	Parks Board, Johnson County Bike Route or other trail group	Short-term
Prepare an open space plan to identify sensitive features, parks, cemeteries, habitats, and natural features, and means of ensuring their protection	NRCS, SWCD	Short-term

Transportation

Action	Representative Organization	Timeframe
Develop a trail network in White River and Pleasant Townships that connects to regional networks	Johnson County Bike Route and other trail groups	Mid-term
Develop ways for Access Johnson County to maximize service to rural areas	Access Johnson County	Mid-term

Infrastructure

Action	Representative Organization	Timeframe
Support efforts to improve the telecommunications infrastructure in the county	Johnson County Development Corporation	Mid-term

Economic Development

Action	Representative Organization	Timeframe
Focus business retention and expansion efforts in the manufacturing sector	JCDC Ongoi	ng
Retain and grow existing companies through focused business retention and expansion survey programs and similar tools	JCDC Ongoi	ng
Attract new companies that will diversify the economic base and provide upward economic mobility of the workforce	JCDC Ongoi	ng
Encourage location of professional and technical operations due to growing average annual wages	JCDC Ongoi	ng
Require a fiscal impact analysis for businesses requesting tax abatement or other county incentives	JCDC Ongoi	ng
Support high value-added service sector	JCDC Ongoi	ng

businesses, high-tech		
and/or advanced		
manufacturers, life		
science and/or bio-tech		
companies, and		
businesses in emerging		
or green-tech sectors		
Continue to monitor		
performance of the		
county economy over		
time and adjust policies	JCDC Ongoi	ng
as needed to reflect		
trends		
Wage criteria should be		
equal to or greater than		
the county's average	IODO Ossasi	ng
wage (as determined by	JCDC Ongoi	
JCDC) to qualify for		
incentive assistance		
Continue to monitor		
performance of the		
county economy over	JCDC Ongoi	na
time and adjust policies	JCDC Oligoi	ng
as needed to reflect		
trends		
Build upon the assets of		
the Camp Atterbury	JCDC Ongoi	ng
Muscatatuck Center for	ODD Ongo	119
Complex Operations		
Support and coordinate		
public and private	Franklin College,	
education providers to	Central 9, Ivy	Short-term
deliver technical training	Tech, WorkOne	
for the workforce pipeline		
Study funding		
mechanisms to off-set the	JCDC Ongoi	ng
cost of development in	1 0000 Origon	''9
select areas of the county		

Information regarding the collaborative partners referenced here can be found on their web sites.

Johnson County Development Corporation <u>www.jcdc.org</u>

Indiana DNR <u>www.in.gov/dnr</u>

Purdue Extension

www.ag.purdue.edu/counties/johnson/pages/default.aspx

NRCS <u>www.nrcs.usda.gov</u> SWCD <u>www.swcd.org</u>

Access Johnson Countywww.accessjohnsoncounty.org

Franklin College <u>www.franklincollege.edu</u>

Central 9 <u>www.central9.k12.in.us</u> lvy Tech <u>www.invytech.edu</u>

Work One <u>www.in.gov/dwd/WorkOne</u>

Appendix D: Zoning Ordinance













Zoning Ordinance

As the principal tool available to the county to manage land use in conformance with the Comprehensive Plan recommendations, it is important that the Zoning Ordinance support the Plan and provide the needed tools to achieve the desired end results. Therefore, an analysis was performed of the current zoning regulations to identify current short-comings and needed changes in regulations and procedures.

6-101-1 General Provisions

H. Jurisdiction

Consider rephrasing to state "except for land included in the extraterritorial jurisdiction of a municipal corporation under IC 36-7-4-205." "Buffer area" is not defined in the ordinance or in Indiana Code.

6-101-2 Administration and Enforcement

E. 3. Use Variance Standards

Variances are based on a finding of "unnecessary hardship" if the Zoning Ordinance is applied to a particular property. Variances are intended to run with the land. The language regarding use variances not being transferrable to subsequent property owners is indefensible and should be removed.

H. 6. No Permit Required

c. Small structures, may increase the impervious surface and may affect drainage. Require an ILP or a drainage permit.

J. Violations and Penalties

1. Penalty – remove fines/penalty dollar amounts from the zoning ordinance and place in a separate ordinance that can be amended annually.

6-101-3 Definitions

Consider moving the definitions to the end of the ordinance and incorporating graphics into the text near the concept being illustrated. Many of the definitions also contain regulatory language. This should be removed and placed in the appropriate sections in the body of the ordinance.

IC 36-7-4-918.4

A board of zoning appeals shall approve or deny variances of use from the terms of the zoning ordinance. The board may impose reasonable conditions as a part of its approval. A variance may be approved under this section only upon a determination in writing that:

- The approval will not be injurious to the public health safety, morals, and general welfare of the community;
- 2. The use and value of the area adjacent to the property included in the variance will not be affected in a substantially adverse manner.
- The need for the variance arises from some condition peculiar to the property involved;
- 4. The strict application of the terms of the zoning ordinance will constitute an unnecessary hardship if applied to the property for which the variance is sought; and
- 5. The approval does not interfere substantially with the comprehensive plan adopted under the 500 series of this chapter.

Case law:

Neither economic opportunity nor loss may enter into determination of existence of unnecessary hardship in ruling upon application for variance. (Light Co. v. Houghton)

Case law (continued):
Granting of variance in absence
of unnecessary hardship could
not be justified as being only
temporary and limited to threeyear period (Light Co. v.
Houghton)

Where necessary hardship is shown to exist based upon terms of ordinance, as they apply to land, subsequent purchasers as well as original owner may claim hardship in variance petition (Reinking v. Metropolitan Board of Zoning Appeals of Marion County)

Where unnecessary hardship is shown to exist based upon terms of the ordinance as they apply to land, ability to claim hardship in justifying a variance is available to a purchaser as well as the original owner (Fail v. La Porte County Board of Zoning Appeals)

Accessory Use or Structure

Defined only as a structure. Also, wrong word use in definition, "principle" versus "principal" where "principal" is correct. This definition is unnecessarily lengthy and complex.

Appeal

As defined, only applies to the floodplain ordinance, but there are other types of appeals in the overall zoning ordinance.

Building Height

A more common and accepted height measurement is to the top of flat roofs and the median between the peak and eaves on gable, hip, and gambrel roofs.

Community

As defined, only applies to the floodplain ordinance, but there are other uses of "community" in the overall zoning ordinance.

Corridor Greenbelt

Remove the standards (setback distances) from the definition. Also, may want to change SR 37 to the same as I-65 in anticipation of I-69 extension.

Dwelling, Multiple-Family

Condominium is a form of ownership, not a land use or dwelling type. Consider rewording to say "single family attached" and/or "townhome" which seems to be the intent.

Encroachment

As defined, only applies to the floodplain ordinance, but there are other types of encroachment in the overall zoning ordinance.

Existing Construction

As defined, only applies to the floodplain ordinance, but there are other types of existing construction in the overall zoning ordinance.

Family

Definition of family may be subject to legal challenge.

Interior Greenbelt

Remove the standards from the definition. Also, may want to change SR 37 to the same as I-65 in anticipation of I-69 extension.

Long Term Storage

As defined, only refers to waste.

Participating Community

As defined, only applies to the floodplain ordinance, but there may be other uses of "participating community" in the overall zoning ordinance.

Religious Institutions

This definition would prohibit a day care or nursery school, bookstore or café attached to a place of worship, all of which are conventional accessory uses for places of worship.

Sign

The definition is very narrow.

Special Exception

The definition doesn't make clear that the use must be listed as a special exception use in the ordinance. A better definition should be inserted, noting that special exception uses may have unique characteristics that may not always be compatible with other permitted uses in the district.

Structure

Two definitions of structure. The second one uses the word "structure" to define "structure."

Variance, Use

Remove the last sentence. A variance, of any type, runs with the land.

6-101-4 Zoning District Regulations

Why is there a multi-family zoning district for the unincorporated area? Is it actually applied anywhere?

Purpose statements for each district should be revised to more closely reflect and support the intent of each category in the

IC 36-7-4-918.2

A board of zoning appeals shall approve or deny all:

- 1. Special exceptions;
- 2. Special uses;
- Contingent uses;
- 4. Conditional uses; from the terms of the zoning ordinance, but only in the classes of cases or in the particular situations specified in the zoning ordinance. The board may impose reasonable conditions on its approval.

Comprehensive Plan. Regulatory language (such as "shall be limited to sites that...") should not be in the purpose, as this is simply the guiding framework for the regulations. The regulations should be in the body of the district language and/or as footnotes to a schedule of regulations.

B. Front Yard Setbacks

The units of measurement (feet) are not mentioned in the table. The setbacks are virtually the same for A-1 through R-2 and for I-1 and I-2, as such what are the meaningful differences between these districts? The large B-1 setbacks prevent "corner store" type development with parking in the rear. It would be more helpful to have a full schedule of regulations (all yards, heights, lot coverage, etc.) than just a table showing front yards.

C. A-1 Agriculture

The purpose statement should be more clear about protecting and preserving, and discontinue use of words like "accommodate" and "rural character" which are more appropriate for rural residential areas. Does the maximum height apply to barns, silos, grain elevators, and other accessory uses? Wind Energy Conversion Systems (WECS) should be added as a special exception use and a WECS ordinance should be included.

The following permitted uses should be removed:

- Parks and playgrounds
- Child care services
- Public/parochial schools
- Religious institutions
- Federal, state, county, or municipal buildings

The following special exception uses should be removed:

- Child care home
- Child care center
- Public swimming pools
- Nursing homes
- Change Private Club to Conservation Club

D. AC Agricultural Conservation Overlay

The purpose of this district is not clear. It seems to allow for the voluntary prohibition of subdivisions, but otherwise is the same as the A-1. Has anyone used this? It seems this should be significantly modified as a true agricultural preservation tool or deleted.

E. RR Rural Residential

2. There is an alternate maximum height for agricultural accessory buildings in this district, which is much more permissive than the agriculture district, but no similar allowance in the agricultural district.

F. R-1 Single-Family Residential District

Remove hospitals from the special exception uses. Should agriculture be a permitted use in R-1, or should it become a legal non-conforming use? The purpose statement says major subdivisions shall be served by public water and sanitary sewer, but the note below the table of requirements states that a larger lot size is required if lots are not served by public water and sewer. This contradiction should be corrected. In addition, there is no minimum lot size specified in the table for single family dwellings. This should be corrected.

G. R-2 Single-Family District

The purpose statement says major subdivisions shall be served by public water and sanitary sewer, but the note below the table of requirements states that a larger lot size is required if lots are not served by public water and sewer. This contradiction should be corrected. In addition, there is no minimum lot size specified in the table for single family dwellings. This should be corrected. The following permitted uses should be removed:

 Agriculture, except confined feeding operations (should become a legal non-conforming use)

Add the following uses to special exceptions:

Single-family attached dwelling, townhomes

The following special exception uses should be removed:

- Hospitals
- Funeral homes

H. R-3 One and Two Family Residential District

Add the following permitted use:

Single-family attached dwelling, townhome

The following permitted uses should be removed:

• Agriculture (should become a legal non-conforming use)

The following special exception uses should be removed:

- Hospitals
- Funeral homes

I. R-4 Multi-Family Residential District

Add the following permitted use:

Single-family attached dwelling, townhome

Minimum lot size requirements should be added to control density. The purpose statement is not sufficient to accomplish this.

K. B-1 Neighborhood Business District

2. and 3. Consider removing single-family, two-family and multi-family housing as a principal use, and not allowing single- or two-family as a special exception use. Do allow upper story residential for mixed-use projects. Many of the uses allowed (by right or special exception) don't conform to the purpose statement — theaters, contractor's offices, schools, auto sales and repair, and drive-in businesses.

L. B-2 Community Business District

Consider removing small-scale industrial uses from the purpose statement to minimize confusion between commercial and industrial districts, none of the permitted uses are industrial. The list of permitted uses could be streamlined by stating "any permitted use in the B-1 district, plus the following." It might also be appropriate to consider adding a Highway Commercial District that is very narrow in scope and allows hotels, gas stations, drive-in restaurants and similar uses specifically oriented to the highway traveler.

Remove the following uses from special exceptions:

Multi-family dwellings

M. I-1 Industrial

2. The minimum lot size should be reconsidered and made larger. It would also be appropriate to consider requiring public water and sanitary sewer as a condition for this district. The footnote following the lot requirements indicates private systems are acceptable. Retail uses, such as auto sales should be removed. Agriculture, stadiums and auditoriums, hotels and motels, and schools should not be permitted in the Industrial District.

N. I-2 Industrial

- 2. The minimum lot size should be reconsidered and made larger. Public utilities should be a requirement for the establishment of this district.
- 3. The list of permitted uses should be reevaluated. Some should not be permitted at all (agriculture, CAFOs, auto sales); others should be special exception uses (outdoor storage, livestock auctions, freight terminals, supply yards, and truck stops).
- 4. Special exceptions uses like restaurants, hotels/motels, stadiums and auditoriums, kennels and schools are not appropriate in I-2 districts.

O. CO Corridor Overlay District

Despite the length of the District, most of the content is comprised of suggestions and guidelines, essentially unenforceable if the applicant does not choose to cooperate. Very specific requirements should be included for signs, lighting, landscaping, and access management.

- d. Statement of significance Add to SR 37 that it is the future I-69 extension corridor
- 2. Consider expanding the coverage of the overlay district to the entire unincorporated area of Johnson County, not just White River Township. This will be a proactive measure, assuring that new development will be done appropriately and setting the tone for future development.
- 9. These are statements of intent, but not requirements. The separation distances in paragraph e should be reevaluated and expanded in accordance with INDOT standards. Distances should be based on posted speed of the abutting roadway, not a one-size-fits-all requirement. There should be design standards for access roads and other alternatives, as well.

P. PUD Planned Unit Development District

This entire district should be revised to clarify permitted uses, where PUDs may be established, open space requirements, and the procedure to be followed for review and approval. Bonus incentives should be provided to encourage the use of PUD as a desirable development technique.

(5)(b) – consider revising i. to allow for no more than 10% commercial with residential, but greater if a mixed commercial/industrial or commercial/institutional PUD. The ordinance needs to be more clear about what uses may be allowed in a PUD. It seems to suggest that non-residential uses may only be permitted as part of a residential PUD. iv. Also, consider revising the entire PUD chapter to provide for "non-contiguous" PUDs, as was discussed with the Steering

"non-contiguous" PUDs, as was discussed with the Steering Committee, as a means of providing for agricultural and/or natural features preservation. Limit the percentage of ponds and easements that can count toward the open space requirement. There should be specific requirements regarding the size and location of open space to ensure it is meaningful and useable, rather than small, isolated pieces that have not individual significance within the overall development.

II. Procedure (c) – Preliminary iv. Submission Requirements – consider moving the number of copies to the application or Rules of Procedure, rather than ordinance. (d) Final Master Plan Approval – ii. Application and iii. Public Notification – neither of these is required for final approval under Indiana Code. Consider simplifying procedure. Similarly, in vi. there is no need for a second hearing and vote. The whole procedure is more lengthy than necessary and discourages use of the PUD technique.

Q. Special Terrain District

The purpose of this district is unclear. It seems that the PUD District could be written to accommodate development within such areas without going through this extra step. PUDs are ideally suited to providing development flexibility within areas of significant natural features.

R. Flood Control Overlay District

This District should be completely revised and streamlined.

k. Standards for Identified Floodways –new construction should not be permitted within the floodway. No development should be

allowed to increase the regulatory flood by any amount. The ordinance should require a compensatory volume of excavation for any fill occurring within the floodplain.

6-101-5 Development Standards

The addition of graphics would greatly aid the user in understanding some of these regulations (visual clearance, projections in front yards, front setbacks for developed residential areas, etc.)

(C)(2) consider not allowing fences in front yards in residential, business, and industrial districts. Fence heights should be controlled, as well as materials in residential districts.

(G)(2)(c) consider removing yard sale regulations from zoning ordinance and regulating through another ordinance.

H. Performance Standards. Consider deleting these standards. Many are obsolete and are superseded by state or federal regulation. In addition, it is unlikely the county has the instruments or expertise to determine compliance.

6-101-6 Regulations Applicable to Specific Uses

D. The Adult Entertainment regulations are not defensible and should be completely revised.

Wind Energy Conversion Systems (WECS) should be added to this chapter.

6-101-7 Off-Street Parking Regulations

C.5. Minimum parking space size should be reduced from 10 feet wide to nine or nine and a half. By reducing the minimum width by a half foot, the amount of asphalt in a big box (Meijer or Wal-Mart) parking lot can be reduced by nearly an acre. Minimum length could also be reduced to 18 feet instead of 20.

D. Off-Street Parking Requirements

Parking requirements for all uses should be reviewed and revised as necessary to reduce requirements, where feasible. The 130% increase over required parking should be reduced to 120% and the applicant should be required to provide specific evidence of actual need for any amount over 120%.

Deferral of parking should also be allowed, if the applicant can demonstrate that the required amount of parking is not needed, but can be provided if/when the need eventually exists.

E. Off-Street Loading

Consider requiring that loading bays not face a public street

6-101-8 Landscape and Screening Regulations

F. Landscape Materials

Consider encouraging native species and prohibiting invasive species and listing each.

H. Fences and Walls

A fence height of seven feet seems excessive in a residential area. Six is the norm. Other requirements regarding placement on the lot line and finished side facing out should be considered.

I. Performance and Maintenance Bonds

Consider moving the dollar amount of the bonds to another ordinance that can be updated annually. In addition, one hundred percent of the estimated cost may not be adequate to cover the actual costs, including administration and increased cost over time. The bond amount should be up to 110 or 125% of the estimated costs. The bonding (performance guarantee) language should be in the Administration and Enforcement section of the ordinance and just referenced here.

6-101-9 Signs

A. Purpose

The words "advertise business" should be deleted from the purpose statement. Signs are intended to identify, not to advertise. This can cause clutter and unnecessary distraction along a roadway.

E. Non-Conforming Signs

4. Variances are intended to run with the land, they do not expire.

H. Temporary Signs

4. Garage Sale Signs – consider regulating yard and garage sales outside of the zoning ordinance.

I. Illumination of Signs

LED displays on signs, especially billboards, should be addressed in the ordinance. These are becoming widespread in many

locations. Their brightness at night, movable messages, and multiple displays can be a cause for concern.

6-101-10 Non-Conforming Uses

(B)(1)(b) Recommend ending after the word "enlarged." Expansion and enlargement should not be permitted in the floodway.

Recommended zoning changes to implement the comprehensive plan

- Allow flexibility of setbacks to accommodate natural features
- Permit mixed-use development
- Consider use of Form-Based Code for certain character areas
- Revise the corridor overlay district to create specific requirements for landscaping, signs and access management
- Prohibit new development in the floodplain
- Prohibit expansion of non-conforming uses in the floodplain
- Create tree preservation incentives or requirements
- Require wetland mitigation at a higher level than state or federal standards
- Add cottage industries as special exception uses in agricultural districts and develop standards for them
- Revise the PUD regulations and incorporate provisions for "non-contiguous" PUDs as a means of protecting agricultural land and significant natural features
- Develop bike parking standards
- Develop compact car parking standards
- Encourage xeriscaping (may raise weed control ordinance concerns to be addressed)

Xeriscaping

Xeriscaping refers to landscaping in ways that reduce or eliminate the need for supplemental irrigation. It is promoted in areas that do not have easily accessible supplies of fresh water, and is gaining acceptance in other areas as climate patterns shift.

B. Subdivision Control Ordinance

6-102-2 Definitions

Consider moving the definitions section to the end.

Definitions of the same words aren't consistent between the zoning ordinance and the subdivision control ordinance, revise for consistency.

Is the Administrator in the subdivision control ordinance the same as the Director in the zoning ordinance? Again, consider revising for consistency.

The subdivision definitions contain policy statements. These should be revised to be definitions and the policies moved to 6-102-3(B)(1).

6-102-3 Application and Approval Process

- (B)(1) Classification of Land Divisions Consider moving the policy statements from the definitions to this section.
- (B)(2) PUD Process Required If a subdivision is following zoning and does not require rezoning then it shouldn't qualify for a PUD regardless of size. Consider removing this provision.
- (D)(2) Preliminary Plat Application Requirements d. consider moving the number of copies to the application or rules of procedure.
- (9) Approval of Construction Plans do they have to install improvements before final, or just bond for them? Make this more specific.
- (10)(E) Minor Subdivisions (2)(d) consider moving the number of copies to the application or rules of procedure. (6) consider moving the number of copies to the application or rules of procedure. (F)(2)(e) consider moving the number of copies to the application or rules of procedure.

What procedure is used for combining lots or splitting lots for agriculture/transfer of ownership without building? Consider developing process for these.

6-102-4 Design Standards

(8) Why would the sight triangle restrictions be in covenants? Covenants are enforced privately, but this is a public safety issue and should be able to be enforced publicly. Move to a requirement, not in required covenant language.

6-102-5 Improvements and Installations

Consider moving construction details to a construction specifications document that can be changed outside of the zoning amendment process and refer to the construction standards in the subdivision control ordinance.

Recommended subdivision control ordinance changes to implement the comprehensive plan

- Consider reviewing the storm water, on-site wastewater treatment, and pavement options for "greener" alternatives
- Consider developing standards for conservation subdivisions
- Consider developing standards for trail construction
- Consider requiring 10% open space in all residential major subdivisions, and a 6% active recreation requirement as part of the open space
- Consider requiring professionally managed Homeowners Associations