CITY OF PORTLAND URBAN REVITALIZATION PLAN 2016

Prepared by:
PLAN 401 Ball State University Urban Planning Studio

EST. PORTLAND 1837
INDIANA

Prepared in 2016 by:

Mary Banning
Jade Broadnax
Brandon Burgoa
Megan Clevenger
Dustin House
Joshua Law
Austin Lawrence
Carley Lemmon
Jasmine Mason
Zoie Motycka
Matt Skelly
Sam Wiser
Hailey Woods

PLAN 401 . Ball State University . College of Architecture and Planning . Dr. Michael Burayidi

TABLE OF CONTENTS

PROJECT RRIEF

The Urban Planning Department at Ball State University collaborated with the City of Portland, IN to create an urban revitalization plan for the city. The project was undertaken by fourth year planning students under the direction of Professor Burayidi. Using the rational comprehensive planning process in Figure 1, students identified problems, determined goals and objectives, as well as brainstormed alternative strategies to address these issues.Each strategy was evaluated on effectiveness and feasibility, leading to the selection of preferred strategies. Through community forums, public surveys, and statistical data, students created an action plan equipped with prioritized initiatives, design guidelines, and sources of funding for the implementation of the projects. Starting the priority action projects, Portland will have a variety of methods with which they can beautify the city and improve overall quality of place.

METHODOLOGY

The Rational Comprehensive Planning (RCP) process was used in the study. The process is divided into three distinct phases that correspond to various action steps in urban planning methodology. The first stage is comprised of problem identification and determination of goals and objectives. In other words, the most basic and preliminary steps to any plan requires the identification of the key issues that reflect the values and objectives of the client. The second stage corresponds to identifying and then evaluating alternative strategies, and then determining preferred strategies. The third stage involves the implementation and evaluation of the proposed strategies and initiatives.

To begin the initial stages of the second phase, we identified and toured three cities that were successful examples of vibrant communities: Danville, Zionsville, and Carmel. In comparison to Portland, each exhibited certain aspects that could be emulated by Portland in its redevelopment of the project area. We examined the precedent cities for connectivity, beautification and streetscaping, housing, as well as the liabilities of the cities that impacted the full realization of their potential. Additionally, we created and conducted surveys of consumer and business owners to gain a better understanding of the community. Along with this, we also surveyed the general public to obtain their perspective on the community and its development. The results of these studies can be found in Appendix A.

Figure 1: The rational comprehensive planning process.

The issues identified were categorized into three areas of attention: design and physical improvements, policy & regulation. The design issues were those that had a spatial component to them. Policy problems required a non-physical solution but could be addressed through incentives, directives or programs that will address the problem. The regulatory category included issues that require the passing of an ordinance or rule to mitigate the problem.

Implementation of the projects was grouped under priority action projects and medium to long term proposals. The action projects are the priority action projects that need to be addressed almost immediately. These projects were those for which funding was readily available, had widespread community support and had catalytic impact on the other projects. The mid to long term projects are more costly to implement and require community organization to jump start the process.

PRORITY ACTION PROJECTS

This section includes the Short Term Priority Action Projects. This section will include the following projects: Theme and Redevelopment Logo, Gateways, Complete Streets, Alleyway Revitalization, Façade Improvement, Economic Improvement District, Downtown Events and Funding Sources for said projects.The action projects should be addressed almost immediately and will provide a catalytic impact for the community and other projects

THEME AND REDEVELOPMENT LOGO

Portland should create a theme for the revitalization project area to help galvanize the community and spur the area's development. The theme should be one that is both aspirational and inspirational. It should also be futuristic. Once selected, the theme should inform all decisions that are made with respect to the redevelopment of the urban area. An example of such a theme could be Portland: Where People Come to Reconnect.

We also suggest that the city select a logo for use in promotion of the project area and on all correspondence. A logo is a symbol that is visually recognizable and given that the city has a recognizable bridge on the Salamonie River leading to the city from the south, a bridge could be used as such a logo. This is depicted in Figure 2 below.

Figure 2: Proposed logo for the City of Portland, IN.

GATEWAYS

Gateways are essential to any thriving community as they promote a positive community identity while also giving a positive impression for residents, visitors, and future investors. Gateways provide the first impression of people visiting the community and can thus be used to communicate a positive community identify. Gateways are also used as a good first impression for future investors. We are proposing that gateways be strategically located at the corner of W. Votaw Street and Industrial Drive, as well as at N. Meridian and Industrial Drive as shown in Figures 3 and 4.

WHAT THIS WILL INVOLVE

The gateways initiative will consist of adding three large gateways in strategic locations around Portland. Each gateway will be 40 feet long by 8 feet tall. These gateways will transform the entrance into Portland from the current gateways and make the city more appealing to both visitors and residents alike.

Figure 3: Location of gateway at W. Votaw Street and Industrial Drive.

The first strategic location for the gateway sign is on the corner of Industrial Drive and Votaw Street. This location consists of two gateways which are located at the first intersection into the city from the west. This allows residents and visitors to know when they are entering Portland. These gateways also clearly represent the turn onto Industrial Drive for both employees and future investors.

Figure 4: Location of gateway at North Meridian and Industrial Drive.

The second strategic location is on the North side of the city. Located on the corner of Meridian Street and Industrial Drive, this gateway has two important functions. The first functionality of the gateway is to hide a vacant parking lot on the east side of the intersection and to enhance the surrounding visual aesthetics. The second functionality is to clearly identify the entrance onto industrial Drive to employees and investors.

COST ESTIMATES

The cost of each of the gateways will be influenced by the material used to create them. The Options include the following:

Option 1a: Concrete Only	$8,500
Option 1b: Concrete w/ Brick Face (Additional $5,500)	$14,000
Option 2: Brick Only	$18,000
Option 3: Framing w/ Brick	$35,000
Option 4: Steel Truss w/ Outer Level Brick	$70,000

Figure 5: Dimensions of Gateway Concept

COMPLETE STREETS

Complete Streets are streets that are not just for cars but are designed and operated to enable safe access for all users, including pedestrians, bicyclists, motorists and transit riders of all ages and abilities. Complete Streets make it easy to cross the street, walk to shops, and bicycle to work.

WHY THIS IS IMPORTANT

A main concern of Portland residents was with the speed on Meridian Street and the over design of the major arterial through the downtown. Currently, Meridian Street is a 4-lane state highway with a turning lane and parallel parking with street trees that infringe on the facades of the buildings and are a nuisance to pedestrians. The concept of a complete street is about being inclusive—recognizing that quality of life requires more than four-lane arterials and chip sealed avenues.

Figure 6: Existing conditions on Meridian Street.

WHAT THIS WILL INVOLVE

We are proposing that Meridian Street and at least three other streets, Main Street, Water Street, and Walnut Street be converted to complete streets. Complete Streets implementation does not require an immediate retrofit of all streets, but rather

Figure 7: Addition of complete street design elements.

incremental changes to the built environment resulting from a shift in everyday planning and engineering practices. By first converting Meridian Street to a complete street, Portland can set the tone for the remainder of the streets and future development that make the city a more walkable and sustainable community.

Figure 8: Street view of Meridian street following redesign.

Elements that we are proposing to be incorporated with the new design of Meridian Street (State Highway 27) include angled parking to replace the parallel parking, extension of sidewalks, bike lanes, set back tree and landscaping designs, focused outdoor seating, and an overall condensed lane layout as seen in the before and after images in Figures 6, 7 and 8. An additional advantage of angled parking is that 19 additional stalls per block could be added to the street.

Raised Crosswalks

Raised and colored crosswalks could also be added to Meridian Street to further decrease speed and make the street pedestrian friendly. The cross walks should be as wide as the intersection crossing and long enough in direction of travel to allow for both front and back wheels on the raised crosswalk. Please refer to Figure 9.

Street Tree and Landscaping Recommendations

For the landscaping of Meridian Street, we are proposing two trees and shrubs, selected for their suitability for the local environment. The shrubs are the New Jersey tea shrub, and the Variegated Japanese Seige. The trees are the American Hornbeam and Freeman Maple. These trees and shrubs are both salt and drought resistant and hardy species that are tolerant to the Midwestern climatic conditions. Other street trees and landscaping options can be found in Appendix B along with the dimensions of the trees and shrubs.

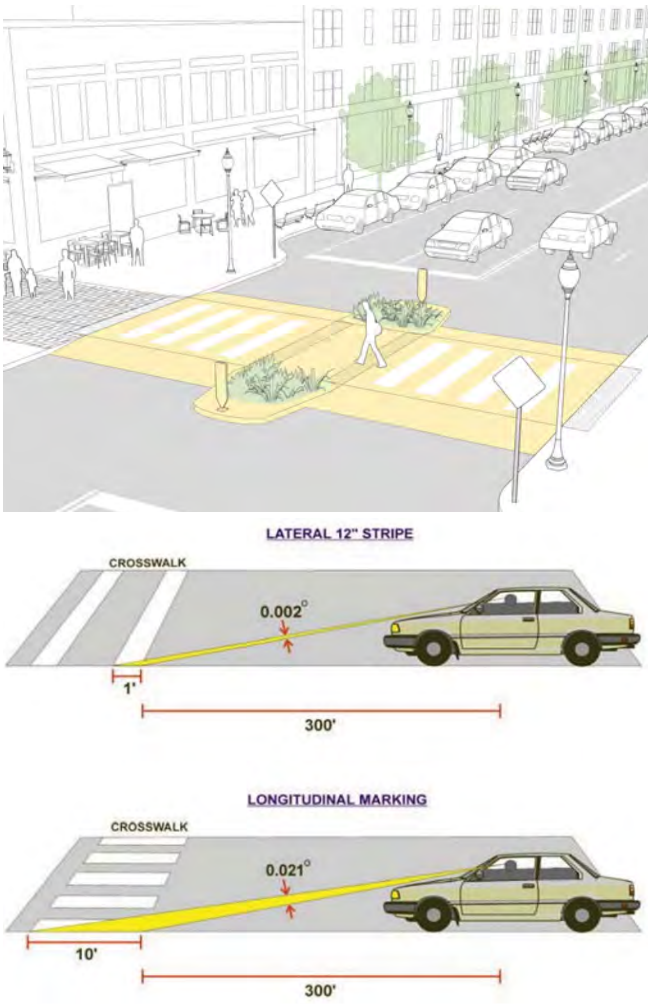


Figure 9: Raised crosswalks

In addition to Meridian Street, some cross streets could be transformed into complete streets as well. Water Street, Walnut Street, and Main Street have been identified for such a redevelopment. The proposed redesign will provide for a wider sidewalk to enable it to accommodate bicyclists, decorative shrubs and landscaping, signage and wayfinding, directional signs and energy efficient lighting. Please Refer to Figure 10. Figures 11, 12

and 13 also show how the public sphere can be enhanced with the addition of outdoor seating along the sidewalk to encourage people to linger and patronize businesses in the downtown.

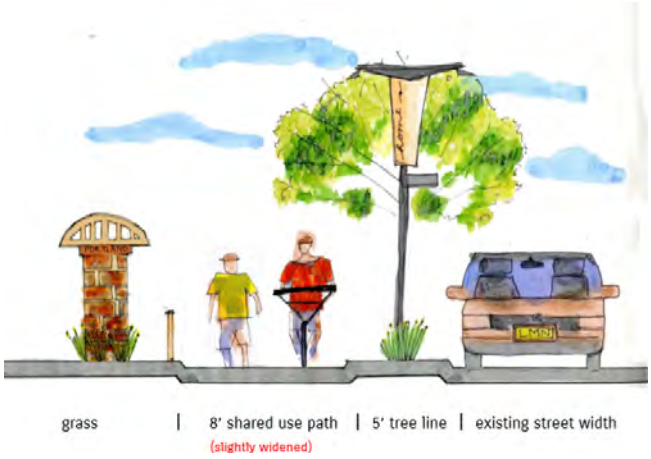


Figure 10: Amenities to be provided on cross streets.

Landscaping of Cross Streets

We also recommend two trees and shrubs for use in the landscaping of the cross-streets. These are shown in Appendix B and are: American Hornbeam, Autumn Spire Red Maple, Virginia Sweetspire and Bluebeard.

Figure 12: 121 E. Walnut street following redesign.

Maintenance Plan for Trees and Shrubs

The following plan is recommended for the maintenance and upkeep of the trees and shrubs:

- American Hornbeam: Organically rich soil, sun or shade growth, rare pruning, regular irrigation.
- Autumn Spire Red Maple: Does well in periodic flooding, prune in summer, low maintenance tree, do not plant under power lines.
- Virginia Sweetspire: Six hours of sun each day, well-drained soils, best suited in mass plantings.
- Bluebeard: Full sun or very light shade, water regularly and thoroughly until plant established, then water moderately

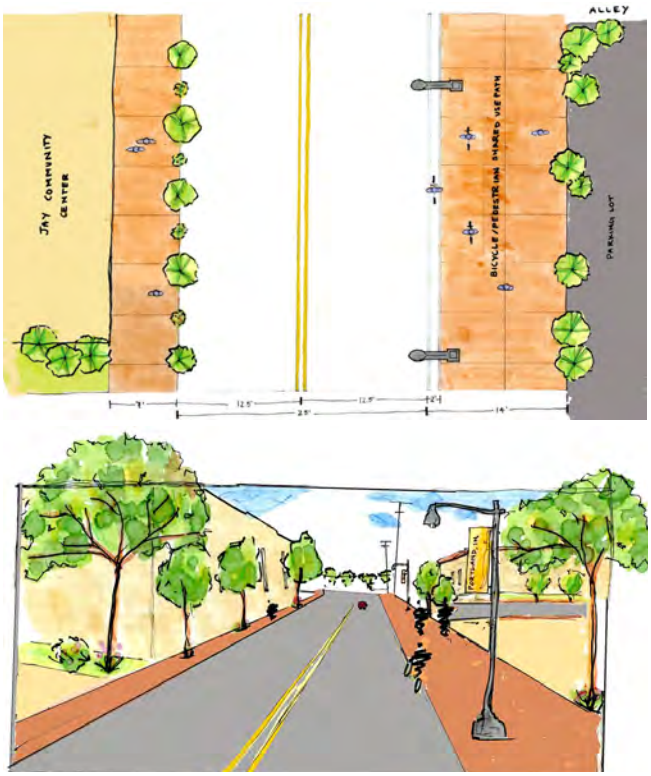


Figure 11: 118 E. Water Street after redesign as complete street.

FUNDING AND ASSISTANCE SOURCES

INDOT offers a multitude of options for funding infrastructure improvements, current or historic. They include the following:

- Group III Local Road and Street Fund

o Up to $3,000,000 for non-INDOT controlled roads

o All arterials, urban collectors, rural major collector streets

• Transportation Enhancement Program assistance

o Provide bike/ped facilities, landscaping, historic preservation/rehab, and education for bike/ped safety

o Funding excludes maintenance, operation, and staffing costs

Other sources of funding are:

• Transportation Alternative Program (TAP)
• Federal Highway Administration (FHWA)
• Federal Transit Administration (FTA)
• Congestion Mitigation and Air Quality Improvement Program (CMAQ)
• Surface Transportation Program (STP)
• Highway Safety Improvement Program (HSIP)
• National Highway Performance Program (NHPP)
• Federal Lands and Tribal Transportation Programs (FLTPP)
• See also: http://www.pedbikeinfo.org/Case studies and funding database
• See also: http://www.fhwa.dot.gov/environment/bicycle_pedestrian/

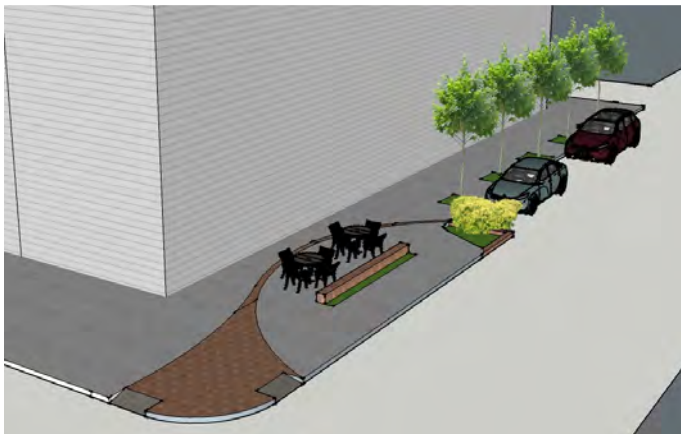


Figure 13: Intersection of Walnut Street and Meridian Street

ALLEYWAY REVITALIZATION

In addition to the redesign and retrofitting of Meridian Street and the cross-streets, alleys within the project area should be improved to enhance the quality of the downtown experience, activate the alleys and diversify the public space in downtown Portland. Activating the alleys will contribute to the overall beautification and revitalization of downtown Portland, increase public spaces, contribute to the city's liveliness and bring new opportunities to the city.

WHAT THIS WILL INVOLVE

Design recommendations for achieving this goal include the use of above ground planters, living walls, bollards, mid-block crossing, shared alleys, paving, signage/wayfinding, public art, lighting, seating, and the provision of bike racks, among others. Please refer to appendix C for more details.

SUITABILITY ANALYSIS

An examination of the alleys in the downtown led us to classify them into three categories for purposes of improving the public space: high suitability, medium suitability and low suitability as shown in Figure 14.

Figure 14: Suitability of Alleyways

High Suitability alleys are colored green. These alleys are wide, the surrounding context is appropriate because they are close to a destination point that draws large numbers of people to the vicinity. Medium suitability alleys are colored yellow. These alleys also are located near activities that draw people to the area but require a little more preparation in terms of paving or other structural modifications before they are redeveloped. Low suitability alleys are colored red and these typically have smaller widths and are less suitable for retrofitting.

Figure 15: Conceptual Ideas of Reactivated Alleys

Figure 16: Conceptual Ideas of Reactivated Alleys

FAÇADE IMPROVEMENTS

Another action project that can add to the quality of the downtown environment and enhance quality of place in Portland is through façade improvements. Façade improvement projects have the potential to extend the life of historic buildings, they also have multiplier impacts in increasing sales and the value of these properties.

The goals of the façade improvement initiative then are to:

- Incentivize appropriate remodeling of building façades;
- Address the physical and visual desires and needs of the community;
- Encourage businesses to continue to look to Portland to invest; and
- Inspire future revitalization in the central business district (CBD) over time.

WHY THIS IS IMPORTANT

Incentivizing remodeling of buildings encourages property owners in the business district to participate in sprucing up the city. Addressing the concerns of the residents of the city of Portland through aesthetic changes can have many benefits, including improving the visual, spatial and physical form of space and helps keep the city of Portland feeling like home.

Figure 18: Contrasting images of a façade improvement in downtown Portland, IN.

Figure 19: Suggested façade improvement for a building in downtown Portland, IN.

WHAT THIS WILL INVOLVE

Figures 17, 18 and 19 show how a façade improvement project can help preserve and improve the brick exterior (some historic structures must retain the brick exterior but consider using limestone for others). The windows of vacant units are covered to keep property appealing to buyers. A long-term goal is to renovate the vacancies and add new windows. Small hedges or green landscaping can also be added along the walls facing the street to help prevent vandalism and visual blight.

FUNDING AND ASSISTANCE SOURCES

There are several sources that the city can turn to for funding and assistance of the façade improvements program. They include the following:

- National Trust for Historic Preservation - http://www.nationaltrust.org/index.html
- Main Street National Trust for Historic Preservation - http://www.mainstreet.org/
- National Register of Historic Places - http://www.cr.nps.gov/nr/
- Preserve America - http://www.preserveamerica.gov
- State and Entitlement CDBG contacts - http://www.hud.gov/offices/cpd/communitydevelopment/programs/contacts/index.cfm
- Preservation Directory - http://www.preservationdirectory.com/
- Heritage Preservation - http://www.heritagepreservation.org/
- LISC Indianapolis - http://liscindianapolis.org/what-we-do/economic-development/small-business-commercial-facade-rebate-program/

SUMMARY OF RELEVANT CASE STUDIES

As examples the City of Beloit, WI provided a grant of $25,000 to improve the façade of Bagels & More. The impact was a 10% increase in first-time customers and a 20% increase in sales. Similarly, using a 50/50 grant matching program the city of Monroe, WI provided $3,500 for the façade improvement of Sequels. The result was a 15-25% increase in first-time customers and a 10-15% increase in property values. When the city of Kendallville, IN provided $7,887 in a 50/50 matching grant for Weible's Paint & Wallpaper, local contractors completed 88% of the work adding to the multiplier effect of job creation in the city, 96% of the materials were supplied locally and there was a boost in customer satisfaction of the business by 96%.

Figure 17: Before and after images of façade improvement in Portland, IN.

ECONOMIC IMPROVEMENT DISTRICT

An Economic Improvement District (EID) allows businesses in an area to levy additional taxes on themselves and use the resulting money to fund projects in the district.

WHAT THIS WILL INVOLVE

We are proposing the establishment of an Economic Improvement District (EID) for the purpose of assisting in the redevelopment of the core area of the city. The boundaries of the EID could be as shown in Figure 20. This tentative area for the EID is 172.8 acres, or 6% of the city's 2,975 acres. With a self-assessed tax of 5% the EID could raise an additional $10,855 that will be tailored specifically for improvements in the area.

Figure 20: Boundaries of an Economic Improvement District (EID).

Indiana Code § 36-7-22 allows municipalities to establish EIDs. It is a financing structure that allows business district improvements via additional tax assessment. Formation is based on a referendum of a majority of property owners in the district to determine if it is acceptable. Once it is established additional taxes can be assessed with the money raised used to fund projects that benefit the district and the businesses within it. An EID board is formed to govern and manage projects within the district.

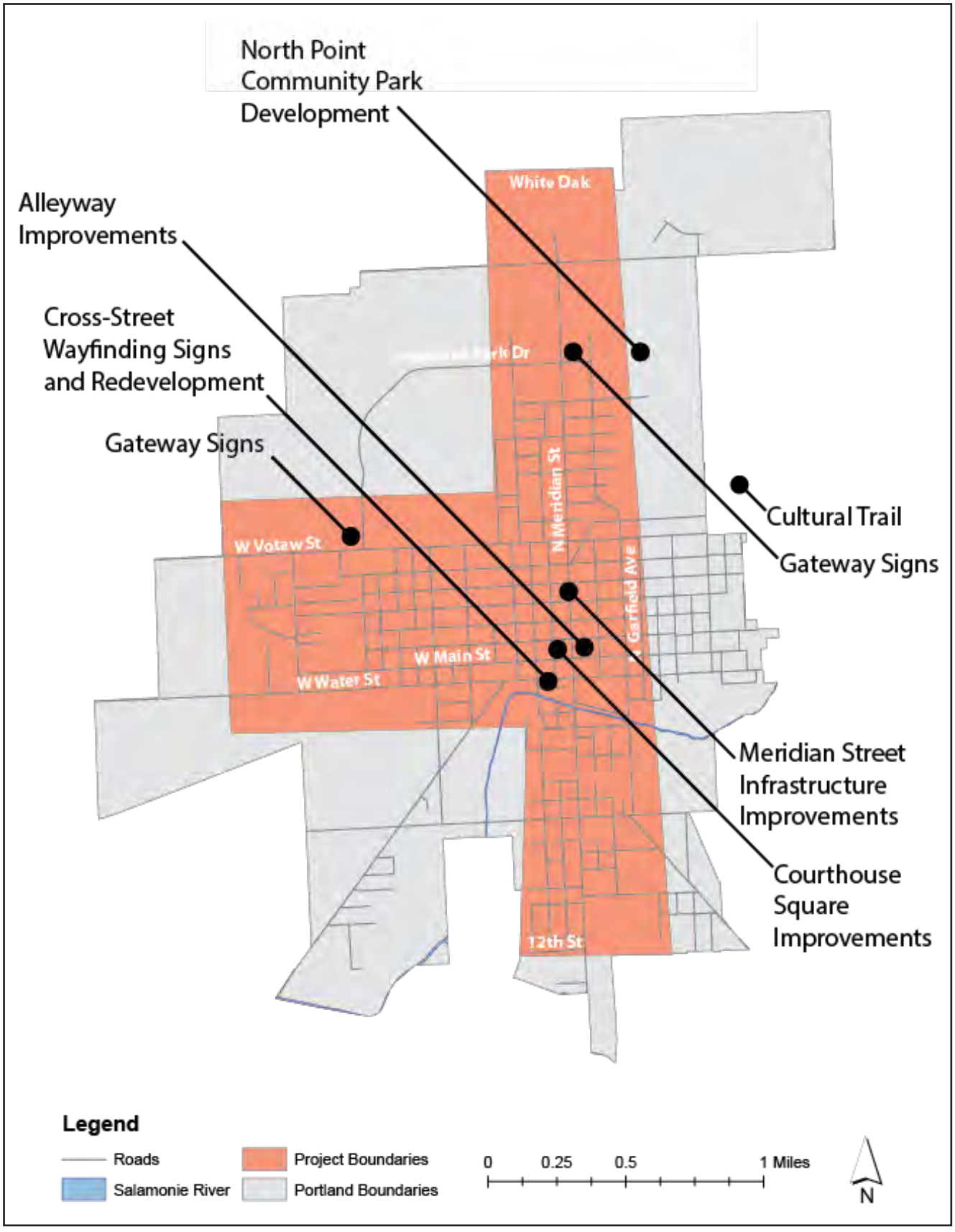
The process for forming an EID consists of a petition of property owners to the city which must include the boundaries of the district, description of each parcel and name and address of owner, detailed description of improvement projects and their expected benefits, a plan for assessment revenue in paying for projects, formula for determining the percentage of the total benefit to be received by each parcel within the district, proposed lifespan of the district, and the names of board members. A public hearing must then be held to discuss the formation of the EID and once approved by the council, it goes into effect.

The board's is the administrative body of the EID and controls the budget and programming as well as implementation of projects in the district. Other duties include tourism attraction, advertising for events and attractions, public and infrastructure improvements, as well as business recruitment, development and retention.

Summary of Design and Physical Improvement Proposals

Figure 21 shows all the project proposals that have a spatial component. In sum, they include a North Point community park, alleyways improvement, a cultural trail, complete streets for Meridian and three cross-streets, and improvements to the Courthouse Square.

Figure 21: Summary of locations for the physical and design proposals.(Following Page)


North Point
Community Park
Development
Alleyway
Improvements
Cross-Street
Wayfinding Signs
and Redevelopment
Gateway Signs
Cultural Trail
Gateway Signs
Meridian Street
Infrastructure
Improvements
Courthouse
Square
Improvements
White Oak
N Meridian St
Garfield AVE
W Votaw St
W Main St
W Water St
12th St
Legend
Roads
Salamonie River
Project Boundaries
Portland Boundaries
0
0.25
0.5
1 Miles
N

DOWNTOWN EVENTS

Events are a way to bring people to the downtown and increase foot traffic. Regular events should be organized throughout the year so that people are brought to the downtown and to help patronize downtown businesses. Table 1 provides examples of events that have the potential to bring people to downtown Portland.

Farmers Markets	Film Festival
Arts and Craft Shows	Educational Events
First Fridays	Local Celebrity Workshops
Charity Races	City Clean Up
Temporary Galleries in Peranent Place	Themed Festivals
Friday Night Open House	Yoga Lunches

Table 1: Examples of downtown events.

FUNDING SOURCES FOR SHORT TERM ACTION PROJECTS

The following are possible funding sources for the short-term projects discussed. They include: Current Revenue; Special Assessment; Community Foundation; Fundraising; Grant Money; and from the Community Development Block Grant funds. Details are provided below in Tables 2 and 3.

General Fund Revenue - Indiana Gateway Budget			
2012	$3,285,370	**2015**	$3,338,800
2013	$3,239,398	**2016**	$3,411,319
2014	$3,154,891	**2017**	$3,618,458

Economic Improvement District - City Council and EID Board
(Property Tax Revenue) * (% Acreage) * (Proposed Mill Rate) = (Additional Revenue from EID)
$3,618,458 * .06 * 0.05 = $10,855.37

Table 2: Potential sources of tax revenues for financing projects.

Special Assessment

Local government assesses property owners who benefit from streetscape and infrastructure improvements.

Portland Foundation		
Category	*2014 Grants*	*1951-2014 Cumulative*
Scholarships	$314,195	$4,874,261
Arts & Culture	$130,482	$2,842,065
Community Development	$137,204	$2,719,851
Education	$147,988	$1,377,960
Health & Human Services	$63,678	$1,292,099
Youth	$104,465	$1,149,065
Totals	$898,012	$14,255,301

Table 3: Portland Foundation Expenditures 1951 – 2014.

Community Memorial Programs

Dedicating public amenities that may be personalized to create a better sense of community, pride, and identity. The Danville Memorial Tree Program was created to honor the patron with a $250.00 engraved brick to raise money for the community. The Avon Town Hall and Park Brick Paving Project is a similar funding program, you donate $45 towards a customized brick that will be placed along the walkway to town hall. Other similar programs that raise community funding include the Indianapolis Motor Speedway Commemorative Bricks and Artist Competitions.

MEDIUM TO LONG TERM PROPOSALS

This section includes the Medium to Long Term Proposals. This section will include the following projects: Business Attraction and Potential, Destination Points, Utilization of Upper Floors of Buildings, Civic and Cultural Amenities Bioswales and Rain Gardens, Brownfields Remediation and Funding Sources for the proposals. These proposals require a 3 to 10 year implementation duration. The proposals need more funding to implement and more community organization to jump start the process.

BUSINESS POTENTIAL AND ATTRACTION

Based on a thirty-minute drive time, we demarcated a buffer using ESRI's Business Analyst to determine the business leakage for the area. The analysis also shows the new businesses that have the potential to thrive in Portland. Figure 22 and 23 and Tables 4, 5 and 6 display this information. The analysis shows that the top three businesses with a good potential in Portland are motor vehicle and parts dealers, food and beverage stores, and general merchandise.

We also identified the businesses that would most appeal to the millennial population in Portland. These are provided in Table 7. While there is currently a small population of the millennial cohort and the creative class in the city, the data show a small uptick in the millennial population in the last five years (see Tables 7 and 8). Increasing the businesses that appeal to millennials could further grow these cohorts in the city.

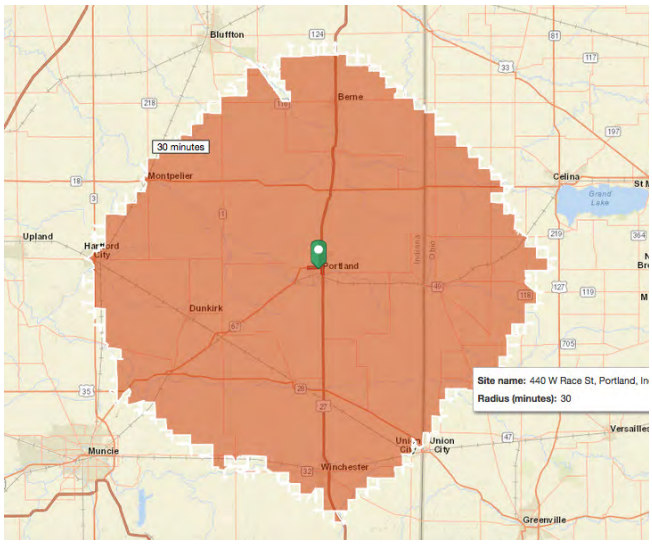


Figure 24: Thirty-minute drive tie from Portland and business potential.

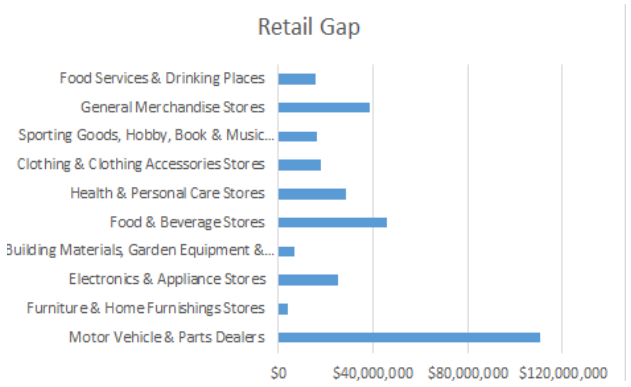


Figure 24: Retail leakage (an indication of business potential) from Portland within a thirty-minute drive time.

Summary Demographics						
2016 Population						74,897
2016 Households						27,937
2016 Median Disposable Income						$36,278
2016 Per Capita Income						$21,186
Industry Summary	**NAICS**	**Demand (Retail Potential)**	**Supply (Retail Sales)**	**Retail Gap**	**Leakage/Surplus Factor**	**Number of Businesses**
Total Retail Trade and Food & Drink	44-45,722	$845,101,280	$666,668,538	$178,432,742	11.8	520
Total Retail Trade	44-45	$775,704,600	$613,154,549	$162,550,051	11.7	387
Total Food & Drink	722	$69,396,679	$53,513,988	$15,882,691	12.9	133
Industry Group	**NAICS**	**Demand (Retail Potential)**	**Supply (Retail Sales)**	**Retail Gap**	**Leakage/Surplus Factor**	**Number of Businesses**
Motor Vehicle & Parts Dealers	441	$181,653,474	$71,184,305	$110,469,169	43.7	57
Automobile Dealers	4411	$146,596,762	$43,224,927	$103,371,835	54.5	26
Other Motor Vehicle Dealers	4412	$24,542,250	$9,013,955	$15,528,295	46.3	9
Auto Parts, Accessories & Tire Stores	4413	$10,514,462	$18,945,423	-$8,430,961	-28.6	21
Furniture & Home Furnishings Stores	442	$18,394,013	$14,171,386	$4,222,627	13.0	23
Furniture Stores	4421	$12,193,994	$10,111,598	$2,082,396	9.3	13
Home Furnishings Stores	4422	$6,200,019	$4,059,788	$2,140,231	20.9	10
Electronics & Appliance Stores	443	$37,027,499	$11,563,014	$25,464,485	52.4	18
Bldg Materials, Garden Equip. & Supply Stores	444	$37,792,643	$30,781,348	$7,011,295	10.2	44
Bldg Material & Supplies Dealers	4441	$31,128,389	$22,806,751	$8,321,638	15.4	34
Lawn & Garden Equip & Supply Stores	4442	$6,664,254	$7,974,598	-$1,310,344	-9.0	10
Food & Beverage Stores	445	$137,594,507	$91,808,386	$45,786,121	20.0	47
Grocery Stores	4451	$126,097,317	$78,019,630	$48,077,687	23.6	25
Specialty Food Stores	4452	$4,781,572	$5,767,052	-$985,480	-9.3	12

Table 4: ESRI Business Analyst of Business Leakage and Surplus from Portland

Health & Personal Care Stores	446,4461	$56,552,556	$27,739,443	$28,813,113	34.2	22
Gasoline Stations	447,4471	$58,368,664	$106,883,691	-$48,515,027	-29.4	38
Clothing & Clothing Accessories Stores	448	$26,828,079	$8,614,055	$18,214,024	51.4	20
Clothing Stores	4481	$16,440,703	$3,857,687	$12,583,016	62.0	12
Shoe Stores	4482	$4,541,871	$556,459	$3,985,412	78.2	2
Jewelry, Luggage & Leather Goods Stores	4483	$5,845,506	$4,199,908	$1,645,598	16.4	7
Sporting Goods, Hobby, Book & Music Stores	451	$23,453,211	$7,162,535	$16,290,676	53.2	22
Sporting Goods/Hobby/Musical Instr Stores	4511	$18,784,376	$6,637,786	$12,146,590	47.8	20
Book, Periodical & Music Stores	4512	$4,668,835	$524,749	$4,144,086	79.8	2
General Merchandise Stores	452	$146,276,577	$107,539,910	$38,736,667	15.3	27
Department Stores Excluding Leased Depts.	4521	$113,591,235	$93,563,902	$20,027,333	9.7	4
Other General Merchandise Stores	4529	$32,685,342	$13,976,008	$18,709,334	40.1	23
Miscellaneous Store Retailers	453	$41,161,482	$13,278,711	$27,882,771	51.2	64
Florists	4531	$1,437,155	$2,590,648	-$1,153,493	-28.6	19
Office Supplies, Stationery & Gift Stores	4532	$8,196,492	$1,478,083	$6,718,409	69.4	8
Used Merchandise Stores	4533	$3,981,453	$2,122,498	$1,858,955	30.5	17
Other Miscellaneous Store Retailers	4539	$27,546,382	$7,087,481	$20,458,901	59.1	20
Nonstore Retailers	454	$10,601,894	$122,427,766	-$111,825,872	-84.1	5
Electronic Shopping & Mail-Order Houses	4541	$6,182,404	$1,063,275	$5,119,129	70.7	2
Vending Machine Operators	4542	$815,873	$0	$815,873	100.0	0
Direct Selling Establishments	4543	$3,603,617	$121,364,491	-$117,760,874	-94.2	3
Food Services & Drinking Places	722	$69,396,679	$53,513,988	$15,882,691	12.9	133
Full-Service Restaurants	7221	$32,075,765	$30,365,406	$1,710,359	2.7	82
Limited-Service Eating Places	7222	$31,208,995	$20,323,395	$10,885,600	21.1	30
Special Food Services	7223	$1,844,893	$543,765	$1,301,128	54.5	3
Drinking Places - Alcoholic Beverages	7224	$4,267,027	$2,281,422	$1,985,605	30.3	19

Table 5: ESRI Business Analyst of Business Leakage and Surplus from Portland

Industry Subsector	Millennial-Oriented Approach	Retail Gap
Motor Vehicle & Parts Dealers	Used cars	$110,469,169
Furniture & Home Furnishings Stores	Used furniture stores & easy-to-assemble furniture options	$4,222,627
Electronics & Appliance Stores	Used & energy-efficient appliances	$25,464,485
Building Materials, Garden Equipment & Supply Stores	Sufficient off-brand tools, using technology to teach how to use tools and equipment, & checking out lawn care items	$7,011,295
Food & Beverage Stores	Local grocery stores & farmers markets	$45,786,121
Health & Personal Care Stores	Organic options	$28,813,113
Clothing & Accessories Stores	Fairtrade/ethically-made clothing stores	$18,214,024
Sporting Goods, Hobby, Book & Music Stores	Record stores, used bookstores, art supply store	$16,290,676
General Merchandise Stores	Self checkout options, local stores	$38,736,667
Miscellaneous Store Retailers	Used clothing stores	$27,882,771
Food Services & Drinking Places	Beer gardens, cafes, local restaurants, ice cream shops	$15,882,691

Table 6: Millennial oriented business potential in Portland.

Year	City Population	Millennial Population	Percentage of City Population
2010	6,500	858	12.0%
2011	6,536	943	14.4%
2012	6,466	906	14.0%
2013	6,537	1,029	15.7%
2014	6,408	1,021	15.9%

Table 7: Millennial population in Portland.

Year	Total Civilian Employment	Employment in Creative Class	Percentage of Civilian Employment
2010	2,984	18	0.6%
2011	2,911	14	0.5%
2012	2,933	40	1.4%
2013	2,953	39	1.3%
2014	2,857	38	1.3%

Table 8: An estimate of the creative class in Portland.

DESTINATION POINTS

From the public meeting and survey results, residents stated their concerns about lack of destination points and places of interest. The Destination Points initiative aims to create and improve popular locations and transform empty public spaces into quality atmospheres. Through placemaking efforts and sustainable design these locations are intended to enhance desirability in order to increase development and entice patrons to live in Portland. This initiative provides a framework that guides vacant and underutilized spaces into successful destination points. When applied, these actions encourage improvements that could transform the city into a more vibrant community that includes adaptable destination points unique to the City of Portland.

WHY THIS IS IMPORTANT

Currently there is a vacant property on the north end of Portland at the east end of the intersection of Industrial Drive and Meridian Street. The unused parcels and parking lot sit empty and mark the area as less desirable. Also the minimal placemaking efforts at the Courthouse Square discourage public use and deter pedestrians from visiting the area.

Turning these potential spaces into destination points could provide new experiences and places for people to visit and enjoy. As destination points are added and improved, the surrounding property markets would also rise. Market changes could encourage additional development/improvements while creating a greater quality of life for Portland residents.

Furthermore, additional destination points could serve as quality "third spaces" separate from one's place of residence and work. Through unique design elements and memorable activities these exclusive spaces could serve as retreats from everyday life. Adding these nodes could complement current activity and provide further spaces for residents and visitors to enjoy.

To enhance community destination points the City of Portland should begin by focusing on two specific nodes. In order to foster a feeling of ownership, it is important to include the community in all planning efforts. It is also important that these places are designed to ensure that all races, ages, and social classes feel comfortable using.

WHAT THIS WILL INVOLVE

The first node is the current Downtown Courthouse Square. Through placemaking efforts the Courthouse Square could be transformed into an environment that boasts community heritage for residents and visitors to experience and appreciate. Five elements should be added to the current public space. First the city should create distinctive sidewalks by using brick pavers at the site. Second, planters, flower baskets, and street trees should be added to form a buffer between pedestrians and vehicular traffic. Third, human scale streetlights should be strategically placed around the square to encourage nighttime use. Fourth, the city should create a festive and historic environment by adding banners and flags. Finally, providing street furniture for pedestrian use could encourage people watching and resting. Figure 25 presents possible design ideas for transforming the Courthouse Square into a popular community node.

Figure 25: Courthouse Square destination point.

The second node is the vacant property north of downtown Portland. This area would be perfect for a park that changes with every season. By building a cement pond this can serve as a water feature that individuals can lounge around and play in during the warm seasons and can be transformed into an ice skating rink during the cold seasons. Adding dining kiosks that offer breakfast, lunch, and dinner options could entice residents and visitors to explore the area at all times of the day.

Also providing a shaded area that has chairs and café tables would encourage individuals to linger for a while and relax. Setting up free fitness, family, and entertainment programs that occur in the greenspace will allow individuals to partake in seasonal activities throughout the year. Incorporating the five placemaking elements into the final design will designate this node as a safe walkable destination point. Figures 26 and 27 depicts some possible design elements and shares a glimpse of the quality public space that the current vacant area could turn into.

Figure 26: North Point Destination Park.

Figure 27: Riverfront Design

UTILIZATION OF UPPER FLOORS OF BUILDINGS

An analysis of the economy of Portland showed that thousands of workers in the city do not live in the city. Thus, more than $14 million is leaked out of the city each year by those workers who live elsewhere. A prime goal is to decrease this leakage by providing housing opportunities for these workers to live in Portland. The city should work with property owners, particularly in the downtown area to remodel their upper floors for residential living. Several such vacancies exist in the downtown and offer the potential for success. The cities of Wilmington, DE and Chico, CA are two cities that have successfully used such a strategy to their benefit.

SUMMARY OF RELEVANT CASE STUDIES

In Wilmington, DE the city provided incentives for renovation of vacant or underutilized buildings in the city's downtown. Called the Upstairs Program, the grants provide gap funding to building owners for property renovation. In the last ten years the city has spent $15 million on the program. This led to an expansion of the city's tax base while also providing much needed housing in the downtown. Figure 28 shows the transformation of one such building in the city.

In Chico, CA, the city incentivized property owners by providing density bonuses for those who increased residential units in the downtown. It also provided infrastructure upgrades at no cost to the owners. Additionally, property owners were given flexibility in parking and landscaping requirements.

Figure 28: The Upstairs program in Wilmington, DE show a building transformation in the city's downtown.

CULTURAL AND CIVIC AMENITIES

We propose that the city of Portland take steps to improve the cultural amenities, particularly those in the downtown area. One way to do this is to create a Cultural Loop through the city. This will be a self-guided tour and takes participants through the key cultural amenities of the city to inform them of the city's cultural and historic richness.

WHY THIS IS IMPORTANT

By creating a cultural loop, the City of Portland will be capitalizing on these amenities in a way that expands businesses while encouraging people to come downtown. The Cultural Loop proposal outlines potential locations to include, the path of the loop, theme and logo ideas, and funding/ assistance resources.

Keeping downtown the cultural and civic center is a major key in a successful downtown. Expanding upon these amenities will create foot traffic in the downtown which will also have a positive effect on businesses in the area. For an example, if someone comes to Portland to do the Cultural Loop tour, they may stop at a coffee shop in the morning and do some shopping downtown afterwards. The money spent downtown will have an impact on the local economy. As a result of increased visitors, the cultural loop could take advantage of the amenities in a way that it can become a tourist attraction for visitors. This will provide an entertainment option, a learning opportunity, and establish destination points throughout the city. The cultural loop will create a theme for the downtown while establishing a sense of identity for the community. The purpose of the loop is to tell the story of Portland through visiting cultural and civic amenities, the use of public art, and educational signage.

A strong element about the City of Portland is demonstrated by the city's established cultural and civic amenities. Figure 29 shows the amenities that are located in the downtown area. The amenities represented in the diagram are the Jay County Public Library, Jay County Courthouse, Ritz Theatre, Jay Community Center, John Jay Center for Learning, Harmony Café and Studio, Art Place Inc., Art in the Park, and City Hall.

Figure 29: Amenities in the proposed Cultural Loop.

WHAT THIS WILL INVOLVE

Portland's Cultural Loop will be a self-guided tour through the city. As shown in figure 29, participants will visit 9 locations that are in close proximity to Meridian Street. The loop will display local art and signage giving an introduction of the history of Portland, IN. Creating the cultural loop can be done in 3 steps.

Figure 30: Cultural Loop.

Step 1: Consent from business owners
While potential locations have been established, Portland will need permission from business owners to include them in the loop. The cultural loop offers business owners incentives such as increased number of foot traffic, free advertising associated with the cultural loop, and an outdoor sign display. In return, business owners may be inclined to offer a promotion to the cultural loop participants or provide some kind of activity for visitors once they have arrived to that stop along the loop.

Step 2: Cultural Loop Committee
The next step in the process is to form a committee that will relieve some of the responsibility from city officials. This committee could be formed from volunteers interested in the project or by people appointed by the city. Within the committee, there would be various responsibilities. The committee could split up responsibility or work as a team. Listed below are some topics the committee would oversee.
1. Working with business owners of the amenities to establish communication between parties.
2. Developing and displaying promotional material for the Cultural Loop- brochures, maintenance of signs, etc.
3. Collaborating with artists and/or donors of public art associated with the loop.
4. Creating public events throughout the year to advertise the Cultural Loop- (For an example, Christmas Candlelight tour or Fall Festivals with arts and crafts and apple cider)

Step 3: Implementing Art and Wayfinding
One of the most important components of this project is using the Cultural Loop to create a theme throughout the downtown. This begins with deciding on a logo and wayfinding theme for the signs. Figure 31 is an example of logos that Portland could use. These logos would be used throughout downtown, on the informational sign for the Loop, and on promotional material. The second component would be displaying artwork. One idea is to display the people sculptures like Carmel, IN used throughout their downtown. The artist, J. Seward Johnson Jr., designed life-size sculptures of people interacting downtown. Portland could do something similar. For an example, outside of Arts Place, there would be a sculpture of someone painting or playing an instrument along with the official Cultural Loop sign. This will indicate to visitors that the business is a part of the loop.

Figure 31: Logo Design Concepts

FUNDING/ASSISTANCE SOURCES

The Portland Foundation Grant

The Foundation makes grants to tax-exempt organization proposing to operate programs that benefit the residents of Jay County. The Foundation is looking for programs that serve as charitable, cultural, and community improvements. For more information on the application process visit http://www.portlandfoundation.org/page.php?13

Grants through Regional Arts Partnership

http://randolphcountyfoundation.org/IAC/FY17%20APS%20Guidelines.pdf

Indiana is divided into 12 regional art partners. Jay County is located within the 5th regional district. The Community Foundation of Randolph County does the decision-making about the Indiana Arts Council (IAC) funds for Jay County. Stephanie Ward is the Program Officer for the region. One grants opportunity is Arts Project Support (APS). The grant provides funding to Indiana arts and non-arts organizations to support a distinct aspect of the of the organizations arts activity. Some examples are exhibits, education seminars, art classes, training sessions. Creation of the cultural loop could be recognized as a distinct aspect of an arts activity. APS applicants can receive up to $5,000 or up to 50% of the project expenses, whichever is less. The matching requirements involve applicants to match IAC funds on a dollar for dollar basis and the total project budget must be at least twice the amount requested. For more information regarding Regional Arts Partnership grant programs visit http://www.randolphcountyfoundation.org/#

Indiana Statewide Cultural District

Source: http://www.in.gov/arts/files/CY2017-Statewide-Cultural-Districts-Guidelines.pdf

Indiana offers an official state designation for communities that use cultural assets as an anchor. Although there is no funding associated with the program, communities receive benefits such as increased tourism marketing and economic activity that come with being a part of a statewide program. Once a community receives the designation, it will last the duration of the program unless it fails to comply with annual requirements. The application process starts around August of each year. The guidelines and criteria is linked above, although the 2017 designation deadline has already passed. Portland will want to begin this process in August 2017 in order to receive the 2018 designation. Application submission requirements include a letter of intent, letter of resolution, letters of support from key partners, completed asset spreadsheet, current long-range plan for the cultural district, list of key staff and responsibility, and maps showing boundaries, cultural assets, accessibility features, and streetscapes. For more information, visit http://www.in.gov/arts/2654.htm

SUMMARY OF RELEVANT CASE STUDY

Erie, PA

The Cultural Loop in downtown Erie runs every Saturday 5-11pm. The Cultural loop provides a trolley service that is a park and ride options to participate in popular arts and cultural activities and performances downtown. The loop was established in 2015 and included 15 stops throughout the city. The trolley stopped at things like the library, courthouse, city hall, parks, theatres, and museums. For more information of the Eric Arts and Cultural Loop visit http://www.erieartsandculture.org/initiatives/cultural-loop

BIOSWALES AND RAIN GARDENS

This initiative encompasses the construction of bioswales along the banks of the Salamonie River and the induction of educational programs on rain gardens to encourage community members to construct them in their own yard. One of the major concerns of the city of Portland is the regular flooding of the Salamonie River. Bioswales and rain gardens can be used to decrease the amount of rainwater that gets into the river. Bioswales and rain gardens not only help defend against floods they also naturally clean stormwater runoff, - made worse by changing climate and impervious surfaces.

WHAT THIS WILL INVOLVE

Rain gardens are shallow depressions (6-12 inches deep) that can hold and infiltrate runoff from roofs and driveways, often seen in residential settings (see Figure 32). They are designed to collect water and are vegetated with plants that can withstand moisture regimes. Rain gardens can absorb 30 percent more water than more conventional landscapes.

Figure 32: Examples of rain gardens in residential neighborhoods.

Bioswales achieve the same goals as rain gardens by slowing and filtering stormwater, but are designed to manage a greater amount of runoff from a large impervious area, such as a parking lot or roadway. Since they need to accommodate greater quantities of stormwater, they often require use of engineered soils and are deeper than rain gardens (see Figure 33).

Both rain gardens and bioswales are proven to be a more affordable, reliable and natural way to reduce flooding. The effectiveness of both rain gardens and bioswales increases with increased contact time between soil and stormwater, and increased vegetative cover. As for rain gardens, as a smaller scale project, we propose that the city of Portland holds education session on rain gardens – everything from how to build them to how much they cost – and then the city should encourage residents nearest the Salamonie River to construct rain gardens in their own yards.

The bigger project will consist of engineered bioswales surrounding the Salamonie River nearest Meridian, which will not only reduce stormwater runoff into the Salamonie – a leading cause of flooding of the river - but also filter runoff

water from the pavement. In the case that the river rises significantly, a natural bioswale alongside it will soak in and slow the rise of water that would not have happened otherwise. Overall, it is a nice alternative to costly storm sewers and underground flooding management facilities.

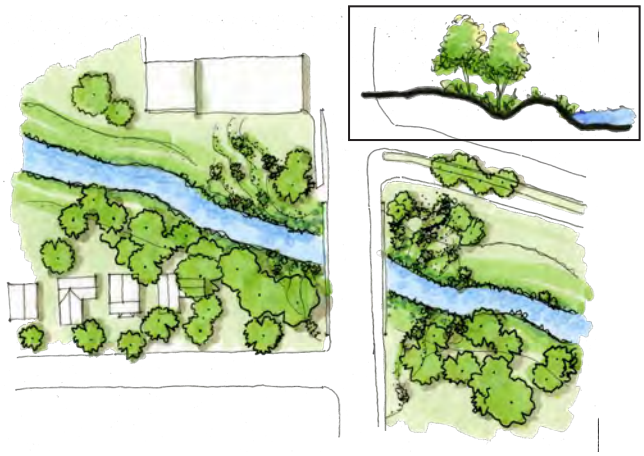


Figure 33: An example of a bioswale's effect in flooding management.

SUMMARY OF RELEVANT CASE STUDIES

Muncie, IN

The Centers for Disease Control awarded $120,000 to the Muncie Sanitary District to be spent over the next three years on rain gardens in the Whitely neighborhood. Whitely was chosen because of its lack of stormwater infrastructure. The process took several phases: Year 1: installation of rain barrels in the Whitely neighborhood, Year 2 : installation of a large community rain garden in the Whitely neighborhood, Year 3 : installation of single home rain gardens. When the overall project is completed, over 70 million gallons of storm water annually will be diverted from the Muncie Sanitary District wastewater treatment plant reducing wastewater treatment costs.

Millvale, PA

In a partnership with local environmental organizations, crews recently created two bioswales on the Sisters of St. Francis of the Neumann Communities' Mt. Alvernia campus along Hawthorne Road. The bioswales are important because of a huge storm-water management problem in the region in general, and Millvale, in particular, has been subject to flooding. The bioswales are part of a larger storm-water mitigation project. The borough of Millvale, with the Western Pennsylvania Conservancy and TreeVitalize Pittsburgh, received a grant of more than $700,000 through the Pennsylvania Infrastructure Investment Authority, or PENNVEST, to plant 850 trees in the borough and build the two bioswales to help absorb storm water. One bioswale, located along Hawthorne Road, is about 400 feet long and collects water from the campus site and the roadway. The second bioswale collects water from a parking lot and hillside above Hawthorne Road.

BROWNFIELD REMEDIATION

The Environmental Protection Agency (EPA) defines a brownfield as "real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant" The actual presence of contaminants on this "real property" must be determined by a carefully planned investigation known as an environmental site assessment (ESA). The Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) makes the purchaser of any real property liable for any contaminants on this property.

Remediation and redevelopment of these brownfields is often the key to creating jobs, expanding the tax base, and revitalizing the economy of local communities. Because of this federal and state programs have evolved to assist developers interested in cleaning up brownfield sites and redeveloping them for productive use. These programs provide technical assistance, regulatory guidance, liability protection, tax incentives, loans, as well as funding for ESAs, job training and cleanup.

Creating a Comprehensive Brownfields Program

1. Locate and identify any and all brownfields, contaminated sites, or properties in need of environmental remediation.
2. Classify the specific type of contamination; this will be crucial in prioritizing which projects are most feasible as well as acquiring funding and grants.
3. Log the above information as well as any other details that may be useful in profiling each property.
4. GIS-based programs such as ArcMap are extremely helpful in visually displaying the location of these properties and storing the associated data with them.
5. Prioritize which remediation projects would be most important and catalytic based on the desires of the community.
6. Follow the guidelines provided by Indiana to proceed with grant applications through various State agencies.

The appendix at the end of this document contains a list of various brownfields and contaminated sites provided by the East Central Indiana Regional Planning District's application. The application itself is also in the appendix to give a better idea of how the process may look. Grants may be procured through the Office of Community and Rural Affairs (OCRA), the Environmental Protection Agency (EPA), the Indiana Department of Environmental Management (IDEM), and other State and Federal agencies.

SOURCES OF FUNDING FOR MEDIUM TO LONG TERM PROJECTS

1) Local and County Funding Sources
2) Indiana Main Street (IMS)
- Downtown Enhancement Grants
- Main Street Revitalization Program
- Historic Renovation Grant Program

3) OCRA Programs of interest
- Blight Clearance Program (maximum award of $350,000)
- Comprehensive Site Redevelopment Program
- Place Based Investment Fund
- Planning Grants
- Public Facilities Program ($5K per project beneficiary, maximum of $400,000)
- Stormwater Improvements Program (5K per project beneficiary, maximum of $500,000)

Workforce Development Program

POLICY AND REGULATION STRATEGIES & INITIATIVES

POLICY STRATEGIES/ INITIATIVES

In addition to the physical improvements some policy and regulations need to be adopted to complement the design initiatives proposed above. These are outlined in Tables 9 through 13 below.

	Strategy	Who is Responsible
Housing		
	Homeownership Education Seminars	Real Estate Firms and Companies, Chamber of Commerce City Government
	Waive Building Permits for Developers for single family housing (limited time)	City Government
	Provide Land for new subdivisions (including amenities and facilities)	City Government
	Improve School System	School System
	Incentivise the development of production of different housing types (low, moderate, high income)	City Government
	Provide grant funding to property owners to remodel upper floors of buildings for residential use	Chamber of Commerce, City Government
	Create an IDA program to enable people to save for a downpayment on a house	Chamber of Commerce

Table 9: Homeownership Policies.

	Strategy	Who is Responsible
Improve Image of City		
	Identify the Uniqueness of Portland	Community forum organized by civic leaders
	Increase Advertisement of Local Events	Chamber of Commerce
	Incorporate New Technologies to Entice Millennials	Chamber of Commerce and Business Owners
	Adopt Design Guidelines for Future Developments	City Government
	Establish a Social Media Presence	City Government
	Develop a Community Outreach and Marketing Strategy	City Government and Chamber of Commerce

Table 10: Policies to improve the image of Portland, IN.

	Strategy	Who is Responsible
Economy		
	Provide Incubator Space	Portland Community Foundation, Federal Economic Grants, State Grants, For-Profit Investors
	Worker Training	Chamber of Commerce and Local Government
	Tax Increment Finance District	City Government
	Mentorship Program	Chamber of Commerce
	Formation of Business Improvement District	Chamber of Commerce and City Government
	Link Business owners and school system (Internships, job shadowing, etc)	School Board, PTO, and Chamber of Commerce
	Monitor Industrial Park and Provide More Land as Need Arises	Chamber of Commerce and Local Government

Table 11: Policies to improve the economy of Portland, IN.

	Strategy	Who is Responsible
Technology		
	Free Wi-fi	Business Owners, Chamber of Commerce, and City Government
	Invest in Public Infrastructure	City Government
	Electronic Business Payments	Business Owners

Table 12: Policies on technology.

REGULATION STRATEGIES/ INITIATIVES

	Strategy	Who is Responsible
Enhance Quality of Place		
	Designated Mixed-Use Development District for Project Area	City Government, Planning Commision
	Adopt and Enforce Building Codes	Building and Plan Commission, City Government
	Adopt and Enforce a Sign Ordinance	Building and Plan Commission
	Special District Designation	Building and Plan Commission
	Pedestrian Crossing Ordinance	City Government
	Adopt a Vacant Property Registration Ordinance (VPRO)	City Government, Plan Commission
	Temporary Closures for Street Events	City Government
	Adopt a Parking Management Plan	Department of Public Works, Plan Commission, INDOT

Table 13: Policies to enhance quality of place.

EVALUATION & CONCLUSION

The rational comprehensive planning process was utilized in the urban revitalization plan for the City of Portland culminating in the identification of policies and action projects for the city. The next step in the process is implementation of the projects to improve conditions in the project area and for the city at large. This is a crucial turning point for the impetus of and overall momentum of the plan and the proposed initiatives. The final two steps involve both the implementation and evaluation of these initiatives and are the responsibility of the City of Portland. While it may be easy to confuse the "City of Portland" with the local governmental entities involved, it is absolutely important to recognize that without the fervor of the community and the drive from each of its citizenry, the plan will not flourish.

As mentioned in many of the public forums held by the city and Ball State students, the need for community mobilization and action is more significant than ever in the implementation stage. Getting community members involved in the process may be hard work, but it is necessary for creating the tight-knit and strong home that residents wish to foster for their hometown. It is not solely up to city council members and other elected officials to make sure things move forward, but rather every single individual must take personal charge of responsibilities to ensure that the plan is implemented as desired.

Phasing the implementation of each project is also key, requiring community-wide, grassroots collaboration to prioritize initiatives based on factors such as cost, duration of project, and overall effectiveness/impact of the changes. Municipal government will be required to work in concert with the Jay County Chamber of Commerce, the newly formed board of the Economic Improvement District as well as other community organizations to implement the plan. Successful communities do not occur on their own, but rather they are invested in by those who wish to see change in their hometowns for a brighter, more progressive future for generations of Portland residents to come.

APPENDIX

STUDY FINDINGS

LAND USE ANALYSIS

- Flooding from Salamonie River
- Historic structures
- Environmentally contaminated sites within project area
- Civic and cultural amenities in project area

DEMOGRAPHIC ANALYSIS

- Declining population
- Aging population
- Lagging incomes
- Lagging college graduation rates

Economic Analysis

- Economic base of a large manufacturing sector
- Employment and income leakage from city
- Market potential for businesses

HOUSING ANALYSIS

- Decreased home ownership rates
- High housing vacancy rates

PRECEDENT STUDIES

- Improve physical form
- Traffic flow
- Pedestrian friendliness
- Improve wayfinding and downtown branding
- Gateway signage
- Create a sense of place and identity
- Diversify downtown's economy
- Provide public gathering space
- Multimodal transportation
- Efficient use of alleyways
- Public events
- Improve nightlife

STRATEGIC PLANNING SESSION

- Lack of destination points
- Improve aesthetics
- Traffic claming for highways
- Improve trail system
- Enforce codes
- Improve landscaping/trees

SURVEYS

- Expand the downtown experience
- Attract millenials and the creative class
- Provide stronger link of downtown with the rest of the city
- Improve quality of buildings
- Expand business open hours beyond 5pm and on weekends
- Involve more people in decision making
- Provide more youth activities

APPENDIX A

STREET TREES/LANDSCAPING GUIDE

The Street Trees/Landscaping strategy is created to guide Portland in the improvement and maintenance of the landscaping and street trees along the main corridor, Meridian Street. This strategy will provide information on the benefits of trees, the current existing landscape, proposals for street trees and landscaping and the continuation of management of the street trees and landscaping.

WHY THIS IS IMPORTANT

This strategy is important to Portland because it contributes to the overall beautification and greenspace within the main corridor, Meridian Street. It will increase the urban tree canopy, contribute to the creation of complete streets (See pg. – for the Complete Streets Strategy), create a softer, well-landscaped main corridor and address issues the Portland residents identified at the first community meeting.

Street Trees and Landscaping Design Recommendations

a. *Street Trees* – A tree planted in the public right-of way, located along or within sidewalks, easements and medians.

Portland should start this action step by removing the current improper street trees located along Meridian Street, specifically located in downtown Portland. The removal of the improper street trees will create a blank slate for Portland to design their landscape and street tree improvements.

Portland then should refer to both the Complete Street Design and Pedestrian Priority Design strategies to determine where street trees should be located and how they will be implemented, the suggestions made by the American Horticulture Industry Association should be consulted in cooperation with the previously mentioned strategies. When considering street tree placement/location along the main Meridian Street corridor, the surrounding building signage locations and visibility should be of high priority, due to the current issues causing the community concern.

Portland, as a last action, should create a street tree program to implement planting regulations, maintain the street trees and preserve the improvements. Street tree and landscaping maintenance guidelines should be included and established within the street tree program.

b. *Planting and Tree Coverage for Parking Lots*

This action step requires Portland to view the current inventory of parking lots along the Meridian Street corridor and within the proposed project area. Portland should implement proposed elements within the suitable parking lots. Planting and tree coverage for parking lots will contribute to the improvement of greenspace along the Meridian Street corridor and other parking areas within the stated project area.

c. *New Planting Techniques*

Portland should start this action step once the current street trees have been removed and a blank slate has been created. This action step should be implemented in conjunction with the street trees recommendation, this will allow for reduction of implementation timing and require less resources.

The planting techniques should include recommendations such as: planting/landscape strips between curb and sidewalks, tree pits, intersection corner planting/landscape pits, planting/landscaping within medians and other planting/landscaping with public gathering spaces addressed within the plan.

Community & Public Landscape Recommendations

The main corridor, Meridian Street, should be the main focus of the street trees and landscaping strategy. The improvement and maintenance of landscaping and street trees along Meridian Street

will complement the corridors' large amounts of activity. This strategy's suggestions can be used within other areas of the designated project area.

Multiple tables were generated to assist in the selection of appropriate street trees, shrubs, grasses and perennials/herbs along the Meridian Street corridor. The surrounding conditions should be considered before determining if the tree should be planted, specifically the proximity to both above ground and below ground utilities, they should as well be considered for other plant species. The tree, shrubs, grasses and perennials/herbs suggestions can also be applied to other areas within the project area.

American Standards Tree Diversity Recommendations

As the City of Portland starts to implement this strategy a set of plant species diversity percentages should be established. As a base recommendation the urban forest population should have no more than 10% and 20% of the same species or genera. This will allow for a more diverse population of plant species and prevent the urban forest population from being wiped out by disease, pests or age.

Tree Canopy Percentage Recommendations

The City of Portland should create a tree canopy goal, to increase tree canopy cover, and a timeframe for achieving said goal. The goal should be representative of the City of Portland's desired outcomes in environmental, social or economic benefits of the tree canopy. There should be a minimum recommended total percentage of 35% in commercial zoning and 40-50% in residential zoning. After the creation of the tree canopy goal, an implementation plan should be created to achieve the tree canopy goal percentage.

Street Tree and Landscaping Maintenance Guidelines

The Portland Street Department and the Portland Park Department should collaborate and create a set of maintenance guidelines to determine who will manage and maintain the street trees and landscaping.

INFORMATION FOR FUNDING/ ASSISTANCE SOURCES

Assistance Sources

Indiana Department of Natural Resources
Department of Forestry
Contact: Carrie Tauscher, Community & Urban Forestry Coordinator
Phone: (317) 234-4386
Email: ctauscher@dnr.in.gov

Portland Street and Park Department
215 S. Wayne Street
Contact: Ryan Myers, Superintendent of Streets and Parks
Phone: (260) 726-4077
Email: rmyers@thecityofportland.net

Assistance in Computing Costs and Benefits
Contact:
Research Trust
International Society of Arboriculture
P.O. Box GG
Savoy, IL 61874-9902
Phone: (219) 355-9411

Indiana Urban Forest Council
P.O. Box 30663
Indianapolis, IN 46230
Contact: Holly Jones, Director
Phone: (317) 517-9180
Email: director@iufc.org

Indiana Arborist Association
Purdue University,
195 Marsteller Street
West Lafayette, IN 47907-2033
Contact: Lindsey Purcell, Chapter Administrator
Phone: 765/494-3625
Fax: 765/496-2422
Email: lindsey@indiana-arborist.org

Indiana Nursery and Landscape Association
7915 S. Emerson Ave., Ste 247
Indianapolis, IN 46237
Phone: 317-889-2382
i-Tree Landscape
USDA Forest Service
https://landscape.itreetools.org/

Funding Sources
Community and Urban Forestry Assistance (CUF-A) Grant
Indiana Department of Natural Resources, Division of Forestry Community and Urban Forestry Program
IDNR, Community & Urban Forestry
402 W. Washington St., W296
Indianapolis, IN 46204
Email: urbanforestry@dnr.IN.gov
Possible Grant Money: $2,000 - $15,000+
Award Frequency: Annually

Small Business Administration (SBA) Funds
Source of funding assistance for purchase of trees. Funding assistance is intended to help small business, any purchased or donated trees must be planted by a company employing under 100 employees. A 45-55 match is required, contributed trees or pro bono services of an architect in planning the project would count.
Contact: Local Urban and Community Forestry Staff, Information located above.

The National Tree Trust
Funding intended for supporting community tree organizations and projects, municipalities and non-profit organizations can apply for funding assistance.
Contact:
The National Tree Trust
1120 G St. NW, Suite 770
Washington, DC 20005 (202/628-8733)

National Urban and Community Forestry Advisory Council
Grant focus changes annually.
Contact:
USDA Forest Service
Cooperative Forestry
P.O. Box 96090
Washington, DC 20090

Indiana Urban Forest Council (IUFC) Awards Program
Honors individuals, projects, organizations and Tree Stewards whose work enhances the environmental health through urban forestry
P.O. Box 30663
Indianapolis, IN 46230
Contact: Holly Jones, Director
Phone: (317) 517-9180
Email: director@iufc.org

SUMMARY OF RELEVANT CASE STUDIES

Fishers, Indiana
In 2015, the city of Fishers created a planting guide to provide the community with basic information on plant species and planting design/implementation to promote a healthy local ecosystem. The guide was created with the help of a variety of reputable sources that provide detailed information, making the guide a model example of how the local landscape and the plant species should interact. It provides information ranging from specific tree planting regulations to specific plant species information. The guide should be looked at as an example for Portland to follow for similar successful local landscape and plant species interaction.

Source: http://www.fishers.in.us/DocumentCenter/View/6081

Tree ID #	Common Name	Scientific Name	Max. Height	Max. Spread	Planting Area	Native	Notes
T1	Honey Locust	*Gleditsia triacanthos*	80'	50'	Large	Y	Try not to Overplant; Good for Stormwater Gardens
T2	Ginkgo (male)	*Ginkgo biloba*	80'	40'	Large	N	Male produces no fruit; Can Revert to Female
T3	Kentucky Coffee Tree	*Gymnocladus dioicus*	100'	40'	Large	Y	Female has Pods; Very Few
T4	American Sycamore	*Platanus occidentalis*	90'	70'	Large	Y	Good for Stormwater Gardens
T5	American Hophornbeam	*Ostrya virginiana*	40'	30'	Medium	Y	
T6	Japanese Zelkova	*Zelkova serrata*	80'	75'	Large	N	Great Tree; Non-Native
T7	Freeman Maple	*Acer x freemanii*	60'	40'	Medium	Y	Fast Growth Rate; Urban Tolerant
T8	Tukish Philbert	*Corylus colurna*	80'	50'	Large	N	
T9	Swampwhite Oak	*Quercus bicolor*	60'	60'	Large	Y	
T10	Emerald Pointe Hardy Rubber Tree	*Eucommia ulmoides 'Empozam'*	40'	15'	Medium		
T11	Schumard Oak	*Quercus shumardii*	60'	40'	Large		
T12	Scarlet Oak	*Quercus coccinea*	70'	50'	Large		
T13	Black Tupelo (Black Gum)	*Nyssa sylvatica*	50'	30'	Large	Y	Can be Drought Sensitive; Good for Stormwater Gardens
T14	Cucumber Tree Magnolia	*Magnolia acuminata*	70'	35'	Large	Y	
T15	Tulip Tree	*Liriodendron tulipfera*	150'	50'	Large		Can be Drought Sensitive; Good for Stormwater Gardens
T16	Bald Cypress	*Taxodium distichum*	70'	45'	Large	Y	Good for Stormwater Gardens
T17	Riverbirch	*Betula nigra*	70'	60'	Large		Good for Stormwater Gardens
T18	Hackberry	*Celtis occidentalis*	80'	60'	Large	Y	
T19	American Hornbeam	*Carpinus caroliniana*	30'	30'	Medium	Y	
T20	Yellowwood	*Cladrastis lutea*	50'	55'	Medium	Y	
T21	Serviceberry	*Amelanchier spp*	25'	20'	Small	Y	
T22	Redbud	*Cercis canadensis*	30'	20'	Small	Y	

Ornamental Grass ID #	Common Name	Scientific Name	Max. Height	Max. Spread	Planting Area	Ranking	Notes
O1	Grass Molinia Moor	*Coerulea arundinacea 'Windspiel'*	7'	4'	Large		Short Life
O2	Leatherleaf Sedge	*Carex buchananii*	2.5'	3'	Medium		
O3	Ice Dance Sedge	*Carex morrowii 'Ice Dance'*	1'	2'	Small		Tolerant to Heat and Drought
O4	Variegated Japanese Sedge	*Carex morrowii 'Variegata'*	1.5'	1'	Small		Year Round Interest
O5	Northern Sea Oats	*Chasmanthium latifolium*	5'	3'	Large		Prefers Well-Drained Soil
O6	Feather Reed Grass	*Clamagrostis x acutiflora*	5'	2'	Large		Prefers Well-Drained Soil
O7	Blue Fescue	*Festuca glauca*	1'	1'	Small		Use at the Edge of Ponds and Containers
O8	Common Rush/Soft Rush	*Juncus effusus*	4'	4'	Small		
O9	Lily Turf	*Liriope muscari*	1.5'	9"	Small		
O10	Switch Grass	*Panicum virgatum*	6'	3'	Large		
O11	Fountain Grass	*Pennisetum alopecuroides*	5'	5'	Large		Plant 30"-36" Apart
O12	Dwarf Fountain Grass	*Pennisetum alopecuroides 'Hamein'*	2'	1.5'	Small-Medium		Drought and Disease Resistant
O13	Autumn Moor Grass	*Sesleria autumnalis*	1'	1'	Small		Adaptable to Drought; Tolerant of Air Pollution
O14	Hardstem Bulrush	*Schoenoplectus acutus*	6'		Medium		Tolerates Standing Water
O15	Common Threesquare	*Schoenoplectus pungens*	4'		Small		Stand up to 3' of Water
O16	Blue-Eyed Grass	*Sisyrinchium angustifolium*	2'	1'	Small		
O17	Variegated Prairie Cord Grass	*Spartina pectinata 'Aureomarginata'*	6'	4'	Large		Salt Tolerant

APPENDIX B

Shrub ID #	Common Name	Scientific Name	Max. Height	Max. Spread	Planting Area	Ranking	Notes
S1	Serviceberry	*Amalanchier canadensis*	25'	15'	Large		
S2	Goat's Beard	*Aruncus dioicus*	6'	4'	Medium		Prefers Moist to Wet Soils and Part Shade
S3	Butterfly Bush	*Buddleia davdii*	6'	6'	Medium		
S4	Littleleaf Boxwood	*Buxus microphylla*	4'	4'	Small		
S5	Glencoe or Green Velvet Boxwood	*Buxus spp.*	4'	4'	Small		Perfers Part Shade
S6	Carolina Allspice	*Calycanthus floridus*	12'	12'	Medium		
S7	Bluebeard	*Caryopteris x clandonensis*	3'	3'	Small		
S8	New Jersey Tea	*Ceanothus americanus*	4'	6'	Small		Drought and Salt Tolerant
S9	Buttonbush	*Cephanlanthus occidentalis*	12'	8'	Large		Drought Tolerant
S10	Summersweet Clethra	*Clethra alnifolia*	6'	5'	Medium		Salt Tolerant
S11	Sweet Fern	*Comptonia peregrina*	4'	8'	Small		Drought and Salt Tolerant
S12	Redosier/Red Stemmed Dogwood	*Cornus sericea*	10'	8'	Large		Winter Interest
S13	Smoke Bush	*Cotinus coggygria*	15'	15'	Large		Tolerate Variety of Soils
S14	Daphne Burkwood	*Daphne x burkwoodii*	4'	4'	Small		
S15	Slender Deutzia	*Deutzia gracilis*	3'	4'	Small		
S16	Silverberry	*Elaeagnus commutata*	10'		Large		Drought and Salt Tolerant
S17	Border Forsythia	*Forsythia x intermedia*	10'	15'	Large		
S18	Fothergilla	*Fothergilla gardenii*	3'	4'	Small		
S19	Large Fothergilla	*Fothergilla major*	10'	9'	Medium		Shade Tolerant; Disease Resistant
S20	Mount Airy Fothergilla	*Fothergilla 'Mount Airy'*	5'	5'	Small		
S21	Witchhazel	*Hamamelis virginiana*	15'	15'	Large		Pollution Tolerant
S22	Seven-son Flower	*Heptacodium miconioides*	20'	10'	Large		Tolerate Variety of Soils
S23	Rose-of-Sharon	*Hibiscus syriacus*	12'	12'	Large		
S24	Smooth Hydrangea	*Hydrangea aborescens*	5'	5'	Small		Salt Tolerant
S25	Oak Leaf Hydrangea	*Hydrangea quercifolia*	10'	8'	Medium		
S26	Virginia Sweetspire	*Itea virginica*	6'	14'	Medium		
S27	Blue Carpet Juniper	*Juniperus aquamata 'Blue Carpet'*	1'	5'	Small		
S28	Blue Star Juniper	*Juniperus aquamata 'Blue Star'*	3'	4'	Small		
S29	Andorra Juniper	*Juniperus horizontalis 'Plumosa'*	18'	5'	Large		
S30	Mountain Laurel	*Kalmia latifolia*	10'	10'	Large		
S31	Japanese Kerria	*Kerria japonica*	6'	9'	Medium		
S32	Beautybush	*Kolkwitzia amabilis*	10'	10'	Large		Prefer Full Sun
S33	Golden Privet	*Ligustrum vicaryi*	12'	13'	Large		
S34	Knotweed	*Persicaria polymorpha*	5'	4'	Small		
S35	Ninebark	*Physocarpus opulifolius*	8'	6'	Medium		
S36	Diablo Ninebark	*Physocarpus opulifolius 'Diablo*	8'	8'	Medium		
S37	Flowering Dwarf Almond	*Prunus glandulosa*	5'	4'	Small		
S38	Catawba Rhododendron	*Rhododendron catawbiense*	10'	20'	Large		
S39	PJM Rhododendron	*Rhododendron PJM hybrids*	6'	5'	Medium		
S40	Jetbead	*Rhodotypos scandens*	4'	3'	Small		
S41	Gro Low Fragrant Sumac	*Rhus aromatica 'Gro Low'*	3'	8'	Small		
S42	Shining Sumac	*Rhus copallinum*	15'	20'	Large		Drought Tolerant
S43	Smooth Sumac	*Rhus glabra*	15'	15'	Large		
S44	Knockout Roses	*Rosa knockout*	4'	4'	Small		
S45	Rosemary Willow	*Salix eleagnos*	10'	8'	Large		Prefer Full Sun
S46	Bladdernut	*Staphylea trifolia*	12'	12'	Large		
S47	Miss Kim Lilac	*Syringa patula*	8'	10'	Medium		
S48	Chinese Lilac	*Syringa x chinensis*	15'	15'	Large		
S49	Fragrant Viburnum	*Viburnum ferreri*	10'	10'	Large		
S50	Old Fashioned Weigla	*Weigela florida*	10'	12'	Large		
S51	Wine and Roses Weigela	*Weigela florida 'Wine and Roses'*	5'	6'	Small		

ALLEYWAY REVITALIZATION

The Alleyway Revitalization strategy was created to activate alleyways and diversify the public space within downtown Portland. This strategy will provide information on ways to activate alleyways, diversify public gathering spaces through alleyway revitalization and improve the downtown landscape.

WHY THIS IS IMPORTANT

This strategy is important to Portland because it contributes to the overall beautification and revitalization of downtown Portland. It will increase the public spaces, contribute to the liveliness, revitalize and bring new opportunities into downtown Portland.

WHAT THIS WILL INVOLVE

This strategy will be completed through the implementation of action steps A through L in staged implementation. Those that provide a base for other action steps to be implemented should be staged first in the implementation and action steps adding to the alleyway space should be staged last. Many of these action steps were modeled after the Living Alleys Market Octavian Toolkit.

Source:http://208.121.200.84/ftp/files/plans-and-programs/in-your-neighborhood/market_octavia_living_alley/Market-Octavia-Living-Alleys-Toolkit_FINAL-WEB.pdf

Alleyway Revitalization Design Recommendations

a. *Above Ground Planters*

Above ground planters can be implemented within alleyways in a variety of ways such as the following: seating with planting space incorporated, free-standing planter boxes, pots, hanging planters and living wall (as mentioned in a later recommendation). Planters are an inexpensive way of incorporating softer landscaping into an alleyway, they are strongly recommended. They contribute to shading, cooling, safety/privacy and increased comfort levels within an alleyway gathering space. Planters, while inexpensive, do require more maintenance, a dedicated maintenance plan should be created and can be incorporated into the street tree and landscaping maintenance guidelines within the street tree and landscaping strategy.

Planters should be located where existing sidewalk space or soil conditions are not suitable for in-ground planting, such as areas where major utilities are located. Above ground planters can be arranged to create a buffer from roadways and sidewalks to allow for comfortable, safe pedestrian gathering spaces, they should not interfere with visibility where the alleyway meets the sidewalk/roadway. Portland should consider the street trees and landscaping recommendations when choosing the plant species that will be in the planters. Above ground planters are an important action step within alleyway revitalization, they incorporate a softer landscape throughout alleyways without having an extensive amount of work.

b. *Living Walls*

Living walls make use of unused wall surfaces within an alleyway, by allowing plants to grow in vertical gardens. Living walls can be implemented by creating a structural support system mounted to an exterior wall surface, systems vary in cost, functions and water requirements. The cost, function and water requirements should be considered before choosing which structural support system will be implemented within the chosen alleyway. Living walls provide similar if not the same benefits as planters and landscaping.

Living walls should be located in accessible and adequate exterior wall surfaces. Portland should take into consideration any possible structural issues, leaking, plant species needs, property owner opinion and involvement and potential waterproofing to prevent damages.

c. *Bollards*
Bollards are vertical posts that act as barriers or diverters that control pedestrian, vehicular and bicyclist movement to and from spaces. They can be fixed or removable, the City of Portland should consider removable for the proposed alleyway revitalization projects. The removable bollards will allow the spaces to still be accessible to motorists but also created a protected, comfortable gathering space for pedestrians.
The bollards should be located at the front and back of the proposed alleyways to define the alleyway gathering spaces. The City of Portland should consider a variety of materials and styles to determine the best aesthetics to match the look of downtown Portland. The bollards should be no less than 42 inches tall and should be placed 18 inches from the curb or sidewalk. Standard bollard placement and spacing is about 10 feet on the center but may be reduced considering the context of the alleyway.

d. *Mid-Block Crossing*
Mid-block crossing can be implemented with the Pedestrian Priority Design and Complete Street Design strategies to help connect pedestrians to the network of active alleyways. The City of Portland should create mid-block crossing with enhanced signage, striping, signals and other special treatments to warn motorists, pedestrians and bicyclist of the mid-block crossing to provide safety for all parties. The mid-block crossings should be located and implemented in areas where alleyways have been revitalized.

e. *Shared Alleys*
Shared alleyways prioritize the right-of-way for pedestrians and bicyclists by creating physical boundaries demonstrating the areas that is primarily for pedestrian use and those areas vehicles can share the space. Shared alleyways allow limited access for vehicles to create a safe area for pedestrians and bicyclists.
The City of Portland should look to the other action steps to pair with this action step, to allow for a vibrant alleyway network. The alleyways should include mixed-use to provide a variety of options within the downtown alleyway network. The City of Portland should use the following tools to create and define shared alleyway space: trees, landscaping, seating, public art, sidewalk/alleyway gardens, bike racks, paving patterns, lighting and other mentioned action steps. The goal of the shared alleyway space should be to create a public gathering space with prioritized right-of-way for pedestrians and bicyclist with limited vehicular access.

f. *Paving*
Paving materials act as the floor to the alleyway, the materials and design used can greatly enhance the aesthetics, safety and sense of place of an alleyway project. Paving for the alleyway will help separate spaces, promote circulation/navigation, create pedestrian and bicyclist friendly spaces and create a sense of place within the alleyway.

The City of Portland should consider the paving materials used to create more defined spaces, improve aesthetics and create a more efficient use of an alleyway. The paving materials can create designated spaces for pedestrians, bicyclists and motorists. The difference in paving will allow less conflict within spaces and create a more aesthetically pleasing views.

An option for paving that can contribute the reduction of stormwater runoff and improve water quality is permeable paving. Permeable paving uses porous material to allow water and air to soil below, allowing for better drainage and efficiency. It should be looked at as an option but the price and maintenance cost are more intensive for this type of pavement and should be considered before moving forward.

g. *Signage/Wayfinding*
Public gathering space in alleyways is a new and unconventional idea, the pedestrians, bicyclist, motorists that use the space need to know what

kind of space they are entering to. Motorist, specifically, are expected to drive slowly and respect the pedestrian and bicyclist while driving through. The signage/wayfinding allows for this response by helping visitors locate and identify businesses, amenities, and where/how the motorist, pedestrian and bicyclist should interact.

The city of Portland should create signage/wayfinding for specifically in the alleyways that get revitalized. The creation of this signage/wayfinding will draw the public in to the space, define a unique alleyway space, incorporate the history of the alleyway and give a graphic representation of the alleyway space. The signage/wayfinding elements should be at both pedestrian/bicyclist and motorist scale to make the signage/wayfinding visible at all levels. The city of Portland should consider local artists to create these signage/wayfinding elements in a variety of sizes, colors and materials.

h. *Public Art*
The public art action step generates interest and draws in pedestrian foot traffic. Adding public art to an alleyway gathering space adds a uniqueness to the space and can transform an alleyway and its identity. The City of Portland can utilize a variety of spaces to create local art pieces within the alleyway space. Public art can be used in interactive and functional ways and is strongly suggested to be used within the alleyway spaces. This action step is also addressed within other strategies in the plan, please refer to other strategies to address public art in other areas. The other strategies should be used as a guide to allow complementary art works throughout the City of Portland.

i. *Lighting*
The lighting action step generates interest and creates a safer environment for the users of the unique gathering space. Adding lighting to an alleyway gathering space adds a safety element as well as a unique space defining component. Lighting can be implemented by the use of light strings, light poles and fixed lights.

The City of Portland should consider light strings as the cheapest and easiest solution to adding lighting to the alleyway gathering spaces. They require less funding, have easy install/removal and can be turn on and off when need be. Light strings are a feasible option but Portland should have the cooperation of property owners. The strings can be attached by bolts to the sides of buildings and potentially powered by the surrounding property owners. Low level illumination or downlighting should be considered to minimize disturbance to potential residents in the upper levels and to help in the reduction of light pollution. Light strings should be at least 15 feet above to avoid conflict with pedestrians, bicyclists and motorists.

j. *Seating*
The seating action step will create functional spaces for residents and visitors to gather within the alleyway space. Seating can be created with planters, built-ins, benches, stones and other potential seating materials. Seating should be provided in a range of heights, locations, orientations and materials to adjust for all users of the space. Seating should accommodate all, accessible seating requires seat level at 16-18 inches high, with area for a user to transfer from a wheelchair to a bench.

k. *Bike Racks*
Allowing bicycles to park in the alleyway space is key in creating and supporting a strong bicycle-friendly network. The bicycle racks will provide a space for bicyclists to store their bikes off the main corridor and allow for more efficient use of all spaces. The City of Portland should consider multiple types of racks that can accommodate a variety of bicycles. These racks should be spaced evenly throughout the alleyway space and follow the theme of the gathering space. The design, location and orientation of the bicycle racks should be looked at carefully to provide the most efficient and safe implementation for all users.

l. *Minimize and Coordinate Building Service*

Functions
The City of Portland should observe its building service functions and determine which should be minimized to promote public use of the alleyways as gathering spaces. The building service functions should be organized in an efficient way so that building efficiency is not affected.

Minimizing and coordinating building service functions can be done through the combination of garage, loading and trash access functions into a single opening or space to create more space for gathering. Setting times for these functions to be addressed can be an option to allow for minimal disruptions within the gathering space. The City of Portland should coordinate between departments to determine the best route of action.

Design Considerations
a. *Hydrology*
Steps in determining if an alleyway is feasible based off Hydrology:
1. Observe drainage of the alley and surrounding streets.
2. Asses the existing sewer system within the area.
3. Analyze the amount of impervious surfaces and determine if other surfaces would be feasible.
4. Determine the best course of action to allow water to be managed efficiently.

b. *Road Composition & Underground Utilities*
The City of Portland should assess the current underground utilities within the area that may require repair as the paving action step is completed. The knowledge of the location and status of the underground utilities is critical in determining how the design of the alleyway will be implemented. The City of Portland should take inventory of this before moving forward in implementation. Some suggestions may be affected by the results of the assessment.

c. *Emergency Vehicle Access*
The alleyway design should allow for adequate space for emergency services to access the alleyway. Portland's Fire and Police Department should be in collaboration to determine the safest and best routes to allow access to the alleyway gathering spaces. More details determining specifics should be discussed and considered before implementing design.

d. *Accessibility*
The alleyway gathering spaces should be accessible to all users. The alleyway spaces should be up to the ADA Standards for Accessible Design. Some basic considerations are as follows: pedestrian paths of travel, sidewalk landings, surfaces, boundary areas and seating/table areas. All alleyway gathering spaces should be up to code to allow for a variety of users within the space. Before design is implemented accessibility should be studied and implemented accordingly.

e. *Parking and Traffic*
The City of Portland should assess the parking and traffic usage of the alleyway before implementing any design. The use of the space between pedestrian, bicyclist and motorist traffic should be considered before deciding on the final design to allow for efficient and equal use of spaces. This is an important step in determining how the alleyway space will be used.

Downtown Alleyway Design Guidebook
As the City of Portland starts the alleyway revitalization strategy an alleyway design guidebook should be created to guide and instruct the city as they move forward in revitalizing the alleyways. The City of Portland should work in collaboration with the following departments to create the guidebook: The Fire Department, Park Department, Police Department and Street Department. The collaboration should help create the guidebook and provide details on safety, maintenance and implementation of alleyway revitalization.

INFORMATION FOR FUNDING/ ASSISTANCE SOURCES

Assistance Sources

Portland Street and Park Department
215 S. Wayne Street
Contact: Ryan Myers, Superintendent of Streets and Parks
Phone: (260) 726-4077
Email: rmyers@thecityofportland.net

International Dark-Sky Association
3223 N. First Ave.
Tucson, AZ 85719
Phone: (520) 293-3198
Website: http://darksky.org/

Funding Sources

Community Development Block Grant Program
1 N. Capitol Avenue
Suite 600
Indianapolis, IN 46204
Contact: Susie Ripley
Phone: (317) 416-3281
Email: sripley@ocra.in.gov
Website: http://www.in.gov/ocra/2331.htm

Urban Land Institute Grant Program
Contact: awards@uli.org
Website: http://uli.org/programs/awards-competitions/
ArtPlace America
195 Montague St, 14th floor
Brooklyn, New York 11201
Phone: (347) 853-7818
Email: cdi@artplaceamerica.org
ncpf@artplaceamerica.org
Website: http://www.artplaceamerica.org/

Ioby
Website: https://www.ioby.org/
National Endowment for the Arts
Contact: OT@arts.gov
Website: https://www.arts.gov/grants-organizations/our-town/introduction

SUMMARY OF RELEVANT CASE STUDIES

Case Study One: Chicago, Illinois

The Chicago Green Alley Handbook: An Action Guide to Create a Greener, Environmentally Sustainable Chicago.

Chicago created a "Chicago Green Alleyway Program" in 2010, to improve infrastructure, create a more walkable alleyway and make alleyways more sustainable, effective and efficient. The handbook was created to discuss the main interests of the Green Alleyway Program, which include the following: Stormwater Management, Heat Reduction, Material Recycling and Energy Conservation and Glare Reduction. The handbook details specific effective techniques and how they are implemented and the benefits that result. The City of Portland can look to this guidebook as an example for alleyway revitalization and how it is implemented, designed and maintained.

Source: https://www.cityofchicago.org/dam/city/depts/cdot/Green_Alley_Handbook_2010.pdf

MULTIMODAL TRANSPORTATION

Diversifying the City of Portland

Portland, Indiana has a declining population and a dependence on automobiles. Diversifying the transit options in Portland, Indiana help to create a desirable place for pedestrians, cyclists, and non-drivers that invest in the city and engage with others in the community. Consider placing priority on alternate modes of transportation to see an increase in the amount of satisfaction with the downtown and surrounding areas of Portland.

WHY THIS IS IMPORTANT

Supporting transit supports quality housing, the local economy, the attraction of millennials, general health and safety, and supports the otherwise immobile. Studies show that housing near good public transit is in high demand, even in bad housing markets. During the last recession, residential values performed 42% better when they were located near a transit service. The local economy typically sees an increase in performance along multimodal transportation areas. In established transit areas, an average of $3 is generated for every $1 invested largely due to the economic development interest along these corridors. The job market and employee satisfaction increases as well. With about 59% of transit trips being trips to work, businesses located near transit have less employee turnover.

Attracting the younger generation is an issue Portland, IN should address in order to grow the population over time. Those born from 1980-2000 (Millennials) prefer a walkable, transit serviced, mixed use neighborhood. Placing priority on multimodal transportation helps create an environment in which America's largest generation wants to live, work, and play. In regard to public health and safety, increased transit efforts show that the average transit rider gets 3 times more exercise than non-riders by walking to stops and destinations. They are also 170 times less likely to be in an accident than car passengers. Often times non-drivers are overlooked. Those too old, too young, banned, or facing a disability that prevents them from driving face major isolation. Studies show they make 15% fewer trips to the doctor, 59% fewer shopping trips, and 65% fewer trips for social, family, and religious activities than drivers do. Multimodal transportation is an important step in better engaging the community.

WHAT THIS WILL INVOLVE

Multimodal transportation in a city of Portland's size typically focuses on strategically placing efficient bicycle and pedestrian infrastructure, along with beautification of streets during this process. This process requires the help of a transportation engineer, urban planner, architect, landscape architect, or other qualified persons in the design of transit routes, bicycle lane renderings, or streetscape improvements.

FUNDING/ASSISTANCE SOURCES

Indiana Department of Transportation
Re: INDOT Transportation Enhancement Program
100 N. Senate Ave. Room N955
Indianapolis, Indiana 46204
Contact: Mike Cales, INDOT Program Director
Phone: (317) 232-5021
Email: mcales@indot.in.gov

Pedestrian-Bicycle Coordinator
100 N. Senate Ave IGCN Room 958
Indianapolis, Indiana 46204-2249
Contact: Jeanette Wilsonmailto:tbailey@cityof-muncie.com
Phone: (317) 232-5496
Email: jwilson@indot.in.gov

See Also: http://www.pedbikeinfo.org/ for more information regarding funding, case studies, etc.