## Downtown Parking & Pedestrian Study

#### CITY OF TERRE HAUTE, INDIANA $\triangleright$ $\triangleright$ $\triangleright$ $\triangleright$ $\triangleright$ $\triangleright$ $\triangleright$ $\triangleright$





#### **PREPARED BY:**



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#### **SCOPE OF SERVICES**

The City of Terre Haute retained HWC Engineering & Traffic Engineering, Inc. to conduct a Downtown Parking & Pedestrian Study. The parking study component consisted of a parking supply and demand analysis. The pedestrian study component consisted of an inventory of existing and proposed facilities along with a discussion regarding barriers to bicycle and pedestrian activity.

Data collection was originally scheduled to begin in November, 2013. However, two situations pushed back the data collection process: 1) signing of the contract was delayed a short time, and 2) a harsh winter with exceptional snowfall amounts prohibited collection of inventory data until the spring months.

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It is noteworthy that parking inventory data collection is not recommended in December and January due to abnormal parking events associated with the holidays. Data collection occurred on March 17-19, 2014. The final report was completed in September, 2014.

#### **STUDY AREA**

The study area consisted of downtown Terre Haute and is shown in Figure 1. The following limits defined our study area:

- North Limits: Cherry Street
- South Limits: Poplar Street
- West Limits: Wabash River
- East Limits: CSX Railroad



• FIGURE 1 - Study Area

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A block numbering convention for the study area was created in order to effectively assemble and analyze the data. The block numbering convention is shown in Figure 2a.



• FIGURE 2a - Block Numbering Convention

Blocks were further defined by "block face" based on the following lettering convention:

- A = north face
- B = east face
- C = south face
- D = west face



#### WALKING DISTANCE

The distance that potential customers will walk to their destination in downtown settings is important in determining the adequacy of parking. In a 2008 study by Smith & Butcher titled "How Far Should Parkers Have to Walk?", it was determined that 1,200 feet was the maximum distance people would typically walk in a Central Business District. Many similar studies have been completed, but there is no magic bullet and no universal agreement for determining the exact distance potential customers will be willing to walk to get to their destination. Obviously, weather will impact the walking distance. However, based on a large number of studies, it is reasonable to assume that in good weather, the maximum acceptable walking distance of 1,200 feet is satisfactory. In inclement weather, a lesser distance is reasonable, in the range of 300 to 400 feet. It is noteworthy that for businesses located along Wabash Avenue, available parking spots located along Poplar Street are within the 1,200 foot acceptable walking distance. Similarly, plotting 1,200 feet from the SkyGarden Parking Garage and the Cherry Street Parking Garage provides a zone of coverage for most downtown businesses located in the study area.

Based on the 1,200 foot acceptable walking distance, we believe the occupancy data collected for the entire study area is appropriate for determining the parking adequacy of the entire study area, assuming good weather conditions. In acknowledging that good weather conditions don't always exist, and that in certain conditions potential customers must park closer to their destination, in our analyses, we have broken the study area into three subareas, namely, the Wabash Avenue Subarea, the Arts Corridor Subarea, and the Hulman Center Subarea. These three subareas are located in the Central Business District of downtown Terre Haute. By analyzing occupancy data in these smaller subareas, the average walking distance would be less than the 1,200 foot acceptable walking distance. Therefore, the subarea parking demand analyses present another view of the adequacy of parking in the downtown area in locations closer to the businesses than the maximum allowable walking distance.

We did not include and analyze the Governmental Center located west of 3rd Street as a defined subarea, primarily because it functions independently of businesses in the Central Business District, and due to the fact that the Vigo County Jail may be relocated in the future, which would significantly change the dynamics of the Governmental Center area.





### Prior Downtown Study Resources



Section Two

HWC Engineering and Traffic Engineering, Inc. reviewed the following studies previously completed for downtown Terre Haute:

- Downtown Parking Study (2000) by American Consulting, Inc.
- Downtown Action Agenda (2002) by Hyett Palma
- Downtown Vision Plan (2009) by Storrow Kinsella
- ISU Campus Master Plan (2009) by Ratio
- ISU Parking Plan (2011) by Tim Haahs Engineers Architects
- Downtown Traffic Study (2012) by Corradino, LLC
- Trail and Greenway Plan (2011) by Burgess & Niple

#### DOWNTOWN PARKING STUDY (2000) – AMERICAN CONSULTING, INC.

The Downtown Parking Study completed in 2000 by American Consulting, Inc. (now American Structurepoint, Inc.) was primarily an inventory of existing parking availability in the downtown study area.

The study noted that there were a total of 708 parking spaces in the study area, comprised of 668 on-street parking spaces, eighteen loading zones that accounted for 29 on-street parking spaces and four bus zones that accounted for 11 on-street parking spaces.

The study noted that 57 new parking spaces could be added by simply re-painting curbs and resigning. Additionally, another 7 spaces could be added by eliminating two bus zones on Wabash Avenue. Also, in the eighteen loading zones, new signs were recommended that limited loading zone enforcement time to Monday-Friday from 7am – 5pm, thus freeing up 29 on-street parking spaces during evenings and weekends. It was suggested that 55 degree angle parking could be placed on the east side of 4th Street between Wabash and Ohio, resulting in an increase of 8 on-street parking spaces. Similarly, the study suggested that 55 degree angle parking could be placed on the east side of 5th Street between Wabash and Ohio, resulting in an increase of 7 on-street parking spaces. These suggestions could increase the on-street parking from a total 708 parking spaces to a total of 787 parking spaces.

The availability of handicapped parking spaces posted downtown was discussed. At the time of the study, only four on-street handicapped parking spaces were noted in the study area.

#### **DOWNTOWN ACTION AGENDA (2002) -- HYETT PALMA**

The Downtown Action Agenda completed in 2002 included the following recommendations: 1) more on-street parking, fewer surface parking lots, no additional surface lots on Wabash, and consideration of additional parking garages; 2) quantify downtown parking demand after the Cherry Street parking garage is completed and in service, particularly at the west end of the Arts Corridor District; 3) if downtown parking demand justifies, construct another parking garage with first floor retail space; and 4) identify parking and pedestrian solutions for two major downtown development districts, namely the Arts Corridor District and the Office, Institutional, and Service District.

#### **DOWNTOWN VISION PLAN (2009) -- STORROW KINSELLA**

The Downtown Vision Plan completed in 2009 included the following recommendations: 1) evaluate the west end of the downtown area for siting of an additional downtown parking structure (including ISU needs); and 2) examine models for a Terre Haute Parking Authority/Agency to be charged with providing public parking – this agency should aim to meet the parking demand and eliminate the perception that private landowners need to provide private parking downtown.

#### ISU CAMPUS MASTER PLAN (2009) – RATIO

The ISU Master Plan completed in 2009 included the following recommendation: parking garage needed between 4th and 5th Streets on the north side of Cherry Street; 400-500 spaces for ISU; parking supply/demand study needed prior to moving forward.

#### **ISU PARKING PLAN (2011) -- TIM HAAHS ENGINEERS ARCHITECTS**

In regard to future parking adequacy on the ISU Campus, the study estimated a campus-wide shortage of approximately 93 spaces in 2014 and 733 spaces in 2020. Recommendations in the report included the addition of at least 800-1,000 net spaces over the next 10 years, with 400-500 net spaces by 2014 (which could be in remote surface lots) and another 400-500 net spaces by 2020 (which should be as structured parking on the west side of campus).

#### **DOWNTOWN TRAFFIC STUDY (2012) -- CORRADINO, LLC**

The Downtown Traffic Study completed in 2012 included the following observations: 1) converting Cherry Street from one-way to two-way is acceptable from a traffic operations standpoint and the estimated cost to do so is approximately \$557,000; and 2) converting

Cherry, Ohio, Walnut, 8th, and 9th Streets from one-way to two-way is unacceptable from a traffic operations standpoint and the estimated cost to do so would be approximately \$1,951,000.

#### **TRAIL AND GREENWAY PLAN (2011) – BURGESS & NIPLE**

This Trails Plan establishes the framework for further development, expansion and integration of a multi-jurisdictional trails and greenways system for the Terre Haute-Vigo County Metropolitan Planning Area. The plan supports national sustainable community goals by strategically connecting the modal pieces – bikeways, pedestrian facilities, transit, and roadway – into a truly intermodal, interconnected system.

# Section Three Stakeholder Input



HWC Engineering and Traffic Engineering, Inc. interviewed key stakeholders in regard to current and future developments that might have an impact on parking and pedestrian issues in the study area. The stakeholders interviewed were as follows:

- Thompson Thrift (500 Wabash Building)
- Indiana State University (Campus Parking Facilities)
- J3 Concepts & Art Spaces, Inc. ("Turn to the River" Study)
- Downtown Terre Haute (Downtown Merchants input)
- Core Redevelopment (Deming Center Redevelopment)

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- City of Terre Haute (Parking for City Hall)
- Vigo County (Parking for Courthouse & Jail)
- Nations Wright and CSL (Hulman Center Redevelopment)

#### **THOMPSON THRIFT – 500 WABASH BUILDING**

The 500 Wabash Building is located on the north side of Wabash Avenue between North 5th Street and North 6th Street. Demolition began in late 2013 and the project is scheduled to be completed in July, 2015. The design of the new 500 Wabash Building will contribute to the historic character of downtown Terre Haute. High quality materials and detailing will define the facades which will be primarily brick and cast stone.

The 22,000 square foot ground floor will offer a mix of restaurants, shops and office space. Outdoor dining is planned on the North 5th Street side and along a pedestrian pass-through on the ground floor at mid-block on Wabash Avenue. The building will wrap around a small parking court on the north side of the building that will have 28 parking spots (26 regular, 2 handicapped). There is also a dedicated loading/unloading zone for building tenants.

The 2nd – 5th floors will be comprised of approximately 104,500 square feet of Indiana State University student housing made up of 75 apartment style units. These 1, 2, 3 or 4 bedroom units will feature private bedroom/bathroom suites.

The projected parking demand for the 22,000 square foot ground floor, at 2.2 spaces per 1,000 square feet of developed floor area, is 50 spaces. There will be 28 parking spots provided on site. Therefore, a shortfall of 22 parking spaces is anticipated.



• 500 WABASH BUILDING - Source: HWC

The projected parking demand for the 2nd-5th floors will be approximately 250 vehicles as discussed with Adam Fisher of Thompson Thrift. The peak demand would occur during the morning and evening hours, with a reduction during the daytime hours.

At the time of the writing of this report, Thompson Thrift was in the midst of discussions with the owners of the SkyGarden parking garage, which is located at 662 Ohio Street and also fronts on Wabash Avenue, approximately 1,000 feet east of the 500 Wabash Building. The SkyGarden parking garage currently has 559 spaces. During the daytime, the typical number of cars parked in the garage is 145. During the evening, the garage is essentially empty. Therefore, there is adequate capacity in the parking garage to accommodate all the parking demand for the 500 Wabash Building, both during daytime and nighttime hours.

#### INDIANA STATE UNIVERSITY – CAMPUS PARKING FACILITIES

Discussions concerning short and long term parking needs on the Indiana State University campus were held with Bryan Duncan, Director of Capital Planning and Improvements, and Lori Elkins, Assistant Director of Public Safety for Traffic and Parking Services.

The ISU Campus Master Plan was completed in 2009 by Ratio. The plan included the following recommendation: parking garage needed between 4th and 5th Streets on the north side of Cherry Street; 400-500 spaces for ISU; parking supply/demand study needed prior to moving forward. The ISU Parking Plan was completed in 2011 by Tim Haahs Engineers Architects. In regard to future parking adequacy on the ISU Campus, the plan estimated a campus-wide shortage of approximately 93 spaces in 2014 and 733 spaces in 2020. Recommendations in

the report included the addition of at least 800-1,000 net spaces over the next 10 years, with 400-500 net spaces by 2014 (which could be in remote surface lots) and another 400-500 net spaces by 2020 (which should be as structured parking on the west side of campus).

Upon further study, the University determined it would not be financially feasible or logistically possible to construct a parking facility between 4th & 5th Streets within the current planning horizon of the Campus Master Plan. Since the completion of the Campus Master Plan in 2009, the University has acquired a 590 space parking garage from the City of Terre Haute (Cherry Street Parking Garage) and leased 318 spaces from the Terre Haute Boys and Girls Club located between Chestnut and Eagle Streets west of 3rd Street. In addition, the University plans within the next two years to add approximately 400 spaces adjacent to the relocated Track and Field facility west of 3rd Street with another 70 spaces to be constructed at what is commonly referred to as the Toney Petroleum site once ownership transfers from the City of Terre Haute. In total, over 1.300 additional parking spaces have been added or are planned to be available within the next two year period.



• CAMPUS PARKING FACILITIES - Source: HWC

#### J3 CONCEPTS AND ART SPACES, INC. – "TURN TO THE RIVER" STUDY

Dialogue in regard to the "Turn to the River" study that was recently completed was held with Jason Saavedra of J3 Concepts and Mary Kramer of Art Spaces, Inc. One of the key outcomes of the study was the identification of imaginative, unique, and transformative concepts that would integrate public art and design within the urban environment and reconnect Terre Haute to the Wabash Riverfront. Recurring themes included:

- Opening up Wabash Avenue to the river as a designed walking promenade
- Creating a meaningful public place at the end of Wabash Avenue on city-owned property adjacent to the Wabash River
- Adding wayfinding and river signifiers throughout the downtown
- Providing a well-designed and attractive pedestrian and bicycle-friendly crossing for US41 (3rd Street)
- A pedestrian bridge across the river

#### **DOWNTOWN TERRE HAUTE – DOWNTOWN MERCHANTS INPUT**

Downtown Terre Haute (DTH) is the community's 21st Century version of the old merchant groups. Organized as a 501 C-3, non-profit corporation in 1999, with funding support from Redevelopment, DTH is an Affiliate of Indiana Main Street.

The National Trust for Historic Preservation's 4-point philosophy for revitalizing downtown districts guides the organization. Under the Main Street model, an active committee represents each point: Organization, Promotion, Economic Restructuring, and Design.

DTH, and the historic merchant groups in Terre Haute that preceded DTH, have a common thread of promoting commerce in the neighborhood and weighing in on a wide range of issues related to downtown development.

Parking and pedestrian issues are in the forefront of DTH's members. During a DTH meeting held on August 20, 2014, representatives of HWC and Traffic Engineering, Inc. discussed the results of the parking supply and demand analysis. The results were discussed in terms of the overall study area and also in terms of three subareas. In the overall study area, there is excess on-street parking capacity and excess parking garage capacity, based on current conditions. Predicted future conditions show on-street parking nearing capacity in the subarea analyses and both parking garages at or near capacity.

Two major downtown projects are causing parking concerns for downtown merchants. The 500 Wabash Building is currently under construction and includes significant retail space as well as housing space for ISU students. The concern is that students will be parking on the street and making

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it difficult for potential customers to find a convenient place to park. Also, the redevelopment of the Deming Center could exacerbate the same concerns in the near future. At the heart of the matter is the desire of downtown merchants to have adequate on-street parking within a reasonable distance from their respective storefronts during normal business hours. Mayor Bennett attended the meeting and indicated the City would enforce the on-street parking limits, particularly in the area surrounding the 500 Wabash Building and the Deming Center. While overnight on-street parking might increase in the areas near the 500 Wabash Building and Deming Center, enforcement of parking limits during business hours will be important in ensuring that on-street parking is available for the customers of downtown merchants during normal business hours.

Most downtown merchants indicated they do not believe that the majority of ISU students living in the 500 Wabash Building and the Deming Center will be parking in remote ISU parking lots consistently. Instead they believe they will be parking on the streets around the developments, forcing the City to enforce on-street parking time limits even more vigorously. We indicated that for the purposes of this parking study, in the future parking demand analyses, we did not assume that any ISU students living in the 500 Wabash Building or the Deming Center would park in remote ISU parking lots. Instead, we assumed they would park in the SkyGarden Parking Garage. The average walking distance from both developments to the SkyGarden Parking Garage is approximately 1,000 feet.

Attendees indicated a future meeting with ISU to present the results of the parking study was important to them, so that ISU clearly understood the results of the study. Attendees felt that ISU should provide designated parking for residents in the 500 Wabash Building and the Deming Center in surface parking lots owned by ISU along Cherry Street near those developments, instead of in remote parking lots.



• DOWNTOWN TERRE HAUTE, IN - Source: HWC

We indicated that a downtown parking questionnaire would be forthcoming since there were a substantial number of downtown merchants not in attendance at the meeting on August 20, 2014.

The downtown parking questionnaire was made available online to downtown merchants on August 28, 2014. Twenty-eight (28) local respondents participated in the survey. The results of the survey are as follows:

#### Question 1: What is the name of your business?

Answer 1: The following businesses participated: Terre Haute Children's Museum, Arts Illiana, Roly Poly, Terre Haute EDC, Sasha Krasutskaya, Millie & Maude, Indiana Theatre Event Center, Arts Illiana (2nd response), Terre Haute Chamber of Commerce, Business Engagement Center, The Copper Bar, THEDC, Holder Design Inc., Hilliard Lyons, mms-ae, Indiana State University, Modern Charm, Century 21 Advantage, Thompson Thrift, The Corner Grind, ISU, Forrest Sherer,

*Mic's Pics Photo & Digital, J-Gumbos, Barnes & Noble ISU, Frontier Communications, Art Spaces Inc., Ossip-Ross Optometry.* 

#### Question 2: What is your business address?

Answer 2: (The respondents listed their business address.)

#### Question 3: Where do you and your employees normally park?

Answer 3: On the street (14%), public parking lot (0%), private parking lot (50%), SkyGarden Parking Garage (14%), Cherry Street Parking Garage (4%), other (18%).

Question 4: Please rate downtown parking options.

Answer 4: Great (10%), generally acceptable (42%), average (24%), poor (24%).

Question 5: What is the greatest distance you would like your customers to walk to get to your business? (One block is approximately 300 feet – list in feet or blocks.)

Answer 5: One block or less (54%), two blocks (18%), three blocks (18%), more than three blocks (7%), other (3%).

Question 6: What is the greatest distance you and your employees are willing to walk from their car to your business? (One block is approximately 300 feet – list in feet or blocks.)

Answer 6: One block or less (54%), two blocks (14%), three blocks (18%), more than three blocks (11%), other (3%).

Question 7: On average, how long does a customer stay at your business?

Answer 7: Less than 30 minutes (32%), 30 minutes to 1 hour (29%), 1 hour to 2 hours (28%), more than 2 hours (11%).

#### Question 8: How often do customers comment about having difficulty finding a parking place?

Answer 8: Every day (21%), two to three times a week (38%), once a week (10%), two to three times a month (14%), never (17%).

#### Question 9: If applicable, list any concerns regarding the future of downtown parking availability.

Answer 9: 500 Wabash, Deming Center, and ISU will cause future parking problems downtown (32%), increased parking demand downtown is a positive indicator of growth (11%), additional parking garage and/or market existing parking garages (32%), other (25%).

Question 10: How can the City of Terre Haute best support you as a local merchant in terms of enhancing downtown parking?

Answer 10: More on-street parking spaces, paint lines delineating parking spaces, minimize no parking zones (23%), new parking garage (14%), install parking meters (9%), market existing parking garages better (14%), encourage employees to park off-street (5%), more surface parking lots (5%), other (30%).

#### **CORE REDEVELOPMENT – DEMING CENTER REDEVELOPMENT**

Core Redevelopment, an Indianapolis company that specializes in rehabilitating historic buildings for modern residential use, has purchased Terre Haute's downtown Deming Center, located at the corner of Cherry Street and North 6th Street. The company will start renovations when the building is fully vacated, most likely in January, 2015. The building will be mostly utilized as housing for Indiana State University students, although the ground floor will contain commercial businesses.

The projected commercial/retail parking demand for the 20,000 square foot ground floor, at 2.2 spaces per 1,000 square feet of developed floor area, is 45 spaces.

The building presently contains 109 apartment units occupied by Terre Haute Housing Authority tenants. In a conversation with Core CEO John Watson, the proposed development will have 111 apartments. Each apartment will have approximately 650 square feet of space and will typically house one person. Therefore, the residential parking demand will be approximately 105 vehicles.

The gross combined commercial/retail and residential parking demand for this development is 150 vehicles. There will be 40 commercial/retail parking spots provided on site. Therefore, the net combined commercial/retail and residential off-site parking demand is 110 vehicles.

Two options were discussed that would provide viable options for the needed 110 spaces: 1) remote parking provided by Indiana State University, and 2) the SkyGarden Parking Garage.



<sup>•</sup> CORE REDEVELOPMENT - Source: HWC

#### **CITY OF TERRE HAUTE – PARKING FOR CITY HALL**

Terre Haute City Hall, the Vigo County Courthouse and the Vigo County Jail are located adjacent to one another on a tract of ground with Cherry Street (US150) to the north, Ohio Street (US150) to the south, 3rd Street (US41) to the east, and 1st Street to the west.

City Hall has a parking lot with approximately 180 spaces to serve employees and visitors.

#### **VIGO COUNTY – PARKING FOR COURTHOUSE AND JAIL**

Terre Haute City Hall, the Vigo County Courthouse and the Vigo County Jail are located adjacent to one another on a tract of ground with Cherry Street (US150) to the north, Ohio Street (US150) to the south, 3rd Street (US41) to the east, and 1st Street to the west.

The Courthouse has a parking lot with approximately 135 spaces to serve employees and visitors. The Jail has a parking lot with approximately 80 spaces to serve employees and visitors.

#### NATIONS WRIGHT AND CSL – HULMAN CENTER REDEVELOPMENT

Hulman Center is a 10,200-seat arena in Terre Haute and is home to the ISU Sycamores men's and women's basketball teams, as well as other community oriented events. Hulman Center opened on December 14, 1973 following construction funded by donations and bond issues after an initial \$2.5 million gift from Tony Hulman and the Hulman family.

Nations Wright (NW) is an Owners Representation firm specializing in project management of sports and entertainment venues, collegiate facilities, municipal projects, elementary and high schools, and private sector commercial projects. NW is currently working with Indiana State University, the City of Terre Haute, and the State of Indiana to structure a long-term plan of finance and development for the renovation and expansion of the Hulman Center.

Convention, Sports, and Leisure International (CSL) is completing a market analysis for a potential event facility development at the Hulman Center. It is anticipated that the facility will be a multi-use event center. This facility could accommodate meetings, banquets/receptions, sporting, trade and consumer shows, conventions, conferences and various other public assembly events.

The CSL analysis noted that the proposed redevelopment would enable enhanced conferences and conventions, and that the typical convention would generate 300-400 attendees. Also, it was estimated that perhaps 200 of those attendees would be pre-parked in adjacent downtown hotel lots.



HULMAN CENTER - Source: HWC





#### INTRODUCTION

It is important to understand that this report is not a comprehensive parking study and recommendations as to how the City of Terre Haute should manage its parking supply and demand are not part of the scope of our study. The purpose of this study is as follows:

- Determine the current parking conditions in study area
  - Collect and analyze public parking demand and utilization data in study area
  - Identify whether there is inadequate public parking supply in study area

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- Estimate future parking conditions in study area
  - □ Identify major planned developments in study area
  - □ Estimate parking demand for the planned developments
  - □ Identify whether there is inadequate public parking supply in study area
- Identify current and future parking conditions in key subareas
  - Wabash Avenue subarea
  - Arts Corridor subarea
  - □ Hulman Center subarea

#### **CURRENT PARKING CONDITIONS - INVENTORY**

The public parking supply within the study area included on-street parking plus two parking garages, namely, the Cherry Street Parking Garage and SkyGarden Parking Garage. Following is the inventory of public parking spaces:

- On-street public parking: 831 spaces (includes 15 handicapped spaces)
- Cherry Street Parking Garage: 610 spaces
- SkyGarden Parking Garage: 559 spaces

The private parking supply within the study area includes private surface parking lots. There are approximately 3,619 private parking spaces in the study area.

The approximate total number of public and private parking spaces in the downtown study area is 5,619.

A complete inventory of on-street parking is summarized in Figure 2b. For block locations, refer to Figure 2a. For each block face, the numbers of handicap spaces are indicated (HC) as well as total number of spaces:

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Section 4 Parking Supply & Demand Analysis

Block Face	HC	Total	<b>Block Face</b>	HC	Total	<b>Block Face</b>	HC	Total	<b>Block Face</b>	HC	Tota
3A	0	0	11A	0	8	20B	2	10	29B	0	8
3B	0	8	11B	2	7	20C	0	8	29D	0	11
3C	0	5	11C	0	6	20D	1	9	30A	0	10
4A	0	8	11D	0	7	21A	0	5	30B	0	10
4B	0	4	12A	0	21	21B	0	9	30D	0	0
4C	0	7	12B	0	2	21C	0	10	31A	3	16
4D	0	10	12C	0	18	21D	0	0	31B	0	8
5A	0	11	12D	0	7	22A	1	20	31D	0	11
5B	0	4	13A	0	7	22B	0	7	32A	0	10
5C	0	6	13B	0	7	22C	0	18	32B	0	12
5D	0	6	13C	0	7	22D	0	5	32D	0	4
6A	1	10	13D	0	3	23A	0	0	33A	0	7
6B	0	0	14A	0	7	23B	0	9	33B	0	11
6C	0	19	14B	0	10	23C	0	7	33D	0	7
6D	0	3	14C	0	6	23D	0	3	34AA	0	3
7A	0	10	14D	0	8	24A	0	9	34AB	0	5
7B	0	10	15AA	0	3	24B	0	7	34AD	0	10
7C	0	10	15AB	0	4	24C	0	5	34BA	0	3
7D	0	0	15AC	0	4	24D	0	5	34BD	0	11
8A	0	11	15AD	0	5	25AA	0	4			
8B	0	0	15BA	0	7	25AB	0	7			
8BC	0	0	15BC	0	7	25AC	0	4		-	
8BD	0	8	15BD	0	9	25AD	2	10			
8C	0	9	17A	0	4	25BA	0	8			
8D	0	7	17B	0	7	25BC	0	7			
9A	0	5	18A	2	8	25BD	0	0			
9B	0	6	18C	0	10	26B	0	9			
9C	0	7	18D	0	9	27A	0	6			
10A	0	8	19A	0	9	27D	0	6			
10B	0	6	19B	1	9	28A	0	3			
10C	0	5	19C	0	7	28B	0	3			
10D	0	9	20A	0	6	29A	0	10			-

• FIGURE 2b - On-Street Parking Inventory by Block Face

#### **CURRENT PARKING CONDITIONS - OCCUPANCY**

Occupancy is a measure of the percentage of parking spaces actually occupied during a typical weekday. Figure 3, "On-Street Occupancy", is a chart that represents overall occupancy rates for the on-street parking facilities for the entire study area. The chart shows that the maximum percent occupancy is approximately 53% at 11am. The lowest percent occupancy is approximately 36% at 5pm.







The Cherry Street Parking Garage, on a typical weekday, has 310 cars that use access cards. Of these 310 cars, 70 are "park and pay" (i.e., transit). Transit parkers average 3.5 hours parking time. Note that the capacity of the garage is 610 spaces.

The SkyGarden Parking Garage, on a typical weekday, has 145 cars. Most cars average a 1-2 hour parking time. Note that the capacity of the garage is 559 spaces.

Parking areas are considered "full" when they are 80% occupied. Figures 4 through 11 illustrate locations where occupancy percentages exceed 80% on an hourly basis.



• CHERRY STREET PARKING GARAGE - Source: HWC



• SKYGARDEN PARKING GARAGE - Source: HWC



#### Parking Occupancy > 80% (10am-11am)

#### Parking Occupancy > 80% (11am-12pm)



• FIGURE 5

#### Parking Occupancy > 80% (12pm-1pm)



• FIGURE 6



#### Parking Occupancy > 80% (1pm-2pm)



• FIGURE 7

#### Parking Occupancy > 80% (2pm-3pm)



• FIGURE 8

#### Parking Occupancy > 80% (3pm-4pm)



• FIGURE 9

#### Parking Occupancy > 80% (4pm-5pm)



• FIGURE 10



#### Parking Occupancy > 80% (5pm-6pm)



• FIGURE 11

#### **CURRENT PARKING CONDITIONS - TURNOVER**

Turnover refers to the length of time a vehicle parks in a particular space. Figure 12 summarizes this information for all on-street parking areas within the study area:

Turnover Summary									
Time Parked (hrs)	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	
Number of Vehicles (1498 total)	814	345	143	73	30	24	33	36	
Percentage of Total	54%	23%	10%	5%	2%	2%	2%	2%	

• FIGURE 12 - Turnover Summary

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#### **AVERAGE PARKING DURATION**

Figure 13 illustrates the specific locations where vehicles parked more than 2 hours:



#### **FUTURE PARKING CONDITIONS – PLANNED DEVELOPMENTS**

The major planned developments identified in the downtown study area are as follows:

- 500 Wabash Building
- Deming Center Redevelopment
- Hulman Center Redevelopment

#### **FUTURE PARKING DEMAND – 500 WABASH BUILDING**

The 500 Wabash Building is located on the north side of Wabash Avenue between North 5th Street and North 6th Street. Demolition began in late 2013 and the project is scheduled to be completed in July, 2015. The 22,000 square foot ground floor will offer a mix of restaurants, shops and office space. The 2nd – 5th floors will be comprised of approximately 104,500 square feet of Indiana State University student housing made up of 75 apartment style units with a total of 270 beds.

The projected commercial/retail parking demand for the 22,000 square foot ground floor, at 2.2 spaces per 1,000 square feet of developed floor area is 50 spaces.

The projected residential parking demand for the 2nd-5th floors will be approximately 250 vehicles,


• 500 WABASH BUILDING - Source: HWC

based on a 270 bed capacity, as discussed with Adam Fisher of Thompson Thrift. The peak demand would occur during the morning and evening hours, with perhaps a slight reduction during the daytime hours, though the daytime reduction might be minimal as many ISU students will walk to class from the 500 Wabash Building.

The gross combined commercial/retail and residential parking demand for this development is 300 vehicles. There will be 28 commercial/retail parking spots provided on site. Therefore, the net combined commercial/retail and residential off-site parking demand is 272 vehicles.

#### **FUTURE PARKING DEMAND – DEMING CENTER REDEVELOPMENT**

Core Redevelopment will start renovations on the Deming Center, located at the corner of Cherry Street and North 6th Street, in January, 2015. The building will be mostly utilized as housing for Indiana State University students, although the ground floor will contain commercial businesses.

The projected commercial/retail parking demand for the 20,000 square foot ground floor, at 2.2 spaces per 1,000 square feet of developed floor area, is 45 spaces.

The proposed residential development will have 111 apartments. Each apartment will have approximately 650 square feet of space and will typically house one person. Therefore, the residential parking demand will be approximately 105 vehicles.

The gross combined commercial/retail and residential parking demand for this development is 150 vehicles. There will be 40 commercial/retail parking spots provided on site. Therefore, the net combined commercial/retail and residential off-site parking demand is 110 vehicles.

#### **FUTURE PARKING DEMAND – HULMAN CENTER REDEVELOPMENT**

Efforts are currently underway to structure a long-term plan of finance and development for the renovation and expansion of the Hulman Center. It is anticipated that the facility will be a multiuse event center. This facility could accommodate meetings, banquets/receptions, sporting, trade and consumer shows, conventions, conferences and various other public assembly events. It is estimated that a multi-use Event Center could typically host 300 -400 attendees, with the event lasting 3.5 days. It is also estimated that approximately 200 of those attendees will be pre-parked at adjacent downtown hotel parking lots. We believe the future parking demand in excess of current demand will be approximately 100 -200 attendees which would translate to approximately 75- 150 parking spaces.

#### **FUTURE PARKING ADEQUACY – 500 WABASH BUILDING**

There will be a net off-site parking demand of 272 parking spaces for the combined residential and commercial/retail components of this building; 250 spaces are residential and 22 spaces are commercial/retail. At the time of the writing of this report, Thompson Thrift was in the midst of discussions with the owners of the SkyGarden Parking Garage, which is located at 662 Ohio Street and also fronts on Wabash Avenue, approximately 1,000 feet east of the 500 Wabash Building. The SkyGarden Parking Garage currently has 559 spaces. During the daytime, the typical number of cars parked in the SkyGarden Parking Garage is 145, leaving an excess capacity of 414 spaces. Assuming all of the ISU residential tenants utilized the SkyGarden Garage, the daytime excess capacity would be 164 spaces (559 total spaces – 145 spaces typical daily occupancy – 250 spaces residential = 164 spaces). During the evening, the SkyGarden Parking Garage is essentially empty, leaving an excess capacity of 559 spaces. Assuming all of the ISU residential tenants utilized the SkyGarden Parking Garage is essentially empty, leaving an excess capacity of 559 spaces. Assuming all of the ISU residential tenants utilized the SkyGarden Parking Garage is essentially empty, leaving an excess capacity of 559 spaces. Assuming all of the ISU residential tenants utilized the SkyGarden Parking Garage, the nighttime excess capacity would be 309 spaces (559 total spaces – 0 typical night occupancy – 250 spaces residential = 309 spaces). Therefore, there is adequate daytime and nighttime capacity in the SkyGarden Parking Garage to accommodate the net off-site peak parking demand for the 500 Wabash Building.

## **FUTURE PARKING ADEQUACY – DEMING CENTER REDEVELOPMENT**

There will be a net off-site parking demand of approximately 110 parking spaces for the combined residential and commercial/retail components of this building; 105 spaces are residential and 5 spaces are commercial/retail. Two options for serving this offsite parking demand were discussed with Core Redevelopment CEO John Watson. The first option is remote parking provided on the campus of Indiana State University (ISU), since the residents of the Deming Center will be ISU students. In our discussions with ISU, it appears that existing remote parking lots will be able to accommodate the 105 residential parking spaces needed for this redevelopment project. A second option would be the SkyGarden Parking Garage. The SkyGarden Parking Garage would likely be much closer than the remote ISU parking lots, and for our analysis we assumed all ISU residential tenants would use the SkyGarden Parking Garage.

Assuming that the ISU tenants of the 500 Wabash Building and the ISU tenants of the Deming Center



Redevelopment fully utilized the SkyGarden Parking Garage, the daytime excess capacity of the garage would be approximately 59 spaces (559 total spaces - 145 spaces typical daily occupancy – 250 spaces residential (500 Wabash) – 105 spaces residential (Deming) = 59 spaces. The nighttime excess capacity of the garage would be approximately 104 spaces (559 total spaces - 0 spaces typical night occupancy - 250 spaces residential (500 Wabash) – 105 spaces residential (Deming) = 104 spaces). Therefore, there is adequate daytime and nighttime capacity in the SkyGarden Parking Garage to accommodate the net off-site peak parking demand for the Deming Center Redevelopment, as well as the 500 Wabash Building.

## FUTURE PARKING ADEQUACY – HULMAN CENTER REDEVELOPMENT

Currently during special events held at the Hulman Center, the Cherry Street Parking Garage experiences a broad range of occupancy. The parking capacity of the garage is 610. Based on data received from Indiana State University for 2013, the following indicates typical special event parking demand at the Cherry Street Parking Garage:

- ISU Women's Basketball Games 25 avg.
  ISU Men's Basketball Games 200 avg.
- Concerts 385 avg.
- Commencements 330 avg.

Convention, Sports, and Leisure International (CSL) is completing a market analysis for a potential event facility development at the Hulman Center. It is anticipated that the facility will be a multi-use event center. This facility could accommodate meetings, banquets/receptions, sporting, trade and consumer shows, conventions, conferences and various other public assembly events.

#### DOWNTOWN PARKING & PEDESTRIAN STUDY

Data assembled by CSL for Midwest area regional and national convention and conference events indicates that a multi-use Event Center could typically host 300 -400 attendees, with the event lasting 3.5 days. It is also estimated that approximately 200 of those attendees will be pre-parked at adjacent downtown hotel parking lots, and that 100-200 attendees will drive back and forth to remote hotels and/or their homes. We believe the net future parking demand in excess of current demand will be approximately 100 -200 attendees which would translate to 75-150 parking spaces. Assuming that these conference events would take place during the daytime in the course of the regular work week, the current available daytime capacity of the Cherry Street Garage is approximately 300 (610 capacity less 310 daily usage = 300). With a future additional parking demand of 75- 150 spaces, the Cherry Street Parking Garage would have approximately 385-460 spaces occupied during the day, which puts the facility at 63% - 75% daytime capacity. Given the 25% - 37% excess capacity in the Cherry Street Parking Garage located adjacent to the Hulman Center, it is unlikely that additional structured parking will be needed.









While a parking supply and demand analysis for the overall downtown study area yields valuable information, certain smaller subareas within the downtown study area merit special consideration. We identified three subareas within the overall downtown study area as follows:

- Wabash Avenue Subarea
- Arts Corridor Subarea
- Hulman Center Subarea

## PARKING SUPPLY AND DEMAND ANALYSIS - WABASH AVENUE SUBAREA

This subarea consists of Cherry Street from 3rd Street to 6th Street, Wabash Avenue from 3rd Street to 6th Street, Ohio Street from 3rd Street to 6th Street, 4th Street from Ohio Street to Cherry Street, 5th Street from Ohio Street to Cherry Street, and 6th Street from Ohio Street to Cherry Street.

From Figure 2b, the total number of on-street parking spaces for this subarea is 173 and includes the following block faces: 3a, 4a, 5a, 3c, 4c, 5c, 9a, 10a, 11a, 9c, 10c, 11c, 19a, 20a, 21a, 3b, 4d, 9b, 10d, 4b, 5d, 10b, 11d, 5b, 6d, 11b, and 12d.



• FIGURE 14 - Wabash Avenue Subarea

#### ▷ ▷ ▷ ▷ ▷ ▷ ▷ ▷ ▷ Section 5 Subarea Parking Supply & Demand Analysis

In terms of current on-street parking demand in this subarea, from 10am to 11am, there were approximately 87 spaces occupied and 86 spaces unoccupied (50% occupancy). From 11am to 12 noon, there were approximately 90 spaces occupied and 83 spaces unoccupied (52% occupancy). From 12noon to 1pm, there were approximately 89 spaces occupied and 84 spaces unoccupied (51% occupancy). From 1pm to 2pm, there were approximately 87 spaces occupied and 86 spaces unoccupied (50% occupancy). From 2pm to 3pm, there were approximately 76 spaces occupied and 97 spaces unoccupied (44% occupancy). From 3pm to 4pm, there were approximately 76 spaces occupied and 97 spaces unoccupied (44% occupancy). From 4pm to 5pm, there were approximately 73 spaces occupied and 100 spaces unoccupied (42% occupancy). From 5pm to 6pm, there were approximately 47 spaces occupied and 126 spaces unoccupied (27% occupancy).



• FIGURE 15 - Wabash Avenue Subarea On-Street Parking Occupancy

Future on-street and off-street parking demand in this subarea will be driven primarily by the 500 Wabash Building and the Deming Center Redevelopment. The net future off-site parking demand associated with the 500 Wabash Building is anticipated to include 272 spaces; of the 272 spaces, 250 spaces are residential and 22 are commercial/retail. It is assumed that the 250 residential spaces would utilize the SkyGarden Parking Garage and the 22 commercial/retail spaces would utilize on-street parking. The net future off-site parking demand associated with the Deming Center Redevelopment is anticipated to include 110 spaces; 105 spaces are residential and 5 spaces are commercial/retail. It is assumed that the 105 residential spaces would utilize the SkyGarden Parking Garage and the 5 commercial/retail spaces would utilize on-street parking. Enforcement of on-street parking time limits in the subarea is important in assuring that residential parking associated with the 500 Wabash Building and Deming Center Redevelopment utilizes the SkyGarden Parking Garage (and/or the remote Indiana State University lots), and not the available on-street parking in the subarea.

In summary, for the Wabash Avenue Subarea, the current on-street parking demand utilizes approximately 52% of available spaces during peak parking hours. Future commercial/retail excess parking demand associated with the 500 Wabash Building and Deming Center Redevelopment will increase the on-street parking demand in the subarea. Assuming 50% of the net commercial/retail off-site parking demand for the 500 Wabash Building and the Deming Center Redevelopment used on-street parking in this subarea, the peak on-street parking demand would increase from a current peak demand of 52% to a future peak demand of 60% (90 spaces + 11 spaces + 3 spaces = 104 spaces occupied and 69 spaces unoccupied).



#### **PARKING SUPPLY AND DEMAND ANALYSIS - ARTS CORRIDOR SUBAREA**

This subarea consists of Wabash Avenue from 6th Street to 8th Street, Ohio Street from 6th Street to 8th Street, and 7th Street from Walnut Street to Cherry Street.

From Figure 2b, the total number of on-street parking spaces for this subarea is 117 and includes the following block faces: 6b, 6c, 7c, 7d, 12a, 12b, 12c, 13a, 13c, 13d, 22a, 22b, 23a, and 23d.



• FIGURE 16 - Arts Corridor Subarea

In terms of current on-street parking demand in this subarea, from 10am to 11am, there were approximately 84 spaces occupied and 33 spaces unoccupied (72% occupancy). From 11am to 12 noon, there were approximately 82 spaces occupied and 35 spaces unoccupied (70% occupancy). From 12noon to 1pm, there were approximately 64 spaces occupied and 53 spaces unoccupied (55% occupancy). From 1pm to 2pm, there were approximately 72 spaces occupied and 45 spaces unoccupied (62% occupancy). From 2pm to 3pm, there were approximately 86 spaces occupied and 31 spaces unoccupied (74% occupancy). From 3pm to 4pm, there were approximately 84 spaces occupied and 33 spaces unoccupied (72% occupancy). From 3pm to 5pm, there were approximately 79 spaces occupied and 38 spaces unoccupied (68% occupancy). From 5pm to 6pm, there were approximately 83 spaces occupied and 34 spaces unoccupied (71% occupancy).



• FIGURE 17 - Arts Corridor Subarea On-Street Parking Occupancy

In addition to the on-street parking, this subarea includes the SkyGarden Parking Garage. As previously mentioned in this report, this parking garage has 559 spaces, and on a typical weekday, it currently has 145 spaces occupied and 414 spaces unoccupied (26% occupancy).

Future on-street and off-street parking demand in this subarea will come primarily from planned developments in the adjacent Wabash Avenue Subarea. As a result of the future off-site residential parking demand from the 500 Wabash Building and the Deming Center Redevelopment, the SkyGarden Parking Garage will have a daytime occupancy of 89% and a nighttime occupancy of 81%.

In summary, for the Arts Corridor Subarea, the current on-street parking demand utilizes approximately 74% of available spaces during peak parking hours. Future commercial/retail excess parking demand associated with the 500 Wabash Building and Deming Center Redevelopment will increase the on-street parking demand in the subarea. Assuming 50% of the net commercial/retail off-site parking demand for the 500 Wabash Building and the Deming Center Redevelopment used on-street parking in this subarea, the peak on-street parking demand would increase from a current peak demand of 74% to a future peak demand of 85% (86 spaces + 11 spaces + 2 spaces = 99 spaces occupied and 18 spaces unoccupied).



## **PARKING SUPPLY AND DEMAND ANALYSIS - HULMAN CENTER SUBAREA**

This subarea consists of Wabash Avenue from 8th Street to 9th Street, Cherry Street from 7th Street to 9th Street, Ohio Street from 8th Street to 9th Street, 8th Street from Ohio Street to Cherry Street, and 9th Street from Ohio Street to Cherry Street.

From Figure 2b, the total number of on-street parking spaces for this subarea is 99 and includes the following block faces: 7a, 7b, 8a, 8b, 8c, 8d, 13b, 14a, 14b, 14c, 14d, 15(a)d, and 24a.



<sup>•</sup> FIGURE 18 - Hulman Center Subarea

#### ▷ ▷ ▷ ▷ ▷ ▷ ▷ ▷ ▷ Section 5 Subarea Parking Supply & Demand Analysis

In terms of current parking demand in this subarea, from 10am to 11am, there were approximately 71 spaces occupied and 28 spaces unoccupied (72% occupancy). From 11am to 12 noon, there were approximately 82 spaces occupied and 17 spaces unoccupied (83% occupancy). From 12noon to 1pm, there were approximately 72 spaces occupied and 27 spaces unoccupied (73% occupancy). From 1pm to 2pm, there were approximately 59 spaces occupied and 40 spaces unoccupied (60% occupancy). From 2pm to 3pm, there were approximately 71 spaces occupied and 28 spaces unoccupied (72% occupancy). From 3pm to 4pm, there were approximately 60 spaces occupied and 39 spaces unoccupied (61% occupancy). From 4pm to 5pm, there were approximately 66 spaces occupied and 33 spaces unoccupied (67% occupancy). From 5pm to 6pm, there were approximately 46 spaces occupied and 53 spaces unoccupied (46% occupancy).



• FIGURE 19 - Hulman Subarea On-Street Parking Occupancy

In addition to the on-street parking, this subarea includes the Cherry Street Parking Garage. As previously mentioned in this report, this parking garage has 610 spaces, and on a typical weekday, has 310 spaces occupied and 300 spaces unoccupied (51% occupancy).

Future parking demand in this subarea will come primarily from the Hulman Center Redevelopment. Conventions and events at Hulman Center could generate the need for approximately 75 - 150 additional spaces. The Cherry Street Parking Garage would be at 75% capacity (460 out of 610 spaces occupied) with the future demand of 150 additional spaces.

In summary, for the Hulman Center Subarea, the current on-street parking demand utilizes approximately 70% - 74% of available spaces during peak parking hours, except for the lunch hour, when the demand is 83%. Future parking demand in the Hulman Center Subarea will be driven primarily by the redevelopment of the Hulman Center. Current on-street parking demand is approaching the "full designation" (greater than 80% occupancy) and future on-street parking demand will begin to spill over into the adjacent Arts Corridor Subarea and the farther areas of the downtown study area, which do have adequate on-street parking availability. Future demand associated with redevelopment of the Hulman Center will effectively bring the Cherry Street Parking Garage to near full capacity, and along with the completion of the 500 Wabash Building and the Deming Center Redevelopment, will likely bring the SkyGarden Parking Garage to full capacity.



# Pedestrian Study



Section Six

# CURRENT INVENTORY OF BICYCLE & PEDESTRIAN FACILITIES

In the Trail and Greenway Plan (2011), the primary facility used for walking was noted to be sidewalks. In the study area, most of the pedestrian facilities are comprised of sidewalks. The condition of the sidewalks varies throughout the study area, but many of the sidewalks are considered to be in fair or better condition.

The National Road Heritage Trail (NHRT) corridor connects downtown Terre Haute and Indiana State University with eastern Terre Haute and Vigo County. This paved, multi-use path is approximately seven miles long, with the western terminus at 4th Street in downtown Terre Haute and the eastern terminus at the Jones Trailhead at Chamberlain Road. The NHRT is located along an abandoned railroad corridor and serves as the backbone to the area trail and greenway system.

Since the opening of the NHRT, connections to the multi-use trail have been completed at various locations with bike lanes, shared roadways, and multi-use paths. Corridors today include widened and existing sidewalks in the study area along 4th, 5th, and 7th Streets, and Ohio Street. However, an existing bike lane along 4th Street south of Indiana State University extending into the study area was recently removed.

# **PROPOSED BICYCLE & PEDESTRIAN FACILITIES**

Projects in the study area listed in the Trail and Greenways Plan (2011) include:

- Wabash River Crossing along US40 Bridge
- Riverscape Plan
- Wabash East Bank Greenway, North Section
- Wabash Avenue Bike Lanes
- TNHRT to Wabash Avenue Connector

The Wabash River Crossing along US40 Bridge project and the Wabash Avenue Bike Lanes project are both targeted for completion by 2015 according to the Trail and Greenways Plan. All of the other proposed projects in the study area that are included in the Trail and Greenways Plan are not scheduled for completion until after 2025.

## **BARRIERS TO BICYCLE & PEDESTRIAN ACTIVITY**

The Trail and Greenway Plan noted that barriers to bicycle and pedestrian activity were primarily:

- Lack of sidewalks/paths
- Sidewalks/paths in poor condition
- Wide roads too difficult to cross
- Lack of lighting
- Pedestrian signals too short of an interval to cross
- Too many cars traveling too fast
- Motorists don't stop for pedestrians

#### 

In the Trail and Greenway Plan, the primary facility used for walking was noted to be sidewalks. As previously mentioned, in the study area, most of the pedestrian facilities are comprised of sidewalks. The condition of the sidewalks varies throughout the study area, but many of the sidewalks are considered to be in fair or better condition. Lack of sidewalks is not a significant issue in the study area. Lack of lighting is not a major issue in the commercial core of the study area and may be a minor issue in the balance of the study area. Along Ohio Street and 3rd Street it is likely that pedestrian signals may have too short of an interval for crossing safely. In the study area, speed of motorists may be an issue, but it may be more of a perception than a reality.

In terms of barriers to pedestrian activity in the study area, 3rd Street (US 41) is perhaps the most significant area of concern. This corridor is wide, heavily traveled, and difficult to cross. Within the study area, there is no pedestrian overpass or underpass across 3rd Street. Other barriers to pedestrian activity in the study area include the railroad tracks along 1st Street and the lengthy crosswalks across Ohio Street.

We believe the "Turn to the River" study that was recently completed presents a dynamic, well-conceived plan that should be considered as a roadmap for future downtown development. A recurring theme in that study is the need for a well-designed and attractive pedestrian and bicycle-friendly crossing for 3rd Street. The study recommends connecting Wabash Avenue to the river with a pedestrian promenade extending Wabash Avenue through the Government Campus to the river, along with the creation of a river overlook park at the west end of the promenade.



• TERRE HAUTE BIKE ROUTE - Source: HWC

# Section Seven Summary Findings D D D D D



## PARKING SUPPLY AND DEMAND ANALYSIS – OVERALL STUDY AREA

There is currently excess on-street parking capacity. Within the study area, there are 831 on-street parking spaces. On a typical day, the maximum number of on-street spaces occupied is 53% of the inventory, and that occurs at 11am.

There is currently excess parking garage capacity. Within the study area, there are 1,169 garage parking spaces. On a typical day, the maximum number of garage spaces occupied is 39% of the inventory.

There is currently excess off-street private surface parking capacity. Within the study area, there are approximately 3,619 off-street private surface parking spaces. No actual count of the occupancy of these private lots was taken as part of this study, but observation indicates there is excess capacity.

There will be future excess on-street parking capacity. Future demand in the study area will be driven by three significant planned improvements: the 500 Wabash Building, the Deming Center Redevelopment, and the Hulman Center Redevelopment. The 500 Wabash Building and the Deming Center Redevelopment have commercial/retail components that will increase future on-street parking demand, but the excess capacity of the study area will handle the additional demand. The redevelopment of the Hulman Center will generate future on-street parking demand, but once again the excess capacity of the study area will handle the additional demand.

There will not be future excess parking garage capacity. The 500 Wabash Building and the Deming Center Redevelopment have significant residential components that will generate a considerable increase in future overnight parking demand. The redevelopment of the Hulman Center will generate a considerable increase in parking demand. It is anticipated that the SkyGarden Parking Garage and the Cherry Street Parking Garage will be at or near capacity (greater than 80% occupancy) upon completion of the 500 Wabash Building, the Deming Center Redevelopment, and the Hulman Center Redevelopment.

There will be future excess off-street private surface parking capacity. Most of the off-street private surface parking is utilized during normal business hours. Owners of some of these private lots should have the opportunity to generate pay-to-park revenue, particularly near the Hulman Center, during special events occurring in the evening and weekend hours. Similarly, some of these private surface parking lots with excess capacity may be available to generate revenue from public use when the existing parking garages are at capacity.

#### PARKING SUPPLY AND DEMAND ANALYSIS – WABASH AVENUE SUBAREA

For the Wabash Avenue Subarea, the current on-street parking demand utilizes approximately 52% of available spaces during peak parking hours.

Future parking demand in the Wabash Avenue Subarea will be driven primarily by the 500 Wabash Building and the Deming Center Redevelopment. Both developments have a modest amount of onsite parking, but off-site parking demand will exist for both residential and commercial/retail spaces.

Off-site residential parking demand will be met by utilizing the SkyGarden Parking Garage. (While remote parking alternatives will be provided by Indiana State University for the residential component of both developments, we believe the distance between those remote lots and the developments will result in minimal usage by ISU tenants.)

Off-site commercial/retail parking demand will utilize on-street parking in the subarea. It is estimated that the increased utilization of on-street parking spaces will jump from 52% to 60%.

Enforcement of on-street parking time limits in the subarea is important in assuring that residential parking associated with the 500 Wabash Building and Deming Center Redevelopment utilizes the

SkyGarden Parking Garage and/or the remote Indiana State University lots, and not the available onstreet parking in the subarea.

#### PARKING SUPPLY AND DEMAND ANALYSIS – ARTS CORRIDOR SUBAREA

For the Arts Corridor Subarea, the current on-street parking demand utilizes approximately 70% - 74% of available spaces during peak parking hours.

Future parking demand in the Arts Corridor Subarea will be driven primarily by demand from developments occurring in the adjacent Wabash Avenue Subarea, namely the 500 Wabash Building and the Deming Center Redevelopment. Both developments have a modest amount of on-site parking, but off-site parking demand will exist for both residential and commercial/retail spaces.

Off-site residential parking demand will be met by utilizing the SkyGarden Parking Garage. (While remote parking alternatives will be provided by Indiana State University for the residential component of both developments, we believe the distance between those remote lots and the developments will result in minimal usage by ISU tenants.)

Off-site commercial/retail parking demand will utilize on-street parking in the subarea. It is estimated that the increased utilization of on-street parking spaces will jump from 74% to 85%.

Enforcement of on-street parking time limits in the subarea is important in assuring that residential parking associated with the 500 Wabash Building and Deming Center Redevelopment utilizes the SkyGarden Parking Garage and/or the remote Indiana State University lots, and not the available on-street parking in the subarea.

## PARKING SUPPLY AND DEMAND ANALYSIS – HULMAN CENTER SUBAREA

For the Hulman Center Subarea, the current on-street parking demand utilizes approximately 70% - 74% of available spaces during peak parking hours, except for the lunch hour, when the demand is 83%.

Future parking demand in the Hulman Center Subarea will be driven primarily by the redevelopment of the Hulman Center.

Current on-street parking demand is approaching the "full designation" (greater than 80% occupancy) and future on-street parking demand will begin to spill over into the adjacent Arts Corridor Subarea and the farther areas of the downtown study area, which do have adequate on-street parking availability.

Future demand associated with redevelopment of the Hulman Center will effectively bring the Cherry Street Parking Garage to near full capacity, and along with the completion of the 500 Wabash Building and the Deming Center Redevelopment, the SkyGarden Parking Garage will be at full capacity.

#### **PEDESTRIAN STUDY**

The proposed pedestrian improvements in the study area, as shown in the Trail and Greenways Plan (2011) will improve pedestrian quality of life, but not significantly.

In terms of barriers to pedestrian activity in the study area, 3rd Street (US 41) is perhaps the most significant area of concern. This corridor is wide, heavily traveled, and difficult to cross. Within the study area, there is no pedestrian overpass or underpass across 3rd Street. Other barriers to pedestrian activity in the study area include the railroad tracks along 1st Street and the lengthy crosswalks across Ohio Street.

Our experience as engineers and landscape architects working in downtown revitalization projects has taught us that there is a strong linkage between pedestrian activity and economic vitality. Busy streets, bustling with pedestrian activity almost always corresponds to a healthy business climate for downtown merchants.

We believe that creation of an enhanced streetscape along various downtown streets should be a priority. Landscaped bump outs at intersections will shorten the pedestrian crossing distance, increasing safety, while at the same creating an improved ambiance. Lessening the hardscape and creating more green spaces would help enhance the pedestrian experience. Utilizing textures and colors in the hard surfaces will also improve the visual experience. Street trees, benches, period lighting, pocket parks, bike racks, street art, wayfinding signage, fountains, and similar amenities attract people to an area. A lack of those features often results in empty streets.

Gateway features indicating that one has arrived at an important place, in this case, the downtown area, are also powerful amenities.

Handicapped accessibility must be a priority throughout the study area.







## GENERAL

It is not within the scope of work of this study to make recommendations about how the City of Terre Haute should manage its parking supply and demand, or whether current City ordinances are adequate. However, we believe it is important to understand clearly the "big picture" implications of the data collected as part of this study.

The purpose of this section of the report is to present the data gathered during the study in such a way that City officials, Indiana State University officials, developers, merchants, and residents understand the current downtown parking demand, and most importantly, anticipate how future development in the downtown area will impact future parking demand. Also, to a lesser degree, this study presents ideas as to how pedestrian activity contributes to a vital and healthy downtown.

As mentioned earlier in this study, parking areas are considered "full" when they are 80% occupied. At that point, the ability to find an open parking spot becomes cumbersome and takes an inordinate amount of time and effort. Therefore, the industry standard for determining when a parking facility is "full" is when it is at 80% capacity or greater.

#### **CURRENT DOWNTOWN PARKING DEMAND**

- On-street daily peak parking demand (entire study area) 53%
- On-street daily peak parking demand (Wabash Ave. Subarea) 52%
- On-street daily peak parking demand (Arts Corridor Subarea) 74%
- On-street daily peak parking demand (Hulman Center Subarea) 83%
- SkyGarden Parking Garage daily peak parking demand 26%
- Cherry Street Parking Garage daily peak parking demand 51%

#### FUTURE DOWNTOWN PARKING DEMAND

- On-street daily peak parking demand (entire study area) 56%
- On-street daily peak parking demand (Wabash Ave. Subarea) 60%
- On-street daily peak parking demand (Arts Corridor Subarea) 85%
- On-street daily peak parking demand (Hulman Center Subarea) 83%
- SkyGarden Parking Garage daily peak parking demand 89%
- Cherry Street Parking Garage daily peak parking demand 75%

#### **ASSUMPTIONS**

It is important that we reiterate the assumptions we used to generate the above data. All future downtown parking demand data is based upon the full build out of the 500 Wabash Building, the Deming Center Redevelopment, and the Hulman Center Redevelopment. We assumed that all ISU residential tenants in the 500 Wabash Building and the Deming Center Redevelopment will utilize the SkyGarden Parking Garage for long-term parking, and not remote parking lots provided by ISU. We believe the proximity of the SkyGarden Parking Garage to both developments will drive ISU tenants to

use that facility, in lieu of parking in a remote ISU parking lot and walking a considerable distance to their apartments.

Should ISU tenants in the two developments actually fully utilize remote parking provided by ISU, then the occupancy of the SkyGarden Parking Garage would revert back to approximately 26% in the daytime and essentially unoccupied in the nighttime. Similarly, should ISU consider revising their parking strategy and dedicating approximately 350 parking spaces in existing parking lots on the north side of Cherry Street adjacent to the two developments housing ISU students, then the occupancy of the SkyGarden Parking Garage would revert back to approximately 26% in the daytime and essentially unoccupied in the nighttime.

## **FUNDAMENTAL CONCLUSIONS**

Fundamental conclusions to be drawn from the parking aspect of this study, based on the assumptions stated above, are as follows:

- Current downtown on-street parking demand is adequate for the overall study area, though two of the three subareas studied are at or near capacity.
- Current downtown parking garage demand is significantly less than available capacity.
- Future downtown on-street parking demand is adequate for the overall study area, though two of three subareas studied will be at or near capacity.
- Future downtown parking garage demand will be at or near capacity.
- Future downtown developments beyond those identified in this study must have on-site parking that fully satisfies the demand of the development. Failure to do so would strain the available onstreet parking and structured parking beyond its capacity.
- Discussions with Indiana State University are advisable in regard to downtown parking demand associated with the 500 Wabash Building and the Deming Center Redevelopment, as well as any other future downtown developments associated with housing for ISU students.
- A new mixed-use facility including a parking garage located in the Wabash Avenue Subarea that could potentially serve ISU, City and County government, and public parking needs should be investigated. The mixed-use facility could include first floor retail, with apartments wrapped around an interior parking garage on the upper levels.

# FUNDAMENTAL CONCLUSIONS TO BE DRAWN FROM THE PEDESTRIAN ASPECT OF THIS STUDY ARE AS FOLLOWS:

- 3rd Street (US41) is a significant barrier to pedestrian activity in the downtown study area.
- To a lesser degree, 1st Street is a barrier to pedestrian activity due to the railroad tracks, and Ohio Street's width presents somewhat of a barrier for pedestrians due to the lengthy crosswalks.
- While much of the downtown study area has streetscape improvements in place, including bump outs, period lighting, street trees, benches, etc., continued construction of streetscape improvements and updating of existing areas with streetscape improvements that are aging is important in the downtown study area.
- Gateway features and enhanced wayfinding signs would improve the pedestrian quality of life in the downtown study area.
- Handicapped accessibility is a must in the downtown study area.







## **FUTURE PARKING GARAGE**

The Downtown Vision Plan (2009) recommended the evaluation of the west end of the downtown area for siting of an additional downtown parking garage. The ISU Campus Master Plan (2009) recommended a new parking garage was needed between 4th and 5th Streets on the north side of Cherry Street. The ISU Parking Plan (2011) indicated structured parking would be needed on the west side of campus by 2020. Recent property acquisitions by ISU as well as financial concerns have resulted in ISU eliminating structured parking on the west end of campus from their plans.

The 500 Wabash Building and the Deming Center Redevelopment projects both include significant

residential housing for ISU students with minimal provision for on-site parking. In our parking supply and demand analysis, we assumed that the SkyGarden Parking Garage would be the primary parking venue for those students, in lieu of remote ISU surface parking lots. Upon completion of those two major downtown developments, parking preferences of the ISU residents in those developments will be evident. If our assumptions were correct, the SkyGarden Parking Garage will be at capacity. If the majority of the ISU residents use the remote surface parking lots provided by ISU, the SkyGarden Parking Garage will have significant excess capacity.

The need for a new parking garage in the west end of the downtown area will be more easily discerned upon completion of the 500 Wabash Building and the Deming Center Redevelopment. In the interim, should additional downtown housing be planned, particularly in the west end of downtown, it is likely that a logical solution might be a mixed use development with retail and commercial on the 1st floor and housing on the 2nd-4th floors, perhaps all wrapped around an elevated parking structure.

## FUTURE DOWNTOWN DEVELOPMENTS

The parking supply and demand analysis indicates that future major downtown developments need to have adequate on-site parking. The lack of adequate on-site parking in the 500 Wabash Building and Deming Center Redevelopment projects will likely result in the SkyGarden Parking Garage being at full capacity. Any major future downtown development that did not have adequate on-site parking would result in major parking problems, both on-street and off-street.

## **3RD STREET (US 41) PEDESTRIAN CROSSING**

Future development of the ISU Campus on the west side of 3rd Street, as well as future projects included in the "Turn to the River" Study dictate that an improved pedestrian crossing solution for 3rd Street is imperative in the downtown area. Most likely locations would be Wabash Avenue, Cherry Street, or possibly Chestnut Street. Wabash Avenue or Cherry Street would likely be the preferred locations in order to serve both downtown and ISU needs.

Should a new parking garage be warranted in the west end of downtown, one thought would be to attempt to site the structure along 3rd Street and include a tower in the structure with an elevator and a stairway that connected to a pedestrian bridge over 3rd Street. Other options could include a tunnel under 3rd Street or a stand-alone pedestrian bridge structure.



