

BROOKSTONE PUD

AUGUST 29, 2019

A residential planned unit development in Avon, Indiana.

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PLANNED UNIT DEVELOPMENT ORDINANCE

Planned Unit Development Ordinance

LETTER OF INTENT

GENERAL LOCATION & SURROUNDING PROJECTS

The proposed Brookstone residential community (“Brookstone”) is located on the 81 +/- acres located on the south side of County Road 100 North, approximately one-half (1/2) mile west of Ronald Reagan Parkway (the “Real Estate”). An Area Map depicting the Real Estate is shown on Exhibit A. Single-family homes exist to the east of the Real Estate (Avon Trails) and to the north of the Real Estate (Brownstone (a Pulte community part of the Brownstone PUD) and Camden (a Lennar community part of the Reagan Park PUD)). Multi-family townhomes (Villa Woods of Avon) and multi-family apartments (Avon Creek Apartments) exist to the south of the Real Estate. Our Shephard Lutheran Church and School exists to the west of the Real Estate. The Town of Avon has annexed the Real Estate.

CONCEPTUAL PLANNING; REAL ESTATE’S FEATURES

Pulte Homes (“Pulte”) proposes a cluster-type Planned Unit Development – Residential (PUD-R) for the Real Estate in accordance with Section 5-5 (Planned Unit Developments: Permitted Uses & PUD Classifications) of the Town of Avon Zoning Ordinance (the “Brookstone PUD”). The Brookstone PUD will be developed as a Standard Subdivision (ST) in accordance with the Town of Avon Subdivision Control Ordinance (“SCO”).

The Real Estate’s natural features include existing trees along its western property line, wetlands in the southwest corner, and a drain that connects to a detention pond located in the Avon Trails community to the east. Because the drain is situated about half-way down the depth of the Real Estate and snakes towards the center of the Real Estate, a unique land plan is necessary to accommodate this feature. In order to create a unique community, Pulte plans to utilize “coving” as a primary design feature. Coving creates a graceful curved greenway formed by open space between the front of the homes and the edge of the street. This method also helps to reduce the number of shallow “back to back” lots that are seen in the typical block layout.

Lots within a coved subdivision such as Brookstone vary in lot width and setback, resulting in a more open feel as you travel through the neighborhood. The Brookstone PUD will feature multiple home offerings to meet the current and future needs of the community.

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Brookstone will have an approximate density of 2.5 dwelling units per gross acre. The community's density falls within the density and design intent of the R-1 (high – 2.1 du/acre) to R-2 (high – 3 du/acre) with flexibility to allow for the curvilinear streets and meandering greenways and streetscapes. 25% of the Brookstone community will be open space, which percentage exceeds the Standard Subdivision (ST) open space requirement of 15%. These open spaces will consist of parks, common areas, and ponds.

Access to Brookstone will be obtained off County Road 100 North. The entrance point will align with the access for the Camden residential community, located on the north-side of County Road 100 North. Improvements to County Road 100 North will be constructed consistent with the recommendations outlined in the Traffic Analysis (see Studies and Surveys attached hereto). Internal connectivity to Avon Trails (to the east) will be provided through Jackson Way. The Fire Department has confirmed the main boulevard entrance to Brookstone will count as two entrances.

ZONING AND PUD STANDARDS

The Real Estate is currently zoned single-family residential (R-1a and R2).

Zoning Ordinance Criteria: According to Chapter 5, Section 5-2 of the Town of Avon Zoning Ordinance ("Zoning Ordinance"), the Avon Town Council and the Avon Plan Commission should evaluate the following when considering a proposed PUD:

A: The proposal will achieve the purposes for which PUDs may be approved pursuant to the requirements of the Chapter 5 of the Zoning Ordinance

Per Section 5-1 of the Zoning Ordinance, the intent of the PUD zoning district is to provide for greater flexibility and innovative approaches to meet the demands of housing while maintaining the best interest of the Town.

A curvilinear land plan cannot be achieved within the standards of the Zoning Ordinance. Due to its innovative approach and style, curvilinear land plans require standards that are tailor-made to that specific community. The result is an improved land plan that includes more open space, deeper lots, varied setbacks, and an aesthetically pleasing streetscape, all of which would not be feasible within the parameters of the Avon Zoning Ordinance.

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B: The proposal will not violate the general purposes, goals, and objectives of the Zoning Ordinance and the Town's Comprehensive Plan

The general objectives of the Zoning Ordinance and Comprehensive Plan are to provide for reasonable and desirable growth by regulating the use and development of land within the Town of Avon.

The Town of Avon adopted the PUD zoning district to allow for greater flexibility and innovative approaches for developments, and Brookstone's innovative land plan provides the flexibility necessary to cater to the needs of the modern homebuyer.

One of the Town's Comprehensive Plan objectives is to specifically encourage medium and higher density residential developments by allowing for varying setbacks, lot widths, and other standards to create more dense developments (*see* Build Goal #4 Objective 2 of the Comprehensive Plan). The Brookstone community, by using a curvilinear design, accomplishes these objectives in a way that a straight-zoned residential community could not.

C: The proposal will not unduly burden adjacent roadways

The Traffic Analysis (see Studies and Surveys attached hereto) reviewed three (3) existing intersections during the AM and PM peak hours (CR 100 N. and Ronald Reagan Parkway; Garrison Lane and Ronald Reagan Parkway; CR 100 N. and CR 900 E.). No improvements were recommended for either intersection of CR 100 N. and Ronald Reagan Parkway and Garrison Lane and Ronald Reagan Parkway. The existing, single-lane roundabout located at CR 100 N. & CR 900 E. currently operates below acceptable levels during the PM peak hour. This roundabout, however, is expandable to two lanes, and as development continues, it is recommended that this roundabout increase from a one-lane to a two-lane roundabout within the next 10 years. This roundabout will operate at acceptable levels during the AM and PM peak hours upon expansion to two lanes.

D: The proposal will result in a development providing adequate and appropriate levels of open space and other compensating amenities both within the proposed development and to the Town of Avon

When compared to a traditional grid-style layout pursuant to the underlying zoning districts of R1a and R2, a curvilinear land plan for Brookstone will increase infrastructure

PLANNED UNIT DEVELOPMENT ORDINANCE

efficiency by reducing the total length of internal public streets, thus reducing the associated long-term cost for the Town of Avon to maintain those internal public streets. Additionally, a curvilinear land plan will allow for more open space than the traditional grid style plan. The proposed land plan exceeds the open space requirement (25% proposed open space percentage versus 15% required open space percentage) and creates opportunities for more natural amenities such as pocket parks and meandering trail systems that are easily accessible to all homeowners throughout the community and adjacent communities.

Indiana Code Criteria: State law (Ind Code § 36-7-4-603) requires the Avon Plan Commission and the Town Council to pay reasonable regard to the following five (5) criteria when requesting a rezone:

Criterion 1: The Comprehensive Plan

The Future Land Use Map located within Avon's Comprehensive Plan, adopted in 2017, does not identify the Real Estate in its future land use map as a specific designation, which means that the current underlying zoning district is the desired land use. The Brookstone PUD, a single-family residential PUD, is consistent with the Comprehensive Plan because the Real Estate's current zoning district is single-family residential (R-1a and R-2). The Brookstone PUD would maintain and enhance the intent of residential districts, which is to "perpetuate the existing high-quality residential character of the Town by preserving established neighborhoods while encouraging new residential development" (Zoning Ordinance - Section 8-1).

Criterion 2: Current conditions and the character of the current structures and uses in each district

The proposed one and two-story single-family residential homes for Brookstone will be complementary to the adjacent residential communities that consists of the single-family homes to the east and north, the multi-family townhomes and apartments to the south, and the church and school to the west. Brookstone will feature Pulte's Landings and Crossings Series of homes, which Pulte currently sells in Pulte's Brownstone community. These homes have been well received in Avon and are selling above the average sales price in Avon.

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Criterion 3: The most desirable use for which the land in each zoning district is adapted

Due to surrounding residential, religious, and educational uses, a single-family residential use is the highest and best use for the Real Estate. The Real Estate's location, and its lack of proximity to a major intersection, means commercial, retail, office, or industrial uses would not be sustainable or desirable for the Real Estate.

Criterion 4: The conservation of property values throughout the jurisdiction

In keeping with the neighboring uses, Brookstone would have a neutral or positive impact on adjacent property values. The land plan is specifically designed to have a minimum or positive impact to the neighboring properties through the strategic spacing of pocket parks and ponds. It is likely that neighboring homes located next to the planned detention ponds will see a positive effect on their home values.

Criterion 5: Responsible development and growth

Avon is in the process of researching the feasibility for a Town Center. Part of that feasibility will be to determine if the current population of Avon can support such an endeavor. It is a common philosophy in the development world that homes for the population to live are needed to support local retail and commercial uses. While Avon has a number of retail uses along US 36, the majority of these uses are chains that can easily be sustained compared to a local business. The future Town Center would likely require a larger fixed population surrounding the Town Center to help support the unique businesses that the Town hopes to attract. The addition of homes within the Brookstone community would help towards providing a fixed population that would support the overall vision of a Town Center and the Town's identity.

Based on the Fiscal Impact Report (see Studies and Surveys attached hereto), the total gross assessed value for the Brookstone community is estimated at \$62,354,810.00. In addition to this, the community will have a positive impact on businesses in the area, including a direct impact of over \$45,000,000.00 and an indirect impact of \$35,513,000.00 during the construction phase. This impact will result in new jobs and increased spending in the area.

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Additionally, in the terms for the best and highest use of the Real Estate, the Real Estate is surrounded by residential uses to the north, east, and south, and to the west exists a church and school. A residential use is the best use for the Real Estate due to the similar surrounding uses and lack of proximity to a major intersection.

ALTERNATE STANDARD

Developing the Real Estate as a PUD-R will allow Pulte to create an innovative design for the Brookstone community through a cluster-style design layout that includes multiple housing options from which homeowners may choose. In order to provide a cluster development, alternate development standards, different from a straight R-1a or R-2 zoning district regulation, will be required. In accordance with Section 5-6 of the Zoning Ordinance governing PUDs, alternate development standards and alternate design and construction standards are detailed below in this Brookstone PUD. The proposed alternate standards shall foster the intent of the PUD to provide a creative design for the Real Estate.

GENERAL DEVELOPMENT STANDARDS

DISTRICT INTENT

The purpose for the Brookstone PUD is to permit a maximum of 195 single-family detached residential dwellings on lots having underground utilities, centralized water, and centralized sewer facilities.

The layout of this district will be curvilinear in nature, and feature a meandering street and multi-purpose trail system.

PERMITTED USES

Dwelling – single family detached (permitted)

Home child care, not to exceed 5 children (special exception permit required)

Parks & playgrounds (permitted)

Accessory uses customary and incidental to a permitted or special use (permitted)

Garages (permitted)

Home occupations (see Chapter 13-6 of the Avon Zoning Ordinance) (permitted)

Swimming pools (permitted)

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DENSITY

There shall be no more than 195 dwelling units located on the Real Estate.

HOME OFFERING

There shall be two housing series within Brookstone to serve a variety of housing needs. It is anticipated that approximately 40% of the homes within Brookstone will be Series A, The Landings Series. The remaining 60% of the homes will be Series B, The Crossings Series. The ratio of Series A to Series B homes on the Real Estate may be modified so long as at least 30% of the homes on the Real Estate are from Series B.

SERIES A shall be detached single family dwelling units offering homes from The Landings Series.

SERIES B shall be detached single family dwelling units offering homes from The Crossings Series.

OPEN AREA

The minimum open area shall be at least 20 acres. Open area shall include parks, commons, ponds, walking paths and landscape easement buffers.

FULL ACCESS ENTRANCE

A full access entrance to Brookstone shall be permitted where shown on the Concept Plan (Exhibit C), it being the intent that a full access entrance shall be permitted at an interval less than every quarter mile along CR 100 N (Signature Street), as set forth in Section 25-7 of the Zoning Ordinance.

STANDARD	SERIES A: LANDINGS	SERIES B: CROSSINGS
1. Minimum Lot Size	7,000 SF	8,000 SF
2. Average Lot Size	9,200 SF	11,000 SF
3. Minimum Lot Width at Building Line	55'	68'
4. Minimum Lot Depth	115'	115'
5. Minimum Lot Frontage – (Non Cul-De-Sac)	36'	30'

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6. Maximum Lot Coverage	50%	50%
7. Minimum Front Yard Setback	25'	25'
8. Minimum Side Yard Setback ¹ - Two Story Homes	10'	10'
9. Minimum Side Yard Setback ¹ - One Story Homes	7'	7'
10. Minimum Distance Between Buildings ²	20'	20'
11. Minimum Rear Yard Setback	25'	25'
12. Maximum Height	35'	35'
13. Side Lot Line to Street Allowable Angle	37°	30°
14. Minimum Livable Floor Area ³ – One Story Homes	1,800 SF	2,300 SF
15. Minimum Livable Floor Area – Two Story Homes	2,400 SF	2,450 SF

ARCHITECTURAL STANDARDS

The following architectural standards shall replace in their entirety the architectural standards set forth in the Zoning Ordinance, including, but not limited to Sections 4-8, Section 8-5, and Section 25-5.

1. Where two wall materials are combined horizontally on one façade, the heavier material must be below.
2. Siding – Vinyl siding shall be premium grade vinyl siding and shall have a minimum thickness of 0.044 inches and shall comply with ASTM (American Society for Testing and Materials) Standard Specification for rigid poly siding (ASTM D3679). All siding shall be Class I as listed in this standard. The minimum length of uncut siding pieces shall be twelve (12) feet. The installer shall make every effort to

¹ Homes that have a third car garage bay may reduce the Minimum Side Yard Setback on the garage side of the home to 5'

² The Minimum Distance Between Buildings may be reduced: (i) to 10' when both homes have a third car garage bay on the shared property line or one of the homes is a single-story home; or (ii) to 15' when one home has a third car garage bay. Living space above the third car garage bay is prohibited when the Minimum Distance Between Buildings is less than 20'.

³ Livable Floor Area shall not include garages or porches, except when a porch is enclosed and heated and/or cooled for use year round.

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minimize the number of joints and to keep the length of installed siding pieces to twelve (12) feet. Additionally, the selected materials shall preserve a wood grained finish in both the siding and the trim. On “gable end trusses” that are constructed out of two by four inch (2”x4”) dimensional lumber installed vertically at sixteen inch (16”) on center (or greater spacing) and where the vertical two by fours (2x4’s) are ten feet (10’) or greater in length, the builder shall install a “strongback” and/or T-brace on the attic side of the truss, approximately at mid span of these vertical two by fours (2x4’s) to serve as an added support mechanism to stop bowing of the vertical two by fours (2x4’s) and the siding attached to it.

3. Windows –All homes shall have a minimum of one window on all four sides of the home, except the garage side of a ranch style home may have no windows provided the other three elevations have a minimum of nine windows total. For the purposes of this calculation, a twin window shall be counted as two windows.
4. Overhangs – All homes shall have a minimum of 8” roof overhangs.
5. Roof Pitches – The minimum roof pitch for the main roof of a home shall be 6/12. Gable, dormer and porch roof pitches may vary to achieve various architectural styles.
6. Shingles – All homes must have dimensional or architectural grade shingles.
7. Garages – All homes must have a 2-car attached garage and meet the following requirements:
 - a. For front loading garages, the garage door total width may not exceed 50% of the linear footage of the front elevation of the home.
 - b. Two (2) dusk-to-dawn coach lights will be provided on all garages.
 - c. If a home has a third car garage, the third car bay shall be offset by a minimum of two feet.
8. Landscaping – A minimum of 10 shrubs will be provided at the foundation of the home in the front yard and will be at least 24” tall at planting. Front yards must be planted with sod and side and rear yards may be either seeded or sodded. For corner lots, sod must be planted in both “front” yards. Each home must have a least one front yard tree (minimum 2.5” caliper for shade, 1.5” caliper for ornamentals

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and 6'-7' in height for evergreens). Corner lots must have an additional tree meeting the same requirements.

9. Driveways – Driveways shall be constructed of concrete material.
10. Monotony Code – The Monotony code attached as Exhibit E will be enforced to provide a variety of home facades and colors within the neighborhood.

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DEVELOPMENT AMENITIES & OPEN SPACE

OPEN AREA, COMMON AREAS & NEIGHBORHOOD AMENITIES

Open area will be offered throughout Brookstone with the following: walking paths/multi-purpose trails, greenways, parks, and gathering areas. In addition to traditional sidewalks, a 6' wide main multi-purpose trail will connect the community's open space parks and gathering areas. A 5' meandering walk will replace the typical sidewalk that sits at the back of the curb. Creating a functional walking system will encourage a stroll rather than a drive while adding character to the neighborhood. The path system will create a network of greenways within Brookstone while providing access to the open space and adjacent communities.

Open Areas: Brookstone will feature three (3) parks: the central park, the north park, and the rear park. These amenities encompass elements and intent of both Active and Passive Parks as outlined in the SCO.

- The central park will be approximately 1.31 acres in size and will feature a basketball court, an open lawn, associated landscaping, and an open shelter. The size of this central park will be thirty percent (30%) larger than what is required under the SCO. Although 300 linear feet of multi-purpose trails are required to be located within this central park, this central park will feature approximately 700 linear feet of multi-purpose trails to connect the park with the remainder of the community.
- The north park will be approximately .82 acres in size and will be used for more active purposes. This park will feature commercial grade play equipment located on safe surfaces, associated landscaping, and a multi-purpose trail and trail gateway to connect the park with the reminder of the community.
- The southern park will be approximately .59 acres in size and will feature a butterfly garden and associated landscaping. This butterfly garden will provide connectivity to the portion of Brookstone's multi-purpose trail that will be part of the Avon Drain Trail.

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Trail Connectivity/Greenway:

- Internally, the Brookstone will feature approximately 1 mile of paved multi-purpose walking/biking trails that is 6' in width to provide pedestrian connectivity throughout the neighborhood. Benches will be located throughout this trail greenway. Brookstone will also feature over 3.3 miles of paved sidewalks.
- The portion of the multi-purpose trail along the southern portion of the Brookstone community will be part of the Avon Drain Trail, which will help complete a 1.5 mile trail connecting C.R. 900 N to the intersection of Ronald Reagan Parkway and US 36.
- Brookstone's trail and sidewalk system will connect to County Road 100 North and provide connectivity to the planned Avon Bicycle & Pedestrian Network.

The Open Area Plan and the Alternative Transportation Network Plan is set forth in the Additional Project Information. The open areas will be constructed with the adjacent/corresponding sections of the community, as depicted on the Phasing Plan which is set forth on Exhibit D.

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LANDSCAPE BUFFERS & ENTRIES

The 40' perimeter landscape buffer yard required for PUDs as set forth in Section 16-11(4)(D) of the Zoning Ordinance shall not be required; provided, however, that for every 100 lineal feet of the Real Estate's perimeter, three shade trees, one evergreen tree, two ornamental trees, and fourteen shrubs shall be planted (the "Required Plantings"). The Required Plantings may be grouped, and the Required Plantings may be placed throughout the entirety of the Real Estate. The provisions of Section 16-9 of the Zoning Ordinance with respect to the preservation of existing plant material shall apply.

In addition, a tree preservation easement ("Tree Preservation Easement") twenty feet (20') in width along the western boundary of the Real Estate and the southern boundary of the Real Estate, shall be recorded. Within the Tree Preservation Easement, no trees with a diameter at breast height ("DBH") in excess of six inches (6") or evergreens eight feet (8') or more in height (the "Protected Trees") shall be removed unless the tree is damaged, diseased, dead (as confirmed by the developer, builder, or the homeowners association), classified as an invasive plant species, is required to be removed in order to comply with safety requirements of any governmental agency, or is required to be removed to accommodate drainage, utilities, trails, parks, or other infrastructure. If a Protected Tree is damaged or otherwise removed by the developer or builder, except as permitted to be removed as listed above, then the developer or builder (as the case may be) shall reestablish the Protected Tree with a tree or trees of combined equal or greater DBH subject to the availability of space for their healthy growth.

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HOMEOWNERS ASSOCIATION & COVENANTS

The maintenance and upkeep of the Common Areas shall be governed by a homeowners' association, pursuant to the terms of a Declaration of Covenants, Conditions and Restrictions to be recorded prior to the first home closing. The Declaration will require the association have professional outside management.

ROADWAY STANDARDS

All roads internal to the Real Estate will be dedicated to the public.

A key feature of the Brookstone community is the curvilinear street system. The sweeping streets do not allow for some of the typical street measurements. Waivers will be requested for the following standards: Minimum Curb Corner Radius (30' requested); Maximum Curb Corner Radius (420' requested); Minimum Centerline Radius (200' requested); Maximum Centerline Radius (2,500' requested); Minimum Tangent Between Curve or Traffic Calming Device (full waiver requested); Maximum Tangent Between Curve (full waiver requested); Minimum Tangent at Intersection (0' requested); Maximum Tangent at Intersection (300'); Maximum Distance Between Intersections (1,800' requested); Maximum Cul-De-Sac Street Length (740').

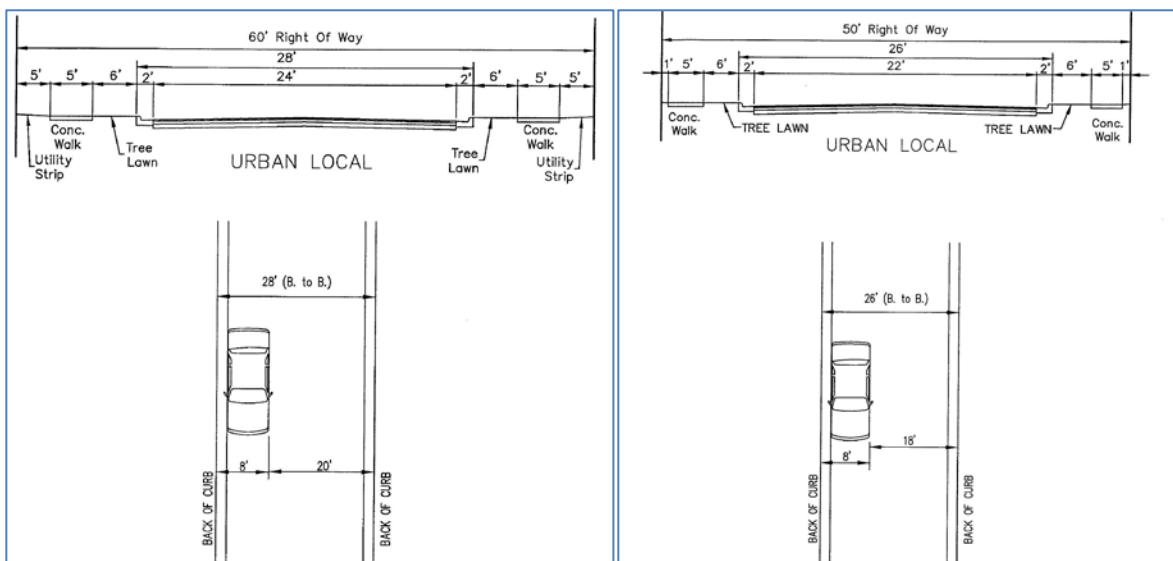
County Road 100 North will be recognized as a Signature Street. A 60' half right of way and 20' landscape buffer (with required plantings) will be provided, as generally depicted on the Sample CR 100 Landscape Plan set forth in the Additional Project Information. A 10' multi-purpose trail will be constructed. Brookstone's entrance will align with the Camden's entrance across the street. The main north/south road will be constructed based on the Neighborhood Collector with Tree Lawn, as identified below. Due to the neighborhood featuring a meandering sidewalk, the dimensions of the tree lawn, location of the sidewalk, and utility strip may vary. The dimensions stated below will be the minimum allowed. When the sidewalk is located outside of the right of way it will be within an easement.

The remaining streets within the neighborhood will be constructed based on the Neighborhood Side Street with Tree Lawn Standards, as identified below. Due to the neighborhood featuring a 6' wide main multi-purpose trail, sidewalks will only be constructed on one side of Side Streets. Cul-de-sacs may utilize sidewalks or the 6' main multi-purpose trail for connectivity. When the sidewalk meanders, as discussed above, the

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width of the tree lawn may increase. When the sidewalk is outside of the right of way it will be within an easement.

Brookstone's concept plan anticipates five cul-de-sacs. The stem of the cul-de-sacs will follow the above Side Street description. The bulb of the cul-de-sacs will be restricted to one way traffic and will have a pavement width of 20'. The minimum cul-de-sac length allowable shall be 200' and the maximum cul-de-sac length allowable shall be 740'.



**Neighborhood Collector with Tree Lawn:
Figure 2A**

**Neighborhood Side Street with Tree Lawn:
Figure 1A**

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PUD EXHIBITS

- A. Area Map
- B. Legal Description
- C. Concept Plan
- D. Phasing Plan
- E. Monotony Code

PLANNED UNIT DEVELOPMENT ORDINANCE

EXHIBIT A: AREA MAP



PLANNED UNIT DEVELOPMENT ORDINANCE

EXHIBIT B: LEGAL DESCRIPTION

Part of the Northeast Quarter and Northwest Quarter of Section 6, Township 15 North, Range 2 East of the Second Principal Meridian, in the Town of Avon, Washington Township, Hendricks County, Indiana, based upon a survey prepared by Michael G. Judt, Professional Surveyor Number 21500017, HWC Engineering Job Number 2019-158-A, dated June 26, 2019, more particularly described as follows:

COMMENCING at the northeast corner of said Northeast Quarter, said corner being marked by a Hendricks County aluminum monument, lying South 88 degrees 35 minutes 55 seconds West (grid bearing based upon Indiana State Plane - West Zone, NAD83, 2011, EPOCH 2010.0000) along the south line of the Southeast Quarter of Section 31, Township 16 North, Range 2 East a distance of 164.26 feet from the southeast corner of said Southeast Quarter; thence South 88 degrees 35 minutes 55 seconds West along said south line, being also the north line of said Northeast Quarter, a distance of 1907.25 feet to the northwest corner of a tract of land described in Instrument Number 200000011119 in the Office of the Recorder of Hendricks County, Indiana, and the POINT OF BEGINNING; thence continuing South 88 degrees 35 minutes 55 seconds West along said north line a distance of 274.60 feet to the northeast corner of a tract of land described in Instrument Number 201206610 in said Recorder's Office, the following three (3) courses being along the east, south, and west lines of said tract; (1) South 01 degrees 24 minutes 05 seconds East a distance of 468.00 feet; (2) South 88 degrees 35 minutes 55 seconds West a distance of 400.00 feet; (3) North 01 degrees 24 minutes 05 seconds West a distance of 467.91 feet (468.00 feet per deed) to the south line of the Southwest Quarter of said Section 31, being also the north line of said Northwest Quarter of said Section 6; thence South 88 degrees 31 minutes 58 seconds West along said north line a distance of 669.31 feet (669.41 feet per deed) to the northwest corner of a tract of land described in Deed Book 311, Page 59 in said Recorder's Office; thence South 00 degrees 58 minutes 55 seconds East a distance of 2754.53 feet to a stone marking the southwest corner of said Deed Book 311, Page 59; thence North 87 degrees 28 minutes 10 seconds East along the south line of said tract a distance of 1369.05 feet (1368.28 feet per deed) to the southerly extension of the west line of Avon Trails, Section 4 C, the plat of which is recorded in Plat Cabinet 4, Slide 49, Page 1 (Instrument Number 200100013881) in said Recorder's Office; thence North 01 degrees 30 minutes 57 seconds West along said west line and said southerly extension, and also

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along the west lines of Avon Trails, Section 6 (Plat Cabinet 5, Slide 34, Pages 1AB, Instrument Number 200200035905), Avon Trails, Section 7 (Plat Cabinet 5, Slide 148, Pages 1AB, Instrument Number 200400013217), Avon Trails, Section 8 (Plat Cabinet 5, Slide 33, Pages 2AB, Instrument Number 200200035897), Avon Trails, Section 9 (Plat Cabinet 5, Slide 196, Pages 2AB, Instrument Number 200400031008), and along the west line of a tract of land described in Instrument Number 200200003254 in said Recorder's Office, a total distance of 2358.85 feet to the southwest corner of said tract of land described in said Instrument Number 200000011119 in said Recorder's Office; thence North 01 degrees 24 minutes 05 seconds West along the west line of said tract a distance of 369.50 feet to the POINT OF BEGINNING, containing 81.046 acres, more or less.

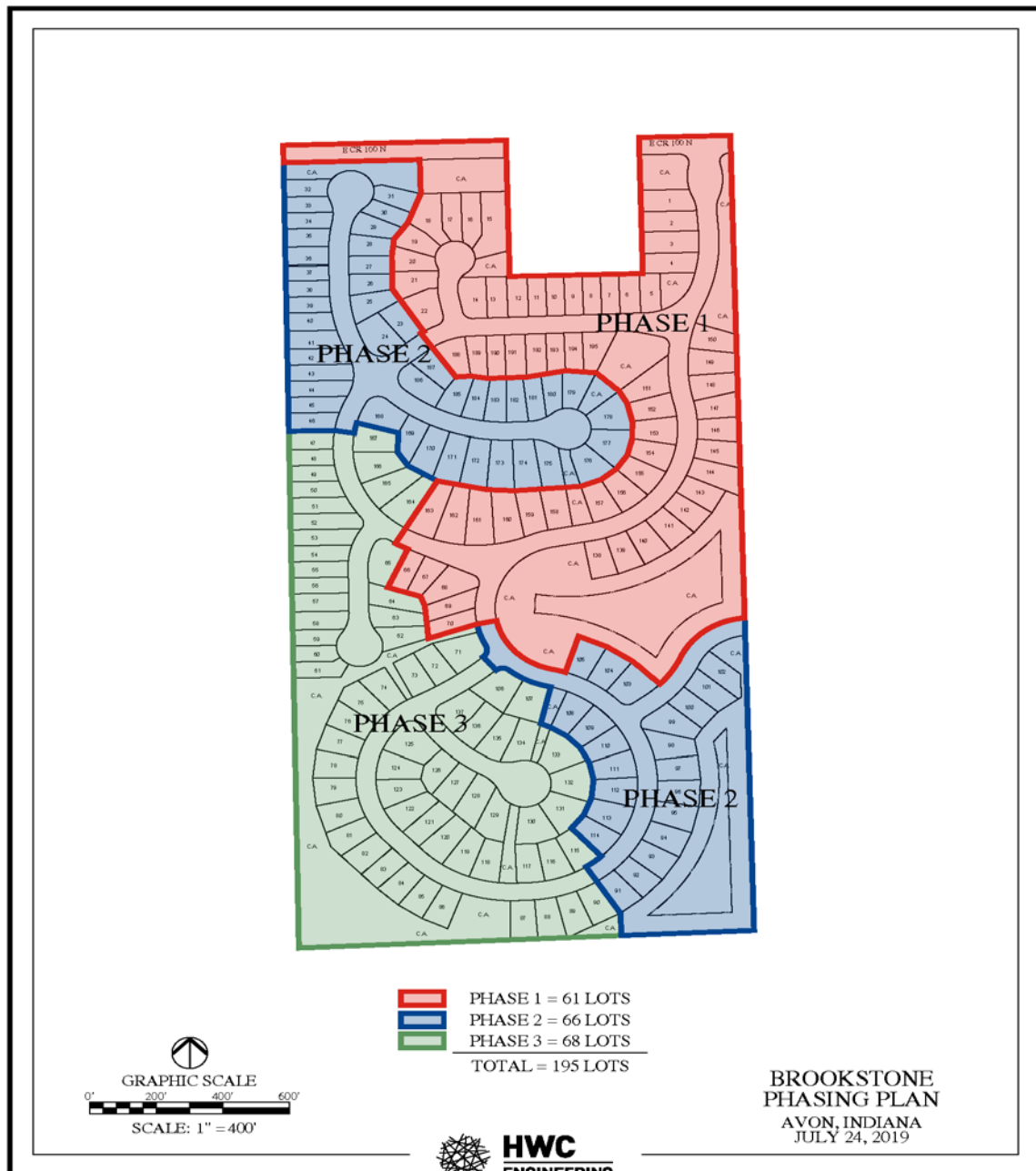
PLANNED UNIT DEVELOPMENT ORDINANCE

EXHIBIT C: CONCEPT PLAN



PLANNED UNIT DEVELOPMENT ORDINANCE

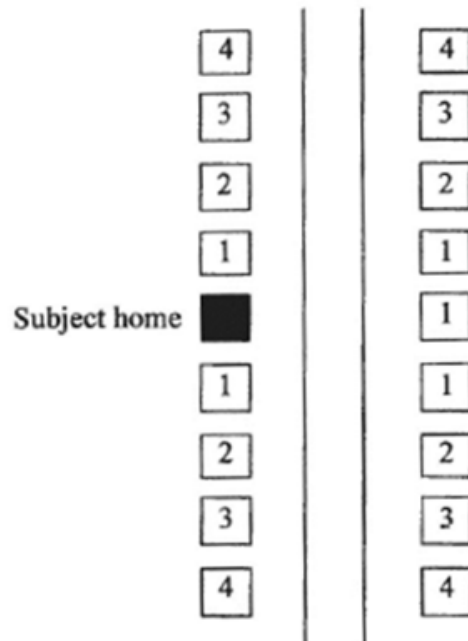
EXHIBIT D: PHASING PLAN



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EXHIBIT E: MONOTONY CODE

MONOTONY CODE GRAPHIC



- 1** Home cannot be of the same elevation of the same plan as the Subject home. Must be a different color package.
- 2** Home cannot be of the same elevation of the same plan as the Subject home. Cannot be the identical color package as the Subject home but may have the same brick.
- 3** Home may be of the same plan and elevation as the Subject home, but must be a different color package.
- 4** May be identical to Subject home.

Additional Project Information

- A. OPEN AREA PLAN; ALTERNATIVE TRANSPORTATION NETWORK PLAN; VEHICULAR CIRCULATION PLAN
- B. INFRASTRUCTURE PLAN
- C. SAMPLE CR 100 LANDSCAPE PLAN
- D. SERIES A (LANDINGS) EXAMPLE FLOORPLANS & ELEVATIONS
- E. SERIES B (CROSSINGS) EXAMPLE FLOORPLANS & ELEVATIONS
- F. UNDERLYING ZONING DISTRICT
- G. SURVEY & TOPOGRAPHY

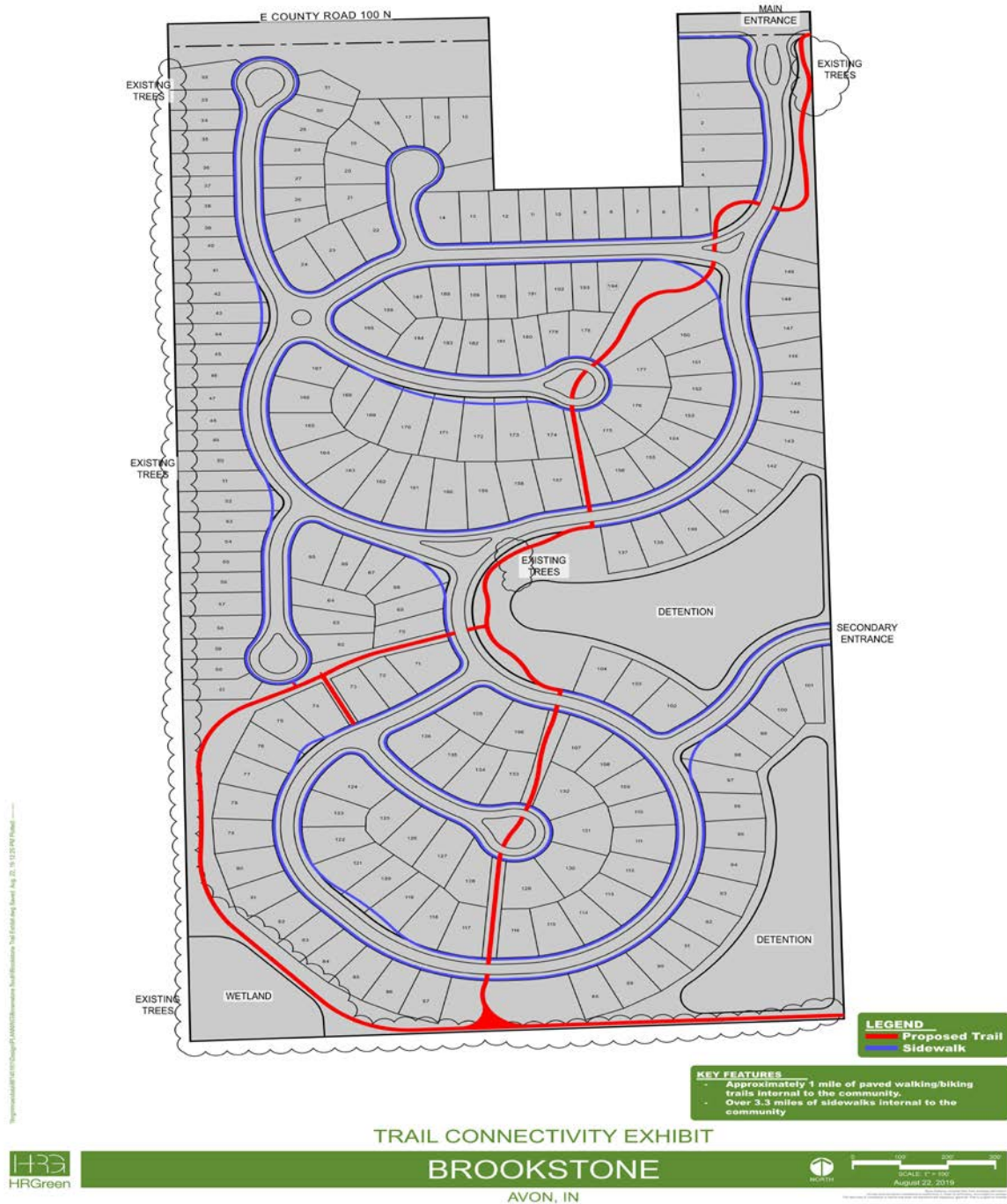
PLANNED UNIT DEVELOPMENT ORDINANCE

OPEN AREA PLAN



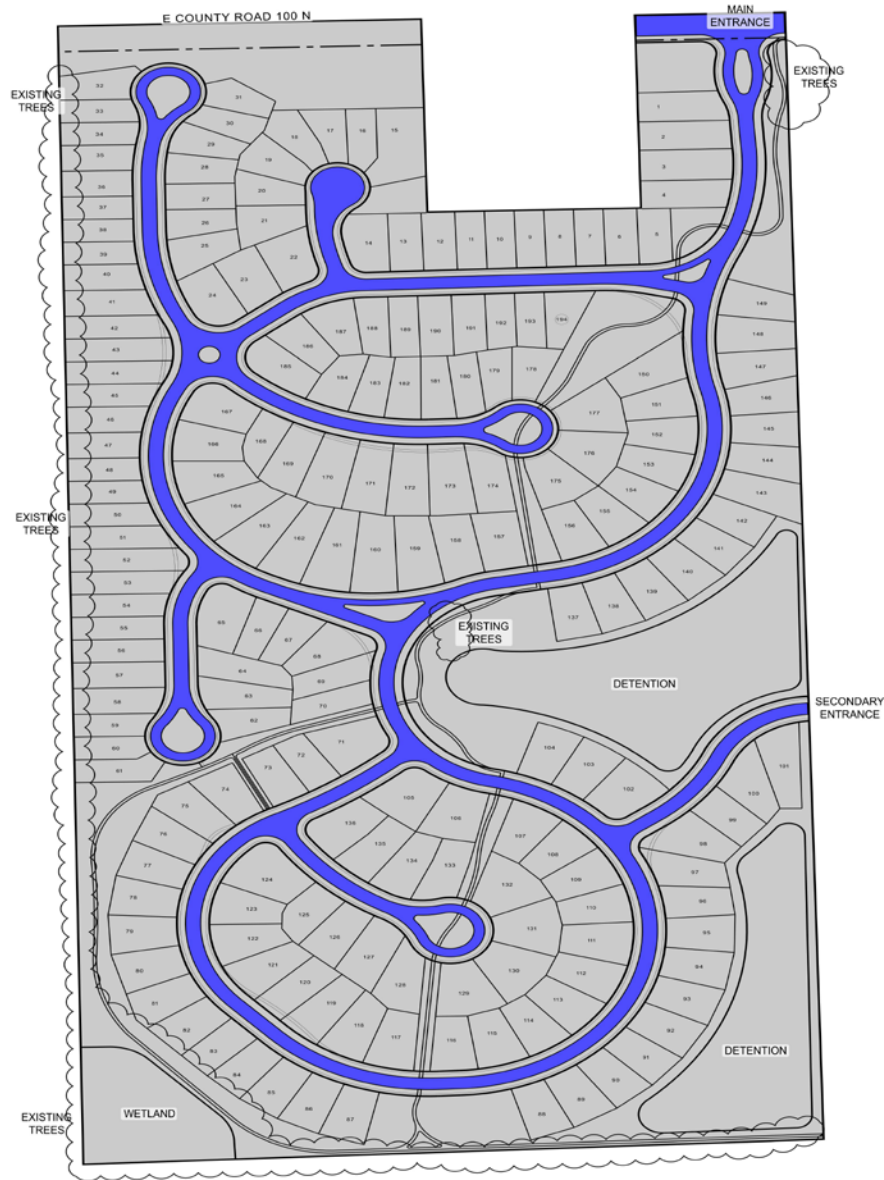
PLANNED UNIT DEVELOPMENT ORDINANCE

ALTERNATIVE TRANSPORTATION NETWORK PLAN



PLANNED UNIT DEVELOPMENT ORDINANCE

VEHICULAR CIRCULATION PLAN



Regeneration of the Design of the Brookstone Development. The Planning Board, Aug. 20, 19, 12, 2019. Printed: 8/22/2019

LEGEND
Vehicular Circulation

VEHICULAR CIRCULATION EXHIBIT



BROOKSTONE

AVON, IN



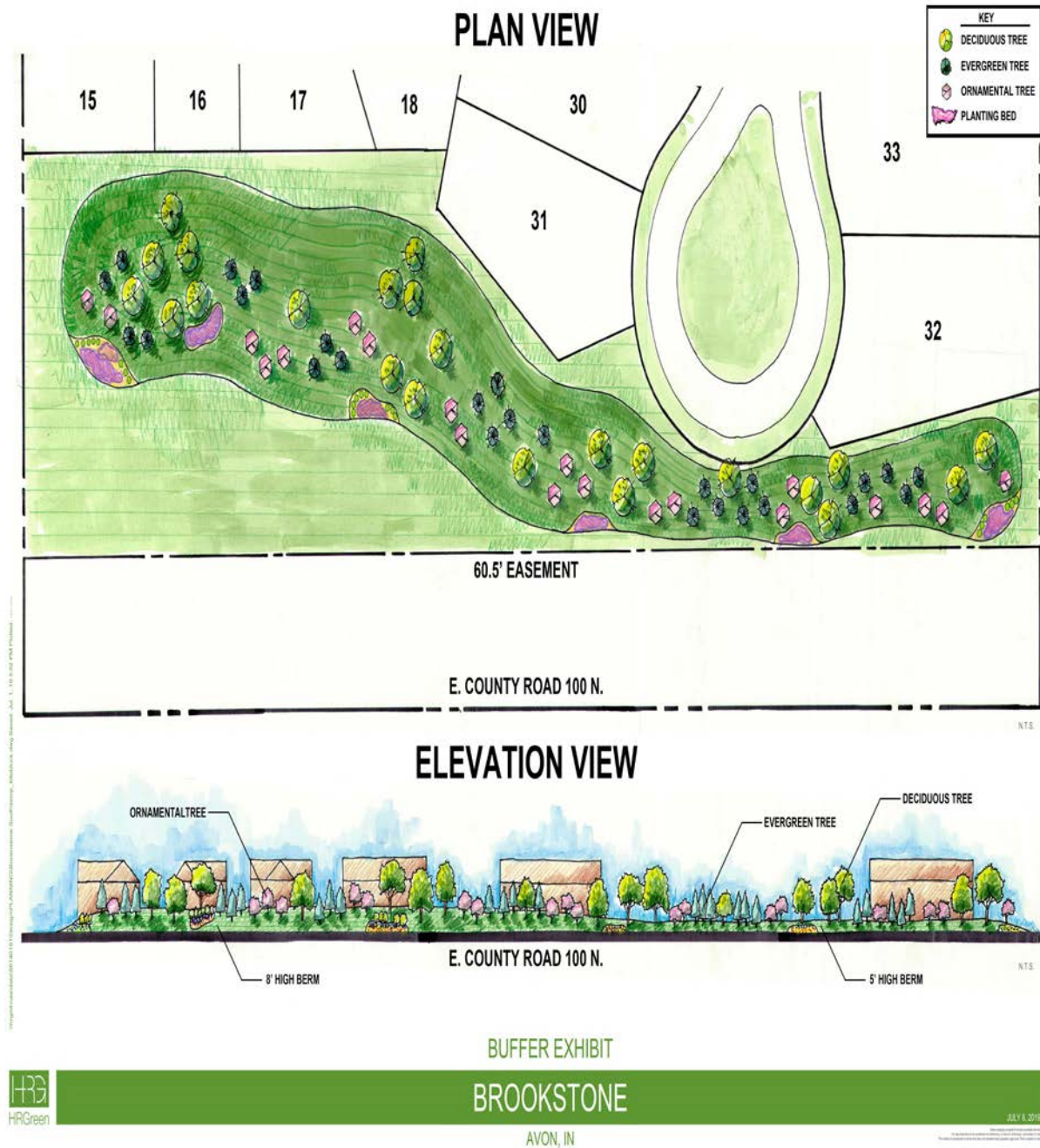
PLANNED UNIT DEVELOPMENT ORDINANCE

INFRASTRUCTURE PLAN



PLANNED UNIT DEVELOPMENT ORDINANCE

SAMPLE CR 100 LANDSCAPE PLAN



PLANNED UNIT DEVELOPMENT ORDINANCE

SERIES A (LANDINGS) EXAMPLE FLOORPLANS & ELEVATIONS

Bennett

Boardwalk

Fifth Avenue

Park Place

Woodward

Landings Series

Bennett 3 Bedroom | 2 Full Bath | 1,870 Square Feet



Landings Series

Boardwalk 4 Bedroom | 2 Full and 1 Half Bath | 2,662 Square Feet



Landings Series

Fifth Avenue 3 Bedroom | 2 Full and 1 Half Bath | 2,426 Square Feet



Landings Series

Park Place 4 Bedroom | 2 Full and 1 Half Bath | 2,746 Square Feet



Landings Series

Woodward 4 Bedroom | 2 Full and 1 Half Bath | 3,004 Square Feet



PLANNED UNIT DEVELOPMENT ORDINANCE

SERIES B (CROSSINGS) EXAMPLE FLOORPLANS & ELEVATIONS

Amberwood

Baldwin

Greenfield

Hilltop

Riverton

Westchester

Crossings Series

Amberwood 3 – 4 Bedroom | 2 Full & 1 Half Bath | 2,323 Square Feet



Crossings Series

Baldwin 4 Bedroom | 2 Full & 1 Half Bath | 2,458 Square Feet



Crossings Series

Greenfield 4 Bedroom | 2 Full & 1 Half Bath | 2,614 Square Feet



Crossings Series

Hilltop 4 Bedroom | 2 Full & 1 Half Bath | 2,881 Square Feet



Crossings Series

Riverton 4 – 6 Bedroom | 2 – 3 Full & 1 Half Bath | 3,120 Square Feet



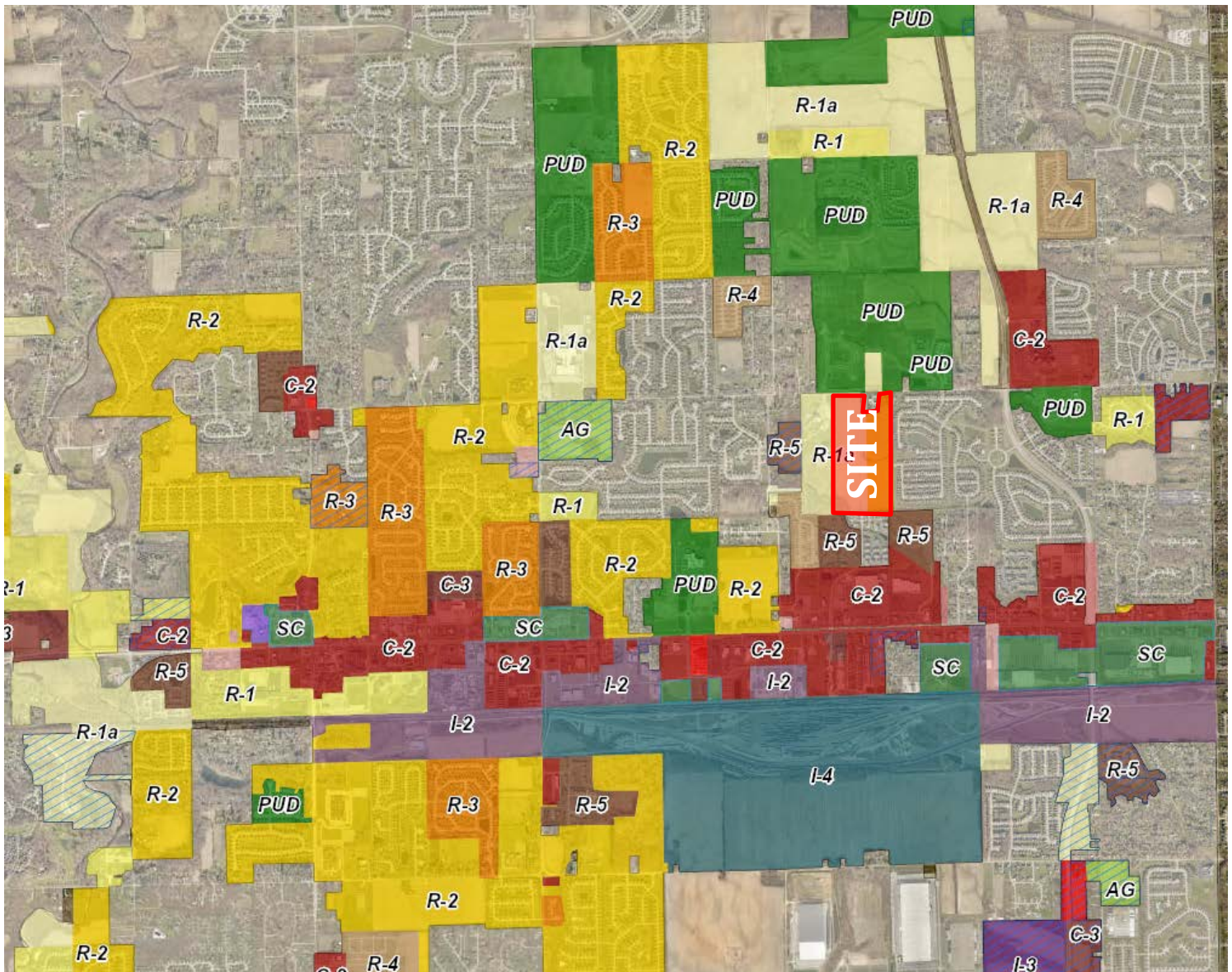
Crossings Series

Westchester 4 – 5 Bedroom | 2 – 3 Full & 1 Half Bath | 3,297 Square Feet



PLANNED UNIT DEVELOPMENT ORDINANCE

UNDERLYING ZONING DISTRICT



PLANNED UNIT DEVELOPMENT ORDINANCE

Comparison to Ordinance

PROPOSED RESIDENTIAL STANDARDS VS. ORDINANCE	R-1A	R-1 HIGH	R-2 HIGH	SERIES A: LANDINGS	SERIES B: CROSSINGS
1. Min. Lot Size	15,000 SF	17,000 SF	10,500 SF	7,000 SF	8,000 SF
2. Min. Avg. Lot Size		18,000 SF	11,500 SF	9,200 SF	11,000 SF
3. Min. Lot Width at Building Line	100'	90'	85'	55'	68'
4. Min. Lot Depth				115'	115'
5. Min. Lot Frontage				36'	30'
6. Max Lot Coverage	35%	40%	40%	50%	50%
7. Min. Front Yard Setback	25'	30'	25'	25'	25'
8. Min. Side Yard Setback ⁴	15'	13'	8'	10'/7'	10'/7'
9. Min. Distance Between Buildings ⁵		10'	10'	20'	20'
10. Min. Rear Yard Setback	15'	15'	15'	25'	25'
11. Side Lot Line to Front Road Angle	15°	15°	15°	37°	30°
12. Max Height	40'			35'	35'
13. Min. Livable Floor Area ⁶ – One-Story	1,400 SF	1,850 SF	1,400 SF	1,800 SF	2,300 SF
14. Min. Livable Floor Area – Two-Story	1,400 SF	1,850 SF	1,400 SF	2,400 SF	2,450 SF

⁴ Homes that have a third car garage bay may reduce the Minimum Side Yard Setback on the garage side of the home to 5'

⁵ The Minimum Distance Between Buildings may be reduced to 10' when both homes have a third car garage bay on the shared property line or 15' when one home has a third car garage bay. Living space above the third car garage bay is prohibited when the Min. Distance Between Buildings is less than 20'.

⁶ Livable Floor Area shall not include garages or porches, except when a porch is enclosed and heated and/or cooled for use year round.

PLANNED UNIT DEVELOPMENT ORDINANCE

PROPOSED INFRASTRUCTURE STANDARDS VS. ORDINANCE	R-1 HIGH	R-2 HIGH	BROOKSTONE
1. Min. ROW Width (1A/2A)	50/60'	50/60'	60'
2. Min. Sidewalk Width	5'	5'	5'
3. Min. Curb Corner Radius	10'	15'	30'
4. Max Curb Corner Radius	15'	20'	420'
5. Min. Centerline Radius	100'	180'	200'
6. Max Centerline Radius	300'	500'	2,500'
7. Min. Tangent between Curve/Calming Dev	50'	100'	n/a
8. Max. Tangent between Curve	300'	500'	n/a
9. Min. Tangent at Intersection	0'	50'	0'
10. Max Tangent at Intersection	300'	500'	300'
11. Min. Distance between intersection	2 lots	2 lots	2 lots
12. Max Distance between intersection	660'	1,000'	1,800'
13. Min Cul de sac street length	300'	n/a	200'
14. Max Cul de sac street length	600'	n/a	740'
15. Min Cul de sac pavement radius	50'	n/a	50'
16. Min. Cul de sac island radius	20'	n/a	20'
17. Min Intersection Angle	80 deg	80 deg	80 deg

PLANNED UNIT DEVELOPMENT ORDINANCE

PERMITTED USE VS. ORDINANCE	R-1	R-2	BROOKSTONE
Agriculture			
Bed & Breakfast Establishment			
Cemetery (w/o funeral home)			
Community Center (public)			
Country Club			
Dwellings, single family detached			
Dwellings, manufactured homes			
Government Buildings			
Home Child Care			Not to exceed 5 children
Libraries & Museums			
Municipal Bldgs, Utilities & Services			
Parks & Playgrounds			
Places of Worship			
Residential Care Home – mentally ill			
Schools – public & private			
Utilities			
LEGEND:	PERMITTED	SPECIAL EXCEPTION	PROHIBITED

NOTE: Any use listed in Chapter 27 of the zoning ordinance but not listed in the above chart is not permitted within Brookstone.

Studies & Survey's

- A. TRAFFIC ANALYSIS
- B. FISCAL IMPACT ANALYSIS
- C. MARKET SURVEY

STUDIES & SURVEY'S

TRAFFIC ANALYSIS

[See Attached]



TRAFFIC IMPACT ANALYSIS

BROOKSTONE DEVELOPMENT

RONALD REAGAN PARKWAY & CR 100 N

AVON, INDIANA

PREPARED FOR



JULY 2019

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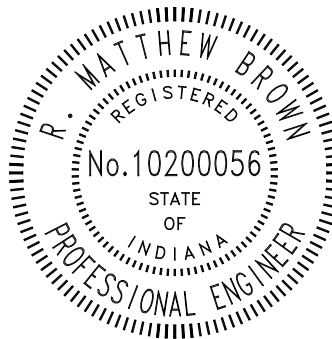
CERTIFICATION

I certify that this **TRAFFIC IMPACT STUDY** has been prepared by me and under my immediate supervision and that I have experience and training in the field of traffic and transportation engineering.

A&F ENGINEERING Co., LLC



R. Matt Brown, P.E.
Indiana Registration 10200056



Antoun Fadoul, E.I.
Traffic Engineer

INTRODUCTION

This **TRAFFIC IMPACT ANALYSIS**, prepared at the request of the Town of Avon on behalf of Pulte Group, is for a proposed residential development known as Brookstone that is located south of CR 100 N, between Ronald Reagan Parkway and CR 900 E in Avon, Indiana.

PURPOSE

The purpose of this analysis is to determine what impact the traffic generated by the proposed development will have on the existing adjacent roadway system. This analysis will identify any existing roadway deficiencies or ones that may occur when this site is developed.

Conclusions will be reached that will determine if the roadway system can accommodate the anticipated traffic volumes or will determine the modifications that will be required to the system if there are identified deficiencies.

Recommendations will be made that will address the conclusions resulting from this analysis. These recommendations will address feasible roadway system improvements to provide safe ingress and egress, to and from the proposed development, with minimal interference to traffic on the public street system.

SCOPE OF WORK

The scope of work for this analysis is as follows:

First, obtain peak hour turning movement traffic volume counts between the hours of 6:00 A.M. to 9:00 A.M. and 3:00 P.M. and 7:00 P.M. at the following intersections:

- CR 100 N & CR 900 E
- CR 100 N & Ronald Reagan Parkway
- Ronald Reagan Parkway & Garrison Lane

Second, estimate year 2029 background traffic volumes by applying a 1 % per year growth rate to the existing counts and adding the extracted generated traffic volumes from a previous study for the approved Camden and Brownstone developments.

Third, estimate the number of peak hour trips that will be generated by the proposed Brookstone development.

Fourth, assign and distribute the generated traffic volumes from the proposed Brookstone development to the study intersections.

Fifth, prepare a capacity analysis, level of service analysis, and turn lane analysis at the study intersections for each of the following scenarios:

Scenario 1: Existing Traffic Volumes – Based on existing intersection conditions and existing weekday peak hour traffic volumes.

Scenario 2: Year 2029 Background Traffic Volumes – Sum of year 2029 projected traffic volumes and the generated traffic volumes from the nearby Camden and Brownstone developments.

Scenario 3: Year 2029 Proposed Development Traffic Volumes – Sum of the traffic volumes from Scenario 2 and the generated traffic volumes from the proposed Brookstone development.

Sixth, prepare recommendations for the roadway geometrics that will be needed to accommodate the total traffic volumes for each of the scenarios identified above.

Finally, prepare a **TRAFFIC IMPACT STUDY** report documenting all data, analyses, and recommendations to provide for the safe and efficient movement of traffic through the study area.

DESCRIPTION OF NEARBY DEVELOPMENTS

The nearby future developments include the Camden and Brownstone residential developments. These developments are located between CR 900 E and Ronald Reagan Parkway, north of CR 100 N. A&F Engineering completed a comprehensive traffic study in February 2017 that included these developments.

DESCRIPTION OF THE PROPOSED DEVELOPMENT

The proposed Brookstone development is located between CR 900 E and Ronald Reagan Parkway, south of CR 100 N in Avon, Indiana. The proposed development will have no more than 199 single-family dwelling units. The site will be served by a full access drive along CR 100 N that will be aligned with the approved Camden development access drive and a connection into Avon Trails through Jackson Way that will provide access to/from Ronald Reagan Parkway.

Figure 1 is an area map showing the location and general layout of the proposed site.

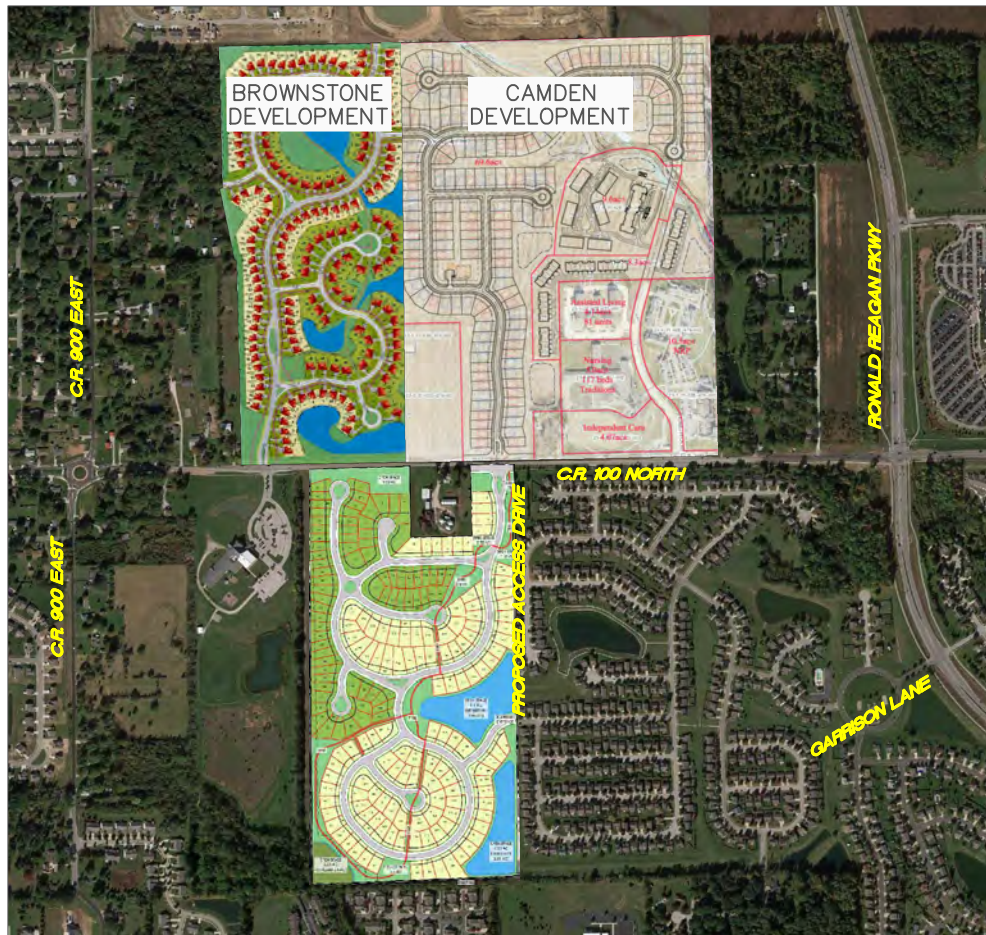


FIGURE 1
AREA MAP

TRAFFIC IMPACT STUDY
PULTE GROUP
AVON, INDIANA

STUDY AREA

The study area for this analysis has been defined to include the following intersections:

- CR 100 N & CR 900 E
- CR 100 N & Ronald Reagan Parkway
- Ronald Reagan Parkway & Garrison Lane
- CR 100 N & Proposed Access Drive

Figure 2 show the existing intersection geometrics at the subject intersections.

DESCRIPTION OF ABUTTING STREET SYSTEM

The proposed development will be primarily served by the public roadway system that includes the following:

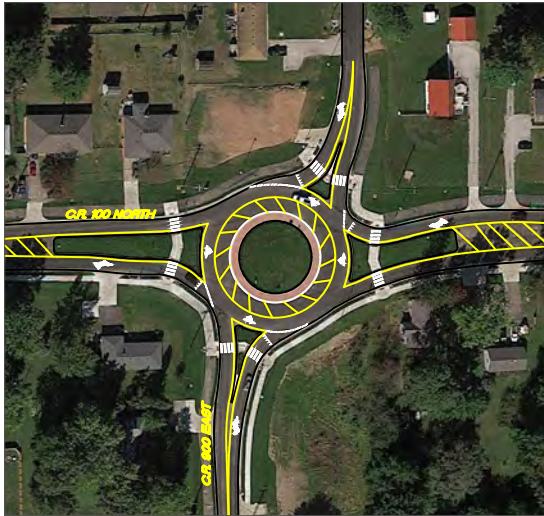
CR 100 NORTH – is an east/west two-lane undivided highway to the south of the proposed development, with a posted speed limit of 40 mph. According to the Town of Avon Thoroughfare Plan, CR 100 N is classified as a Secondary Arterial in the vicinity of the site.

CR 900 EAST – is a north/south two-lane roadway to the west of the proposed development, with a posted speed limit of 40 mph. According to the Town of Avon Thoroughfare Plan, CR 900 E is classified as a Collector in the vicinity of the site.

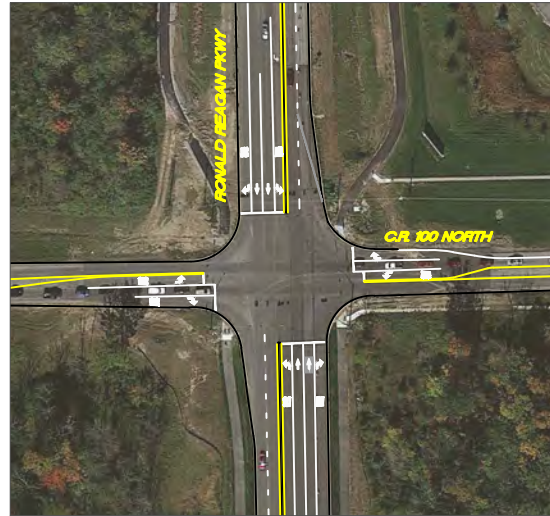
RONALD REAGAN PARKWAY – is a north/south two-lane undivided highway to the east of the proposed development, with a posted speed limit of 50 mph in the vicinity of the site. According to the Town of Avon Thoroughfare Plan, Ronald Reagan Parkway is classified as a Primary Arterial.

EXISTING TRAFFIC VOLUMES

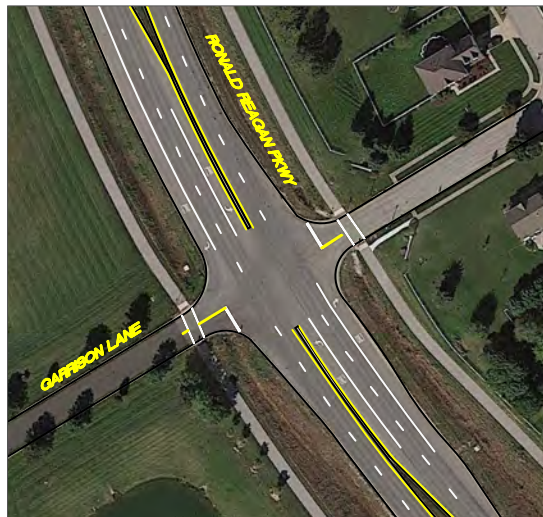
Peak hour turning movement traffic volume counts were collected by A&F Engineering at the study intersections between the hours of 6:00 AM and 9:00 AM and 3:00 PM and 7:00 PM during a typical weekday in June 2019 under good weather conditions. The AM and PM peak hours vary slightly between each location. Therefore, the actual peak hour at each location will be used to represent a maximum traffic scenario at each analyzed intersection. The intersection count output summary sheets are included in the **Appendix** and the peak hour volumes are shown on **Figure 3**.



CR 100 N & CR 900 E



**CR 100 N & RONALD REAGAN
PARKWAY**

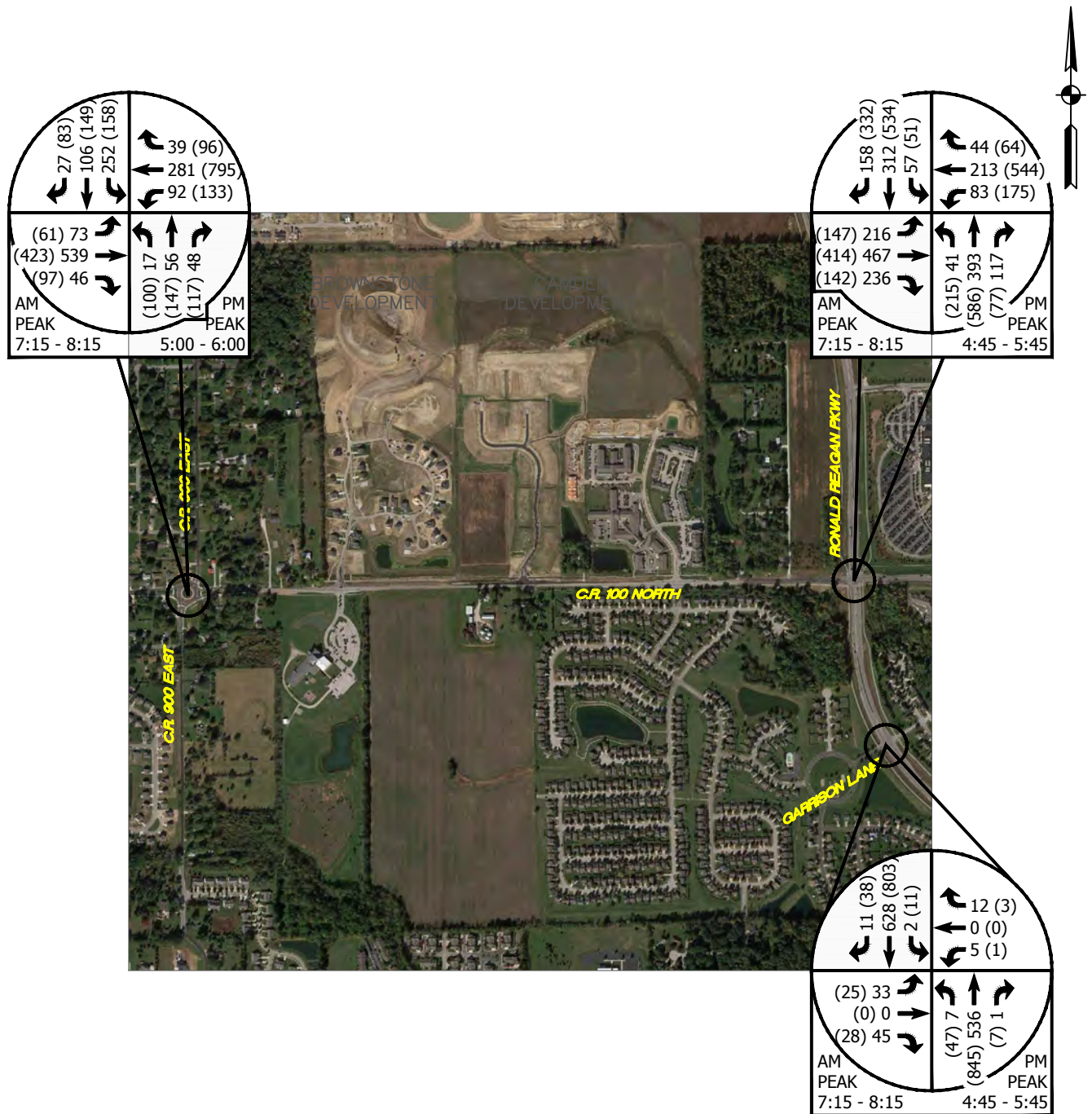


**RONALD REAGAN PARKWAY
& GARRISON LANE**

FIGURE 2

**EXISTING INTERSECTION
GEOMETRICS**

**TRAFFIC IMPACT STUDY
PULTE GROUP
AVON, INDIANA**



LEGEND

XX = A.M. PEAK HOUR
(XX) = P.M. PEAK HOUR
* = NEGLIGIBLE

FIGURE 3

EXISTING TRAFFIC VOLUMES

**TRAFFIC IMPACT STUDY
PULTE GROUP
AVON, INDIANA**

YEAR 2029 BACKGROUND TRAFFIC VOLUMES

The proposed Brookstone residential development is expected to be fully developed by 2029. In order to account for annual growth in traffic that would occur due to future development outside of the study area over the next 10 years, an annual 1% (non-compounded) growth percentage is applied to the existing traffic volumes. Therefore, a growth rate factor of 1.10 was applied to the existing traffic volumes to obtain year 2029 projected traffic volume estimates. In addition, the generated traffic volumes from the approved Camden and Brownstone developments were added to the year 2029 projected traffic volumes to yield total year 2029 background traffic volumes.

Figure 4 shows the total year 2029 background traffic volumes while the figure depicting the total generated traffic volumes from the approved Camden and Brownstone developments can be found in the **Appendix**.

GENERATED TRAFFIC VOLUMES FROM PROPOSED DEVELOPMENT

The estimate of newly generated traffic is a function of the development size and of the character of the land use. The *ITE Trip Generation Manual* was used to calculate the number of trips that will be generated by the proposed Brookstone development. **Table 2** summarizes the total trips that will be generated by the site.

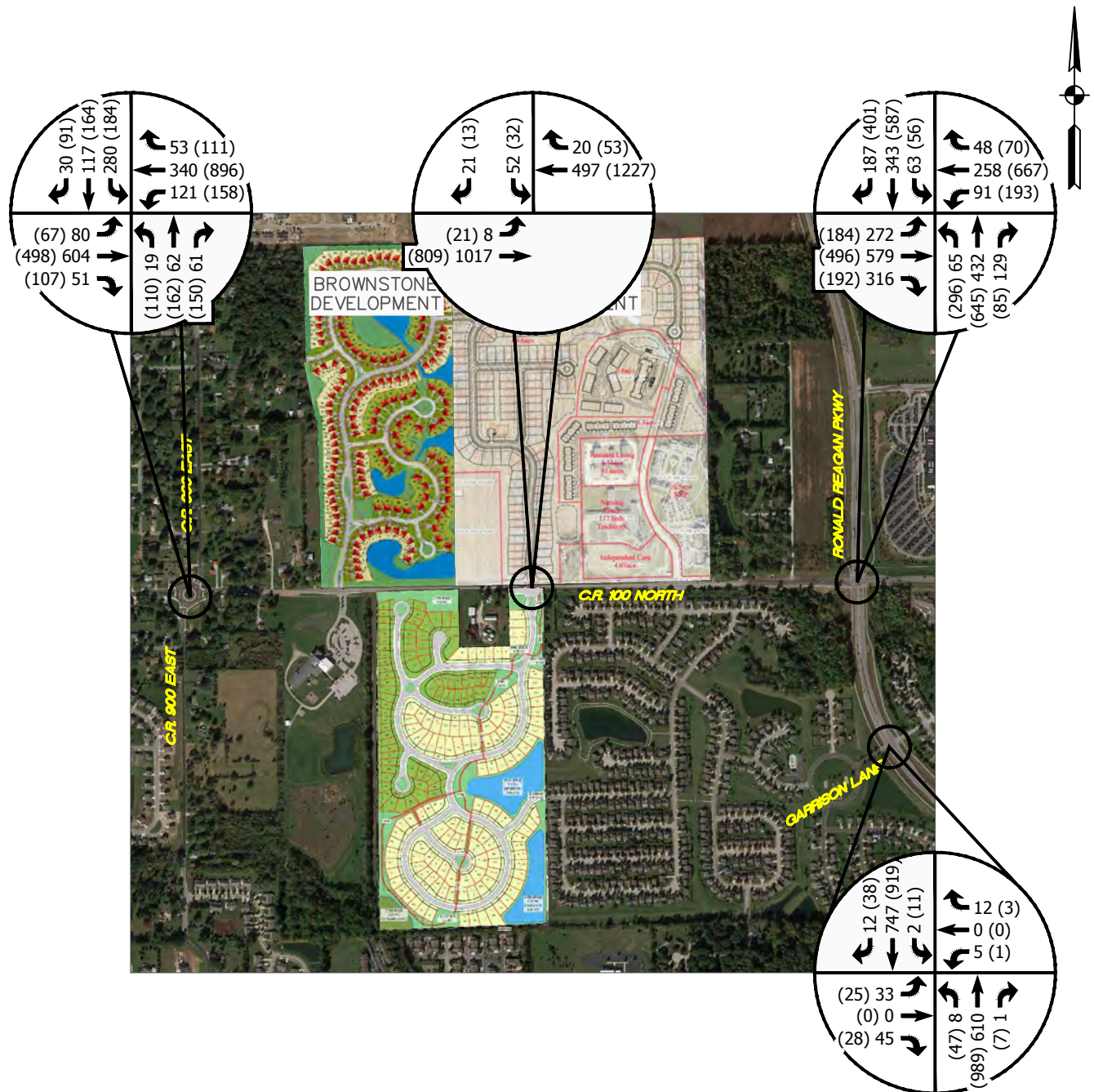
TABLE 1 – TOTAL GENERATED TRIPS FOR PROPOSED DEVELOPMENT

DEVELOPMENT INFORMATION			GENERATED TRIPS			
LAND USE	ITE CODE	SIZE	AM ENTER	AM EXIT	PM ENTER	PM EXIT
Single-Family Housing	210	199 DU	37	109	124	73

PASS-BY & INTERNAL TRIPS

Pass-by trips are trips already on the roadway system that are captured by a proposed development. Residential developments do not typically generate a significant amount of pass-by traffic. Therefore pass-by trip reductions were not considered for this analysis.

An internal trip results when a trip is made between two or more land uses without traversing the external public roadway system. The proposed development is a single land use only. Thus, internal trips are not included in this analysis.



LEGEND

XX = A.M. PEAK HOUR
(XX) = P.M. PEAK HOUR
* = NEGLIGIBLE

FIGURE 4
YEAR 2029 BACKGROUND
TRAFFIC VOLUMES

TRAFFIC IMPACT STUDY
PULTE GROUP
AVON, INDIANA

ASSIGNMENT AND DISTRIBUTION OF GENERATED TRIPS

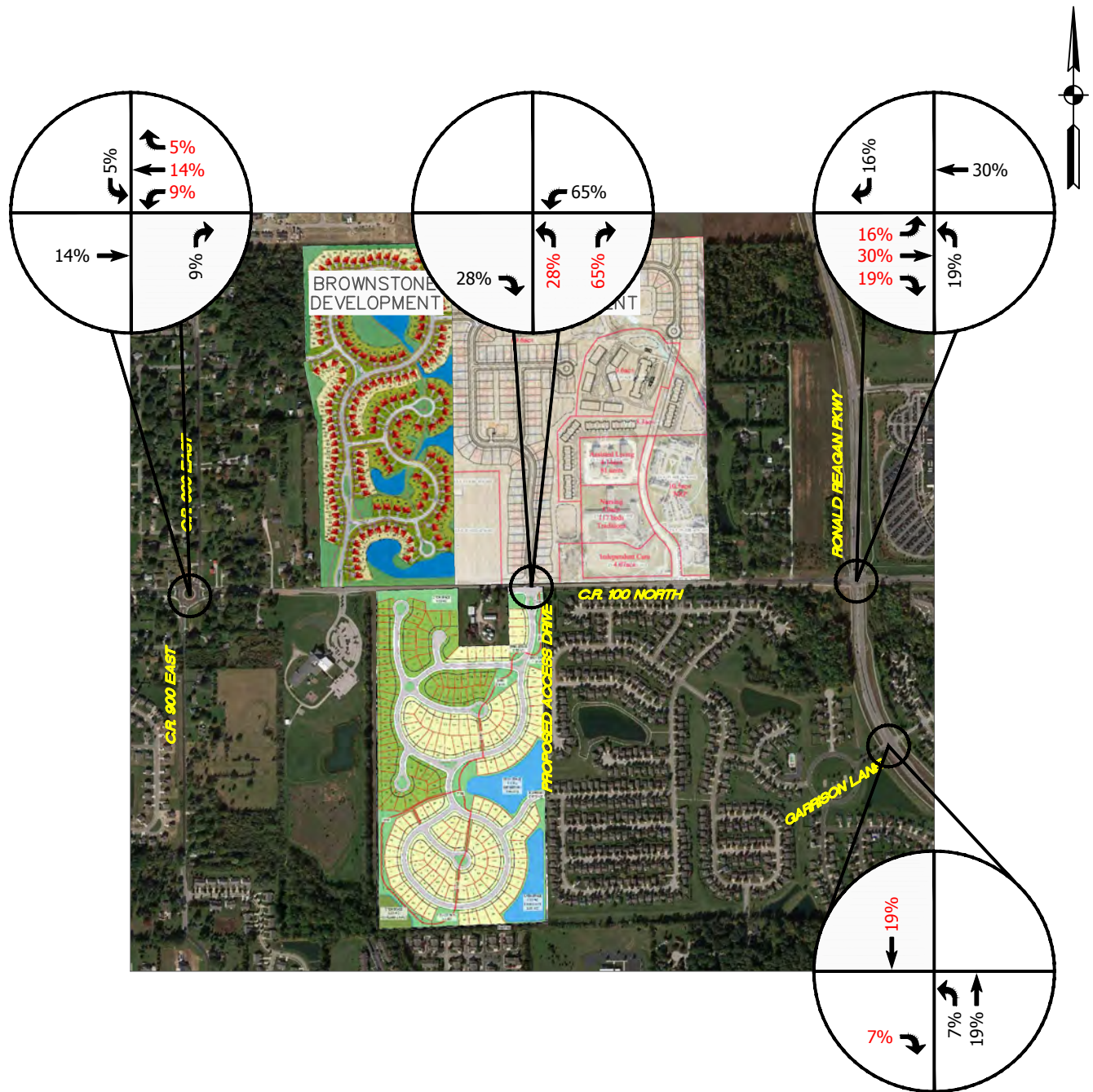
The study methodology used to determine the traffic volumes from the proposed Brookstone development that will be added to the street system is defined as follows:

1. The volume of traffic that will enter and exit the subject site must be assigned to the access points and to the public street system. Using the traffic volume data collected for this analysis, traffic to and from the site has been assigned to the proposed driveways and to the public street system that will be serving the site.
2. To determine the volumes of traffic that will be added to the public roadway system, the generated traffic must be distributed by direction to the public roadways at their intersection with the driveway. For the subject site, the distribution was based on the location of the development, the existing roadway network, the existing traffic patterns and the assignment of generated traffic.

The assignment and distribution of generated traffic volumes for the proposed Brookstone development is shown on **Figure 5**.

GENERATED TRIPS FROM THE PROPOSED DEVELOPMENT ADDED TO THE STREET SYSTEM

The total generated traffic volumes that can be expected from the proposed Brookstone development have been assigned to each of the study intersections. These volumes were determined based on the previously discussed trip generation data, assignment of generated traffic and distribution of generated traffic. The total peak hour generated traffic volumes from the proposed Brookstone development are shown in **Figure 6**. **Figure 7** shows the sum of year 2029 background traffic volumes and generated traffic volumes from the proposed Brookstone development.

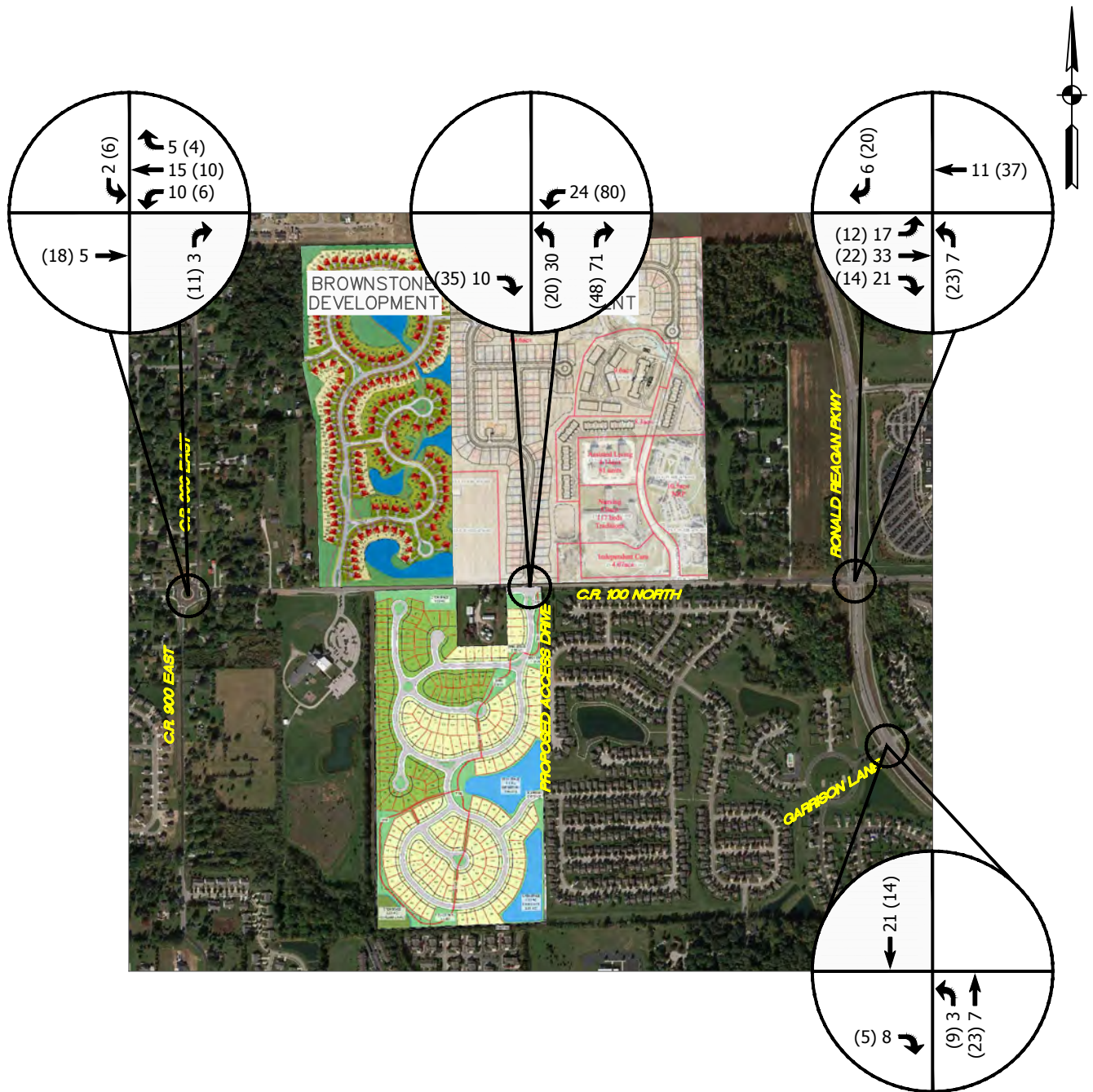


LEGEND
XX = INBOUND TRAFFIC
XX = OUTBOUND TRAFFIC
* = NEGLIGIBLE

FIGURE 5

**ASSIGNMENT & DISTRIBUTION
OF GENERATED TRAFFIC VOLUMES
FROM PROPOSED DEVELOPMENT**

**TRAFFIC IMPACT STUDY
PULTE GROUP
AVON, INDIANA**



LEGEND

XX = A.M. PEAK HOUR
(XX) = P.M. PEAK HOUR
* = NEGLIGIBLE

FIGURE 6

**GENERATED TRAFFIC VOLUMES
FROM PROPOSED DEVELOPMENT**

**TRAFFIC IMPACT STUDY
PULTE GROUP
AVON, INDIANA**



LEGEND

XX = A.M. PEAK HOUR
(XX) = P.M. PEAK HOUR
* = NEGLIGIBLE

FIGURE 7

**SUM OF YEAR 2029
BACKGROUND TRAFFIC VOLUMES
AND GENERATED TRAFFIC VOLUMES
FROM PROPOSED DEVELOPMENT**

**TRAFFIC IMPACT STUDY
PULTE GROUP
AVON, INDIANA**

TURN LANE ANALYSIS

The generated peak hour traffic volumes from the proposed Brookstone development were combined with the year 2029 background traffic volumes to determine if a left-turn lane and/or a right-turn lane would be required along CR 100 N at the proposed access drive. According to Section 46-4.01 of the INDOT *Design Manual*, a westbound left-turn lane along CR 100 N is warranted at the proposed access drive. However, a right-turn lane was not warranted at the proposed access drive. However, to safely move traffic into the site, an eastbound right-turn taper is recommended along CR 100 N at the proposed access drive.

The graphs showing the left-turn lane and right-turn lane warrant criteria are included in the **Appendix**.

CAPACITY ANALYSIS

The "efficiency" of an intersection is based on its ability to accommodate the traffic volumes that approach the intersection. It is defined by the Level-of-Service (LOS) of the intersection. The LOS is determined by a series of calculations commonly called a "capacity analysis". Input data into a capacity analysis include traffic volumes, intersection geometry, and number and use of lanes. To determine the LOS at each of the study intersections, a capacity analysis has been made using the recognized computer program *Synchro/SimTraffic*¹. This program allows intersections to be analyzed and optimized using the capacity calculation methods outlined within the *Highway Capacity Manual (HCM 6th Edition)*². The following list shows the delays related to the levels of service for signalized, unsignalized, and roundabout intersections:

<u>Level of Service</u>	<u>Control Delay (seconds/vehicle)</u>	
	<u>UNSIGNALIZED/RAB</u>	<u>SIGNALIZED</u>
A	Less than or equal to 10	Less than or equal to 10
B	Between 10.1 and 15	Between 10.1 and 20
C	Between 15.1 and 25	Between 20.1 and 35
D	Between 25.1 and 35	Between 35.1 and 55
E	Between 35.1 and 50	Between 55.1 and 80
F	greater than 50	greater than 80

¹ *Synchro/SimTraffic 10.1*, Trafficware, 2017.

² *Highway Capacity Manual (HCM)*, 6th Edition, Transportation Research Board, National Research Council, Washington, DC, 2016.

CAPACITY ANALYSIS SCENARIOS

To evaluate the proposed development's effect on the public street system, a series of traffic volume scenarios were analyzed to determine the adequacy of the existing roadway network. In addition, recommendations can be made to improve the public street system so it will accommodate the future traffic volumes. An analysis has been made for the weekday AM peak hour and PM peak hour at the study intersections for the following traffic volume scenarios:

Scenario 1: Existing Traffic Volumes – Based on existing intersection conditions and existing weekday peak hour traffic volumes. **Figure 3** is a summary of the weekday AM and PM peak hour traffic volumes.

Scenario 2: Year 2029 Background Traffic Volumes – Sum of year 2029 projected traffic volumes and the generated traffic volumes from the nearby Camden development and Brownstone development. **Figure 4** is a summary these traffic volumes.

Scenario 3: Year 2029 Proposed Development Traffic Volumes – Sum of year 2029 background traffic volumes and the generated traffic volumes from the proposed Brookstone development. **Figure 7** is a summary these traffic volumes.

The following tables summarize the level of service results at each of the study intersections. The *Synchro* (HCM 6th Edition) intersection reports illustrating the capacity analysis results are included in the **Appendix**.

TABLE 2 – LEVEL OF SERVICE SUMMARY: CR 100 N & CR 900 E

APPROACH	AM PEAK						PM PEAK					
	S1A	S1B	S2A	S2B	S3A	S3B	S1A	S1B	S2A	S2B	S3A	S3B
Northbound Approach	A	A	B	A	B	A	B	B	C	C	D	C
Southbound Approach	A	A	B	A	B	B	E	C	F	F	F	F
Eastbound Approach	C	A	E	A	E	A	C	A	D	A	E	A
Westbound Approach	A	A	A	A	A	A	F	A	F	B	F	B
Intersection	B	A	C	A	C	A	E	B	F	C	F	C

DESCRIPTION OF SCENARIOS:

SCENARIO 1A: Existing Traffic Volumes with Existing Intersection Conditions.

SCENARIO 1B: Existing Traffic Volumes with Proposed Intersection Geometrics*.

SCENARIO 2A: Year 2029 Background Traffic Volumes with Existing Intersection Conditions.

SCENARIO 2B: Year 2029 Background Traffic Volumes with Proposed Intersection Geometrics*.

SCENARIO 3A: Year 2029 Proposed Development Traffic Volumes with Existing Intersection Conditions.

SCENARIO 3B: Year 2029 Proposed Development Traffic Volumes with Proposed Intersection Geometrics*.

*The proposed intersection geometrics include converting the single-lane roundabout to a double-lane roundabout with dual entry lanes along the eastbound and westbound approaches.

TABLE 3 – LEVEL OF SERVICE SUMMARY: CR 100 N & RONALD REAGAN PARKWAY

APPROACH	AM PEAK			PM PEAK		
	S1	S2	S3	S1	S2	S3
Northbound Approach	C	C	C	C	D	D
Southbound Approach	B	C	C	C	C	D
Eastbound Approach	B	B	B	C	C	D
Westbound Approach	B	B	B	C	D	E
Intersection	B	C	C	C	D	D

DESCRIPTION OF SCENARIOS:

- SCENARIO 1: Existing Traffic Volumes with Existing Intersection Conditions.
 SCENARIO 2: Year 2029 Background Traffic Volumes with Existing Intersection Conditions.
 SCENARIO 3: Year 2029 Proposed Development Traffic Volumes with Existing Intersection Conditions.

TABLE 4 – LEVEL OF SERVICE SUMMARY: RONALD REAGAN PARKWAY & GARRISON LANE

APPROACH	AM PEAK			PM PEAK		
	S1	S2	S3	S1	S2	S3
Northbound Left-Turn	A	A	A	B	B	B
Southbound Left-Turn	A	A	A	A	B	B
Eastbound Approach	C	C	C	D	D	D
Westbound Approach	B	C	C	C	C	D

DESCRIPTION OF SCENARIOS:

- SCENARIO 1: Existing Traffic Volumes with Existing Intersection Conditions.
 SCENARIO 2: Year 2029 Background Traffic Volumes with Existing Intersection Conditions.
 SCENARIO 3: Year 2029 Proposed Development Traffic Volumes with Existing Intersection Conditions.

TABLE 5 – LEVEL OF SERVICE SUMMARY: CR 100 N & PROPOSED ACCESS DRIVE

APPROACH	AM PEAK	PM PEAK
	S3	S3
Northbound Approach	E	F
Southbound Approach	F	F
Eastbound Left-Turn	A	B
Westbound Left-Turn	B	B

DESCRIPTION OF SCENARIOS:

- SCENARIO 3: Year 2029 Proposed Development Traffic Volumes with Existing Intersection Conditions.

*The proposed intersection conditions include the construction of the northbound approach with at least one inbound and two outbound lanes with the driveway stopping for CR 100 N; and the addition of an exclusive westbound left-turn lane and an eastbound right-turn taper along CR 100 N.

CONCLUSIONS & RECOMMENDATIONS

The conclusions that follow are based on existing traffic volume data, trip generation, assignment and distribution of generated traffic, capacity analyses/level of service results, turn lane analysis and a field review conducted at the site. Based on the analysis and the resulting conclusions of this study, the following recommendations are formulated to ensure that the roadway system will accommodate the increased traffic volumes from the site.

CR 100 N & CR 900 E

Capacity analyses for the existing traffic volumes has shown that this intersection operates below acceptable levels of service during the PM peak hour. As future traffic is considered at this intersection, analyses show that the existing single-lane roundabout experiences increased delays. Thus, the conversion of this single-lane roundabout into a double-lane roundabout is recommended within the next 10-years. Further analyses have shown that this intersection improvement will lead to acceptable levels of service during the AM and PM peak hours under all traffic volume scenarios.

CR 100 N & RONALD REAGAN PARKWAY

Capacity analyses for all traffic volume scenarios has shown that this intersection operates and will continue to operate at acceptable levels of service during the AM and PM peak hour with existing intersection conditions. Therefore, no improvements are recommended at this location.

RONALD REAGAN PARKWAY & GARRISON LANE

Capacity analyses for all traffic volume scenarios has shown that all approaches to this intersection operate and will continue to operate at acceptable levels of service during the AM and PM peak hour with existing intersection conditions. Therefore, no improvements are recommended at this location.

CR 100 N & PROPOSED ACCESS DRIVE

The following intersection conditions are recommended at this intersection:

- Construction of the northbound approach with at least one inbound lane and two outbound lanes.
- Addition of an eastbound right-turn taper along CR 100 N.
- Addition of an exclusive westbound left-turn lane along CR 100 N.
- Stop Controlled intersection with the northbound approach stopping for CR 100 N.

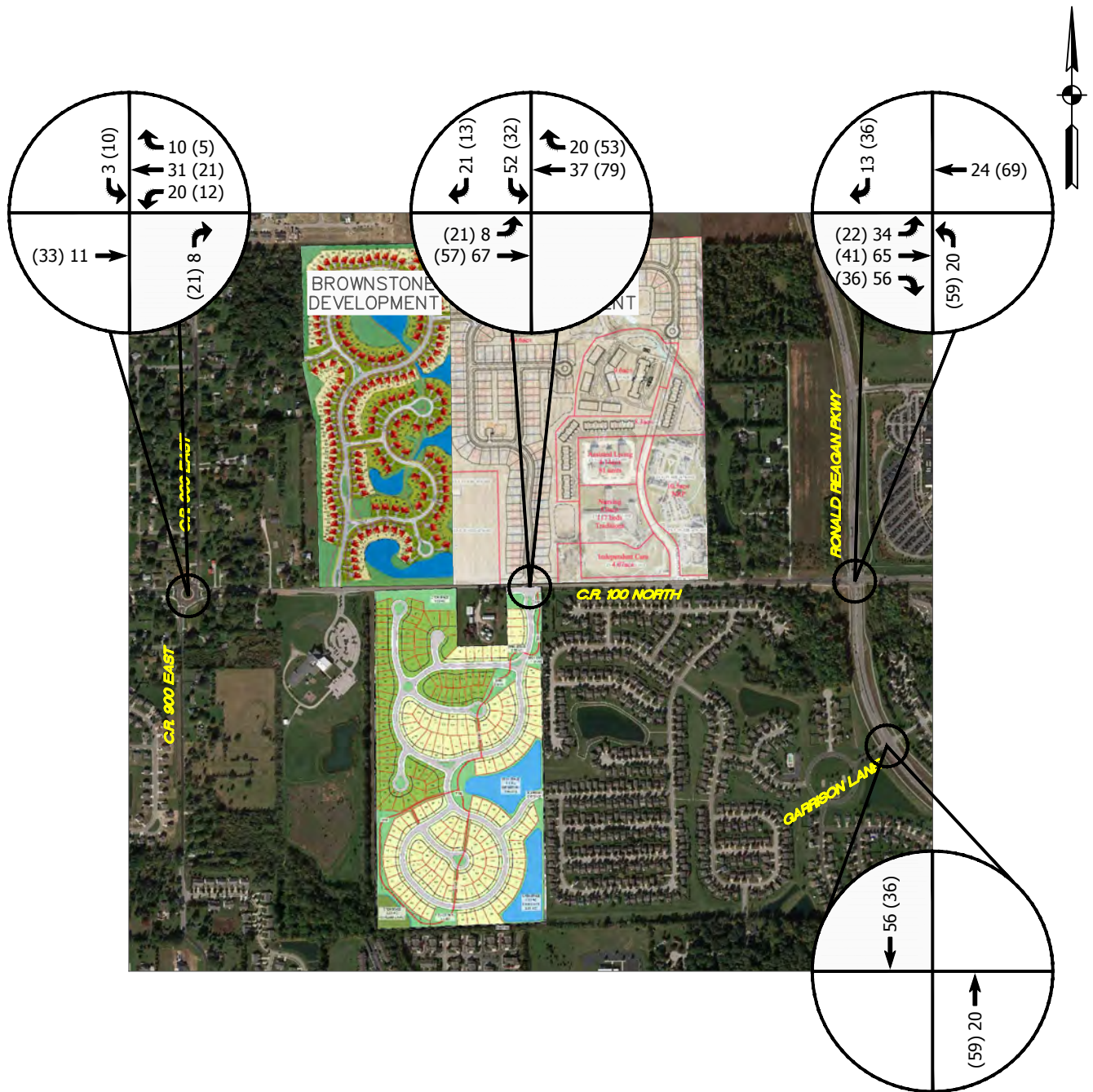
TRAFFIC IMPACT STUDY

APPENDIX



***8365 Keystone Crossing Boulevard, Suite 201
Indianapolis, IN 46240
Phone: (317) 202-0864 Fax: (317) 202-0908***

ADDITIONAL FIGURES



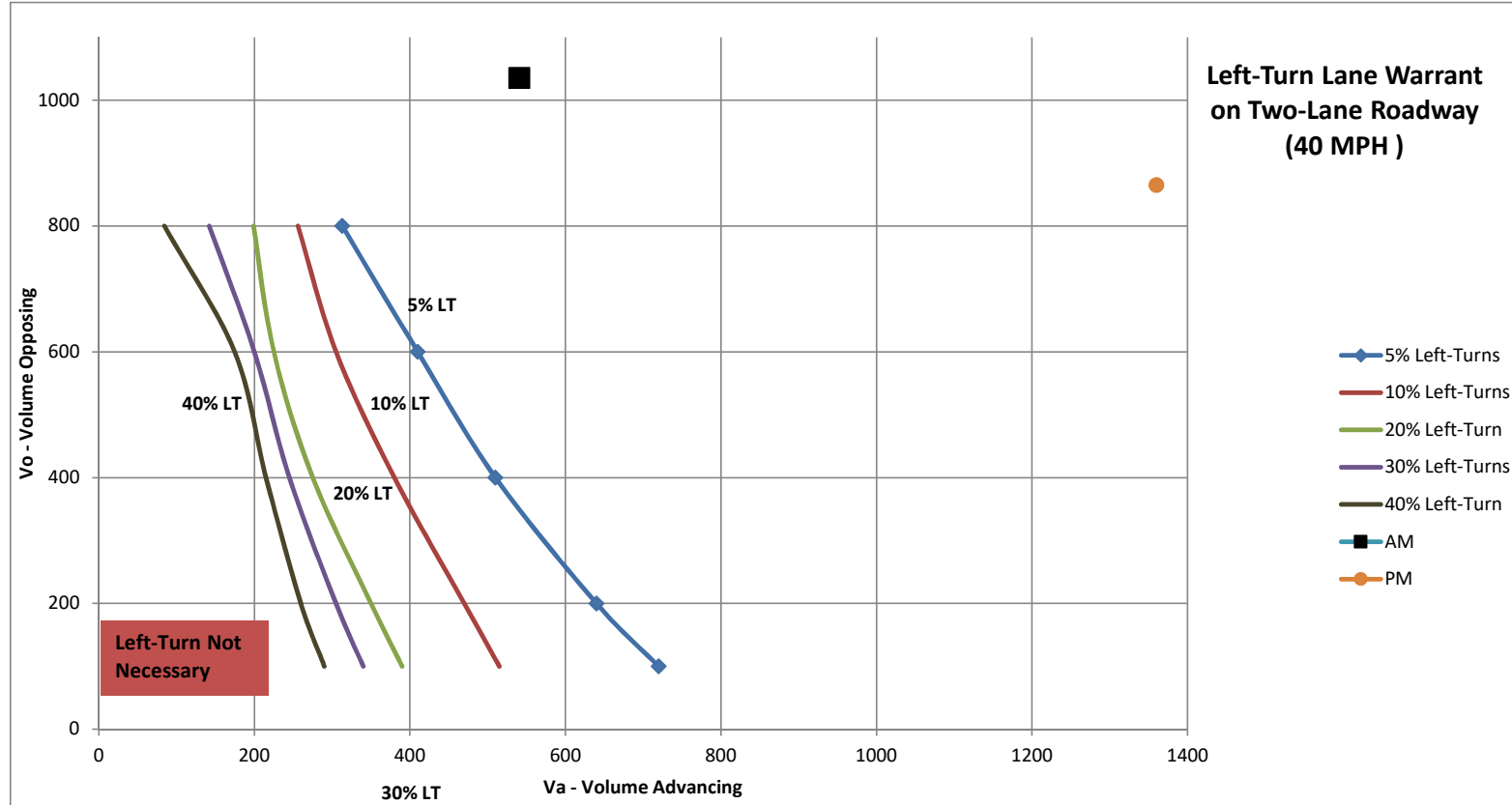
**TRAFFIC IMPACT STUDY
PULTE GROUP
AVON, INDIANA**

TURN LANE WARRANTS

CR 100 N & Proposed Access Drive

Operating Speed (mph)	Opposing Volume (veh/h)	Advancing Volume (veh/h)							
		5% Left Turns	10% Left Turns	15% Left Turns	20% Left Turns	25% Left Turns	30% Left Turns	35% Left Turns	40% Left Turns
40	800	313	256	228	199	171	142	113	84
	600	410	305	265	225	213	200	187	175
	400	510	380	328	275	260	245	230	215
	200	640	470	410	350	328	305	282	260
	100	720	515	453	390	365	340	315	290

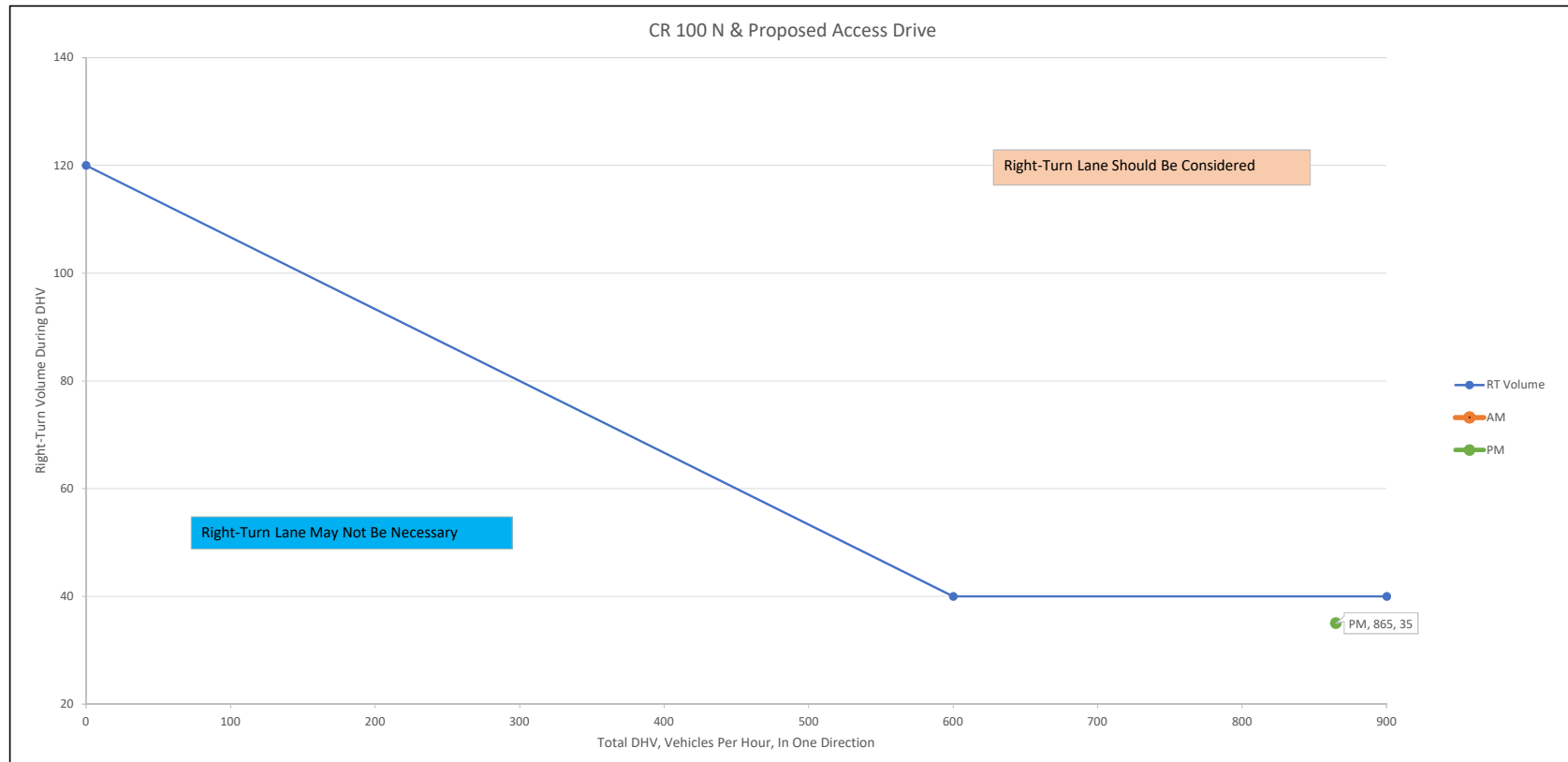
	INPUT	Warrant?
AM	Advancing Volume (Va)	541
	Opposing Volume (Vo)	1035
	Left-turn Volume	24
	Left-turn %	4%
		YES
PM	Advancing Volume (Va)	1360
	Opposing Volume (Vo)	865
	Left-turn Volume	80
	Left-turn %	6%
		YES



CR 100 N & Proposed Access Drive

Total Volume	RT Volume
0	120
600	40
900	40

Time	Input		Met?
AM	RT Volume	10	NO
	Total Volume	1035	
PM	RT Volume	35	NO
	Total Volume	865	



CR 100 N & CR 900 E

TRAFFIC VOLUME COUNTS CAPACITY ANALYSIS

CR 100 N & CR 900 E - TMC

Tue Jun 18, 2019

Full Length (6 AM-9 AM, 3 PM-7 PM)

All Classes (Lights and Motorcycles, Heavy)

All Movements

ID: 669474, Location: 39.778184, -86.3625



Provided by: A&F Engineering

8365 Keystone Crossing, Suite 201, Indianapolis, IN, 46240, US

Leg Direction	South Northbound					North Southbound					West Eastbound					East Westbound					
Time	L	T	R	U	App	L	T	R	U	App	L	T	R	U	App	L	T	R	U	App	Int
2019-06-18																					
6:00AM	0	7	9	0	16	28	7	2	0	37	7	93	3	0	103	8	21	1	0	30	186
6:15AM	1	7	8	0	16	32	11	4	0	47	5	119	5	0	129	7	29	9	0	45	237
6:30AM	1	7	6	0	14	43	14	4	0	61	11	148	11	0	170	8	39	7	0	54	299
6:45AM	3	16	15	0	34	61	12	2	0	75	7	140	6	0	153	17	39	4	0	60	322
Hourly Total	5	37	38	0	80	164	44	12	0	220	30	500	25	0	555	40	128	21	0	189	1044
7:00AM	5	12	18	0	35	54	26	4	0	84	14	131	13	0	158	17	38	9	0	64	341
7:15AM	5	11	9	0	25	53	29	9	0	91	21	151	10	0	182	25	68	8	0	101	399
7:30AM	2	15	13	0	30	66	24	4	0	94	18	146	11	0	175	18	58	4	1	81	380
7:45AM	4	16	12	0	32	69	31	5	0	105	17	121	13	0	151	30	72	11	0	113	401
Hourly Total	16	54	52	0	122	242	110	22	0	374	70	549	47	0	666	90	236	32	1	359	1521
8:00AM	6	14	14	0	34	64	22	9	0	95	17	121	12	0	150	19	83	16	0	118	397
8:15AM	5	20	6	0	31	50	24	4	0	78	9	145	7	0	161	21	65	7	0	93	363
8:30AM	5	7	7	0	19	51	28	5	0	84	12	123	19	0	154	23	71	10	0	104	361
8:45AM	11	12	15	0	38	40	31	5	0	76	16	106	15	0	137	24	79	7	0	110	361
Hourly Total	27	53	42	0	122	205	105	23	0	333	54	495	53	0	602	87	298	40	0	425	1482
9:00AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00PM	15	32	19	0	66	31	32	12	0	75	9	110	15	0	134	19	155	19	0	193	468
3:15PM	24	34	21	0	79	35	29	12	0	76	6	87	17	0	110	36	149	21	0	206	471
3:30PM	16	35	26	0	77	27	24	9	0	60	14	92	18	0	124	29	166	16	0	211	472
3:45PM	19	43	17	0	79	34	24	11	0	69	10	97	19	0	126	35	150	26	0	211	485
Hourly Total	74	144	83	0	301	127	109	44	0	280	39	386	69	0	494	119	620	82	0	821	1896
4:00PM	26	25	25	0	76	31	31	15	0	77	11	82	16	0	109	32	160	18	0	210	472
4:15PM	26	22	20	0	68	43	35	11	0	89	10	94	21	0	125	36	187	27	0	250	532
4:30PM	23	48	34	0	105	27	30	18	0	75	13	101	20	0	134	27	184	25	0	236	550
4:45PM	22	33	24	0	79	30	35	22	0	87	22	102	10	0	134	42	199	31	0	272	572
Hourly Total	97	128	103	0	328	131	131	66	0	328	56	379	67	0	502	137	730	101	0	968	2126
5:00PM	33	40	26	0	99	37	27	15	0	79	14	106	29	0	149	36	188	27	0	251	578
5:15PM	24	35	32	0	91	41	44	28	0	113	18	107	22	0	147	32	206	25	0	263	614
5:30PM	24	38	28	0	90	47	36	15	0	98	12	98	23	0	133	33	214	22	0	269	590
5:45PM	19	34	31	0	84	33	42	25	0	100	17	112	23	0	152	32	187	22	0	241	577
Hourly Total	100	147	117	0	364	158	149	83	0	390	61	423	97	0	581	133	795	96	0	1024	2359
6:00PM	25	32	23	0	80	37	19	15	0	71	15	114	15	0	144	28	162	23	0	213	508
6:15PM	24	31	25	0	80	38	34	12	0	84	9	91	15	0	115	28	169	27	0	224	503
6:30PM	24	22	14	0	60	34	30	9	0	73	6	77	21	0	104	24	134	15	0	173	410
6:45PM	14	31	26	0	71	37	24	9	0	70	8	74	19	0	101	13	96	16	0	125	367
Hourly Total	87	116	88	0	291	146	107	45	0	298	38	356	70	0	464	93	561	81	0	735	1788
Total	406	679	523	0	1608	1173	755	295	0	2223	348	3088	428	0	3864	699	3368	453	1	4521	12216
% Approach	25.2%	42.2%	32.5%	0%	-	52.8%	34.0%	13.3%	0%	-	9.0%	79.9%	11.1%	0%	-	15.5%	74.5%	10.0%	0%	-	-
% Total	3.3%	5.6%	4.3%	0%	13.2%	9.6%	6.2%	2.4%	0%	18.2%	2.8%	25.3%	3.5%	0%	31.6%	5.7%	27.6%	3.7%	0%	37.0%	-
Lights and Motorcycles	406	673	522	0	1601	1158	752	291	0	2201	347	3060	424	0	3831	698	3327	450	0	4475	12108
% Lights and Motorcycles	100%	99.1%	99.8%	0%	99.6%	98.7%	99.6%	98.6%	0%	99.0%	99.7%	99.1%	99.1%	0%	99.1%	99.9%	98.8%	99.3%	0%	99.0%	99.1%
Heavy	0	6	1	0	7	15	3	4	0	22	1	28	4	0	33	1	41	3	1	46	108
% Heavy	0%	0.9%	0.2%	0%	0.4%	1.3%	0.4%	1.4%	0%	1.0%	0.3%	0.9%	0.9%	0%	0.9%	0.1%	1.2%	0.7%	100%	1.0%	0.9%

*L: Left, R: Right, T: Thru, U: U-Turn

CR 100 N & CR 900 E - TMC

Tue Jun 18, 2019

Full Length (6 AM-9 AM, 3 PM-7 PM)

All Classes (Lights and Motorcycles, Heavy)

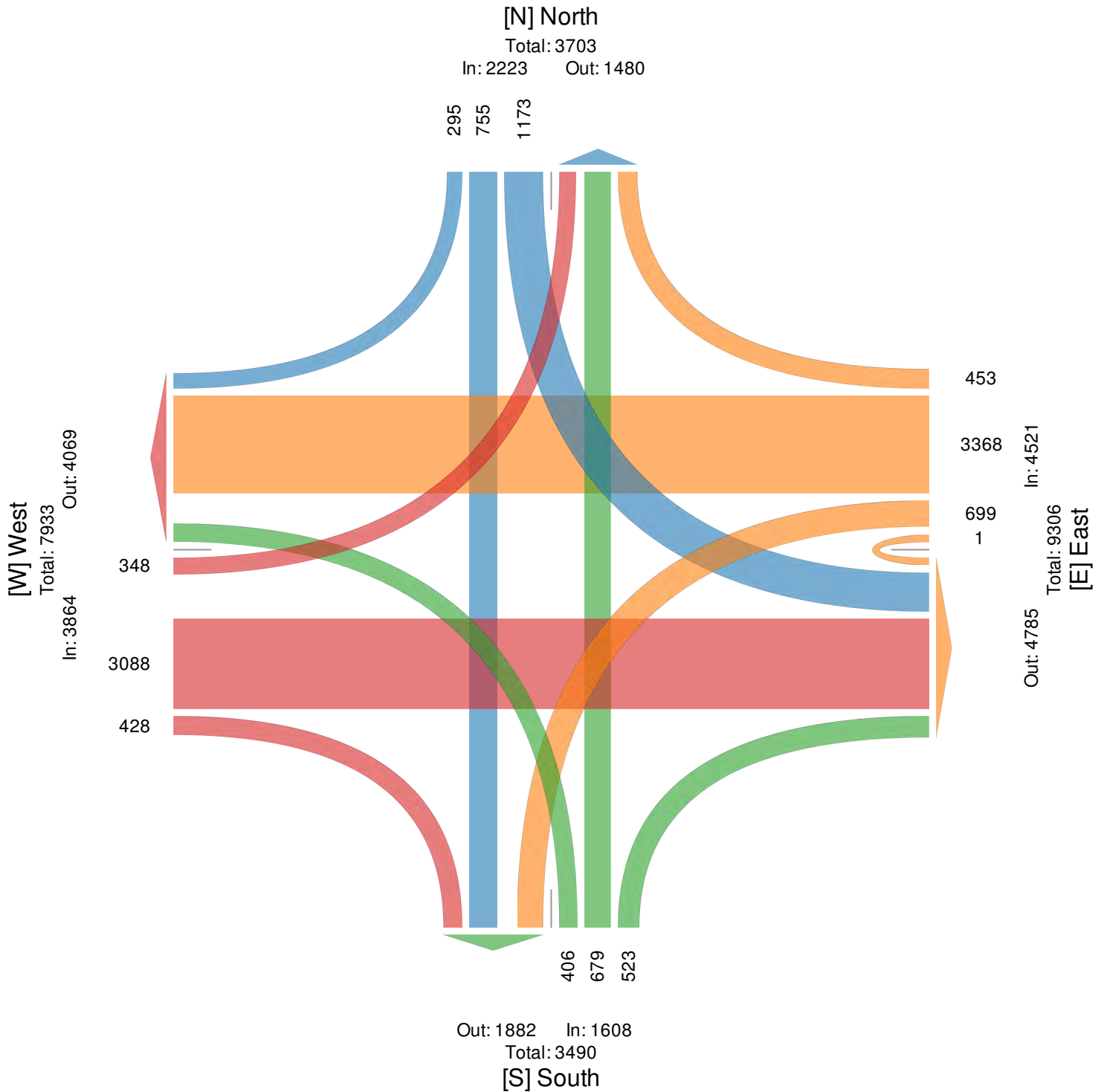
All Movements

ID: 669474, Location: 39.778184, -86.3625



Provided by: A&F Engineering

8365 Keystone Crossing, Suite 201, Indianapolis, IN, 46240, US



CR 100 N & CR 900 E - TMC

Tue Jun 18, 2019

AM Peak (7:15 AM - 8:15 AM)

All Classes (Lights and Motorcycles, Heavy)

All Movements

ID: 669474, Location: 39.778184, -86.3625



Provided by: A&F Engineering

8365 Keystone Crossing, Suite 201, Indianapolis, IN, 46240, US

Leg Direction	South Northbound					North Southbound					West Eastbound					East Westbound					
Time	L	T	R	U	App	L	T	R	U	App	L	T	R	U	App	L	T	R	U	App	Int
2019-06-18 7:15AM	5	11	9	0	25	53	29	9	0	91	21	151	10	0	182	25	68	8	0	101	399
7:30AM	2	15	13	0	30	66	24	4	0	94	18	146	11	0	175	18	58	4	1	81	380
7:45AM	4	16	12	0	32	69	31	5	0	105	17	121	13	0	151	30	72	11	0	113	401
8:00AM	6	14	14	0	34	64	22	9	0	95	17	121	12	0	150	19	83	16	0	118	397
Total	17	56	48	0	121	252	106	27	0	385	73	539	46	0	658	92	281	39	1	413	1577
% Approach	14.0%	46.3%	39.7%	0%	-	65.5%	27.5%	7.0%	0%	-	11.1%	81.9%	7.0%	0%	-	22.3%	68.0%	9.4%	0.2%	-	-
% Total	1.1%	3.6%	3.0%	0%	7.7%	16.0%	6.7%	1.7%	0%	24.4%	4.6%	34.2%	2.9%	0%	41.7%	5.8%	17.8%	2.5%	0.1%	26.2%	-
PHF	0.708	0.875	0.857	-	0.890	0.913	0.855	0.750	-	0.917	0.869	0.892	0.885	-	0.904	0.767	0.846	0.609	0.250	0.875	0.983
Lights and Motorcycles	17	56	48	0	121	249	106	25	0	380	73	537	46	0	656	92	275	39	0	406	1563
% Lights and Motorcycles	100%	100%	100%	0%	100%	98.8%	100%	92.6%	0%	98.7%	100%	99.6%	100%	0%	99.7%	100%	97.9%	100%	0%	98.3%	99.1%
Heavy	0	0	0	0	0	3	0	2	0	5	0	2	0	0	2	0	6	0	1	7	14
% Heavy	0%	0%	0%	0%	0%	1.2%	0%	7.4%	0%	1.3%	0%	0.4%	0%	0%	0.3%	0%	2.1%	0%	100%	1.7%	0.9%

*L: Left, R: Right, T: Thru, U: U-Turn

CR 100 N & CR 900 E - TMC

Tue Jun 18, 2019

AM Peak (7:15 AM - 8:15 AM)

All Classes (Lights and Motorcycles, Heavy)

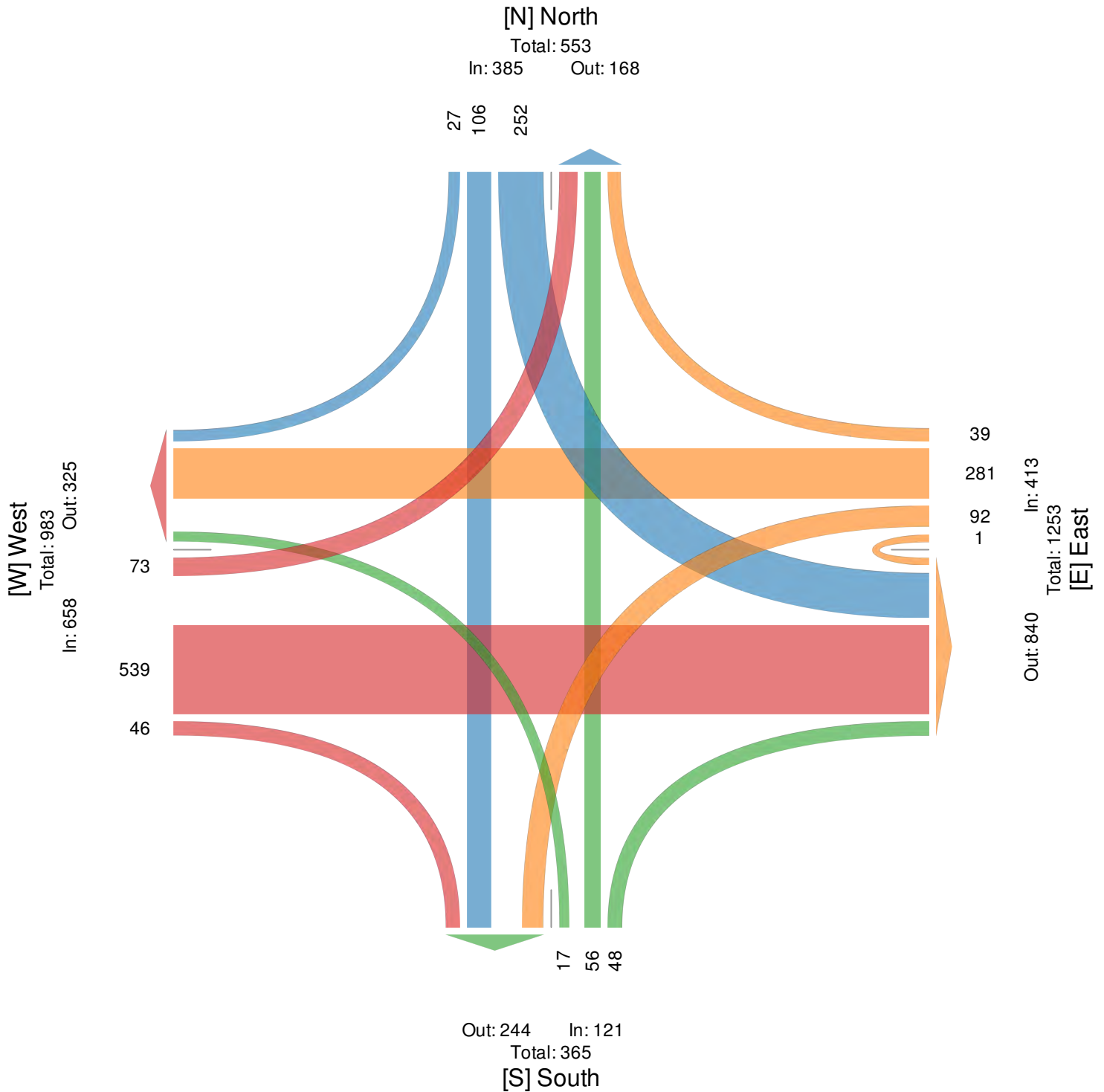
All Movements

ID: 669474, Location: 39.778184, -86.3625



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CR 100 N & CR 900 E - TMC

Tue Jun 18, 2019

PM Peak (5 PM - 6 PM) - Overall Peak Hour

All Classes (Lights and Motorcycles, Heavy)

All Movements

ID: 669474, Location: 39.778184, -86.3625



Provided by: A&F Engineering

8365 Keystone Crossing, Suite 201, Indianapolis, IN, 46240, US

Leg Direction	South Northbound					North Southbound					West Eastbound					East Westbound					
Time	L	T	R	U	App	L	T	R	U	App	L	T	R	U	App	L	T	R	U	App	Int
2019-06-18 5:00PM	33	40	26	0	99	37	27	15	0	79	14	106	29	0	149	36	188	27	0	251	578
5:15PM	24	35	32	0	91	41	44	28	0	113	18	107	22	0	147	32	206	25	0	263	614
5:30PM	24	38	28	0	90	47	36	15	0	98	12	98	23	0	133	33	214	22	0	269	590
5:45PM	19	34	31	0	84	33	42	25	0	100	17	112	23	0	152	32	187	22	0	241	577
Total	100	147	117	0	364	158	149	83	0	390	61	423	97	0	581	133	795	96	0	1024	2359
% Approach	27.5%	40.4%	32.1%	0%	-	40.5%	38.2%	21.3%	0%	-	10.5%	72.8%	16.7%	0%	-	13.0%	77.6%	9.4%	0%	-	-
% Total	4.2%	6.2%	5.0%	0%	15.4%	6.7%	6.3%	3.5%	0%	16.5%	2.6%	17.9%	4.1%	0%	24.6%	5.6%	33.7%	4.1%	0%	43.4%	-
PHF	0.758	0.919	0.914	-	0.919	0.840	0.847	0.741	-	0.863	0.847	0.944	0.836	-	0.956	0.924	0.929	0.889	-	0.952	0.961
Lights and Motorcycles	100	146	116	0	362	157	149	82	0	388	60	419	97	0	576	132	790	95	0	1017	2343
% Lights and Motorcycles	100%	99.3%	99.1%	0%	99.5%	99.4%	100%	98.8%	0%	99.5%	98.4%	99.1%	100%	0%	99.1%	99.2%	99.4%	99.0%	0%	99.3%	99.3%
Heavy	0	1	1	0	2	1	0	1	0	2	1	4	0	0	5	1	5	1	0	7	16
% Heavy	0%	0.7%	0.9%	0%	0.5%	0.6%	0%	1.2%	0%	0.5%	1.6%	0.9%	0%	0%	0.9%	0.8%	0.6%	1.0%	0%	0.7%	0.7%

*L: Left, R: Right, T: Thru, U: U-Turn

CR 100 N & CR 900 E - TMC

Tue Jun 18, 2019

PM Peak (5 PM - 6 PM) - Overall Peak Hour

All Classes (Lights and Motorcycles, Heavy)

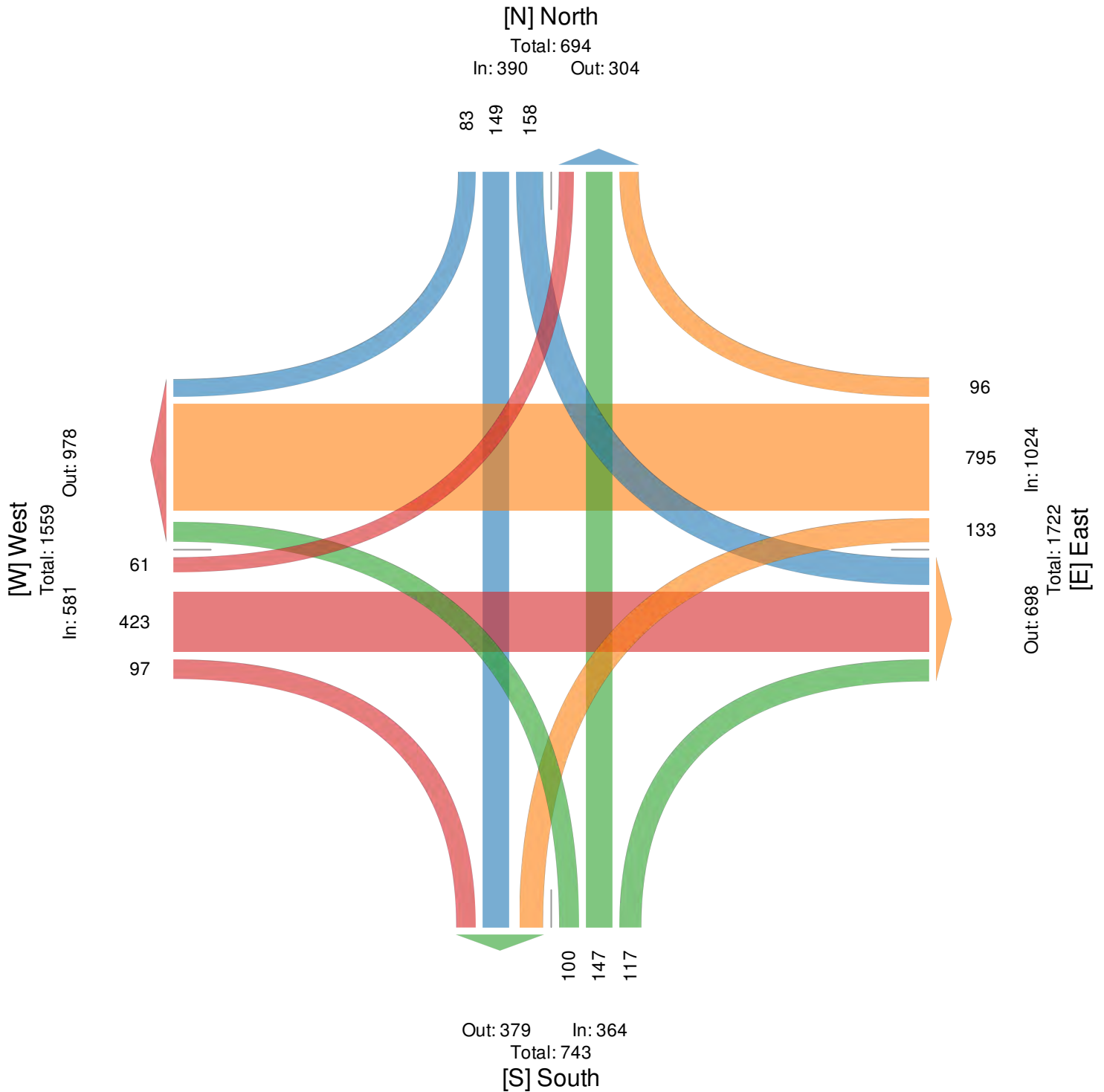
All Movements

ID: 669474, Location: 39.778184, -86.3625



Provided by: A&F Engineering

8365 Keystone Crossing, Suite 201, Indianapolis, IN, 46240, US



Intersection				
Intersection Delay, s/veh	13.8			
Intersection LOS	B			
Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	671	421	123	393
Demand Flow Rate, veh/h	677	427	123	398
Vehicles Circulating, veh/h	462	148	889	404
Vehicles Exiting, veh/h	340	864	249	171
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	21.7	6.6	9.4	9.2
Approach LOS	C	A	A	A
Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976	4.976
Entry Flow, veh/h	677	427	123	398
Cap Entry Lane, veh/h	861	1187	557	914
Entry HV Adj Factor	0.992	0.987	1.000	0.987
Flow Entry, veh/h	671	421	123	393
Cap Entry, veh/h	854	1171	557	902
V/C Ratio	0.786	0.360	0.221	0.436
Control Delay, s/veh	21.7	6.6	9.4	9.2
LOS	C	A	A	A
95th %tile Queue, veh	8	2	1	2

Intersection				
Intersection Delay, s/veh	47.0			
Intersection LOS	E			
Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	606	1067	379	406
Demand Flow Rate, veh/h	611	1077	382	409
Vehicles Circulating, veh/h	462	324	677	1080
Vehicles Exiting, veh/h	1027	735	396	321
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	17.3	74.6	14.3	49.4
Approach LOS	C	F	B	E
Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976	4.976
Entry Flow, veh/h	611	1077	382	409
Cap Entry Lane, veh/h	861	992	692	459
Entry HV Adj Factor	0.991	0.990	0.993	0.993
Flow Entry, veh/h	606	1067	379	406
Cap Entry, veh/h	854	982	687	455
V/C Ratio	0.709	1.086	0.552	0.892
Control Delay, s/veh	17.3	74.6	14.3	49.4
LOS	C	F	B	E
95th %tile Queue, veh	6	26	3	10

Intersection						
Intersection Delay, s/veh	7.1					
Intersection LOS	A					
Approach	EB		WB		NB	SB
Entry Lanes	2		2		1	1
Conflicting Circle Lanes	2		2		2	2
Adj Approach Flow, veh/h	671		421		123	393
Demand Flow Rate, veh/h	677		427		123	398
Vehicles Circulating, veh/h	462		148		889	404
Vehicles Exiting, veh/h	340		864		249	171
Ped Vol Crossing Leg, #/h	0		0		0	0
Ped Cap Adj	1.000		1.000		1.000	1.000
Approach Delay, s/veh	8.0		4.5		7.5	7.9
Approach LOS	A		A		A	A
Lane	Left	Right	Left	Right	Left	Left
Designated Moves	LT	TR	LT	TR	LTR	LTR
Assumed Moves	LT	TR	LT	TR	LTR	LTR
RT Channelized						
Lane Util	0.470	0.530	0.471	0.529	1.000	1.000
Follow-Up Headway, s	2.667	2.535	2.667	2.535	2.535	2.535
Critical Headway, s	4.645	4.328	4.645	4.328	4.328	4.328
Entry Flow, veh/h	318	359	201	226	123	398
Cap Entry Lane, veh/h	883	959	1178	1252	667	1007
Entry HV Adj Factor	0.992	0.991	0.985	0.988	1.000	0.987
Flow Entry, veh/h	316	356	198	223	123	393
Cap Entry, veh/h	876	951	1160	1237	667	995
V/C Ratio	0.360	0.374	0.171	0.180	0.184	0.395
Control Delay, s/veh	8.2	7.9	4.6	4.5	7.5	7.9
LOS	A	A	A	A	A	A
95th %tile Queue, veh	2	2	1	1	1	2

Intersection						
Intersection Delay, s/veh	11.9					
Intersection LOS	B					
Approach	EB		WB		NB	SB
Entry Lanes	2		2		1	1
Conflicting Circle Lanes	2		2		2	2
Adj Approach Flow, veh/h	606		1067		379	406
Demand Flow Rate, veh/h	611		1077		382	409
Vehicles Circulating, veh/h	462		324		677	1080
Vehicles Exiting, veh/h	1027		735		396	321
Ped Vol Crossing Leg, #/h	0		0		0	0
Ped Cap Adj	1.000		1.000		1.000	1.000
Approach Delay, s/veh	7.5		9.8		11.0	24.8
Approach LOS	A		A		B	C
Lane	Left	Right	Left	Right	Left	Left
Designated Moves	LT	TR	LT	TR	LTR	LTR
Assumed Moves	LT	TR	LT	TR	LTR	LTR
RT Channelized						
Lane Util	0.470	0.530	0.470	0.530	1.000	1.000
Follow-Up Headway, s	2.667	2.535	2.667	2.535	2.535	2.535
Critical Headway, s	4.645	4.328	4.645	4.328	4.328	4.328
Entry Flow, veh/h	287	324	506	571	382	409
Cap Entry Lane, veh/h	883	959	1002	1078	799	567
Entry HV Adj Factor	0.992	0.991	0.991	0.990	0.993	0.993
Flow Entry, veh/h	285	321	501	565	379	406
Cap Entry, veh/h	875	950	993	1068	793	563
V/C Ratio	0.325	0.338	0.505	0.530	0.478	0.721
Control Delay, s/veh	7.7	7.4	9.8	9.8	11.0	24.8
LOS	A	A	A	A	B	C
95th %tile Queue, veh	1	2	3	3	3	6

Intersection				
Intersection Delay, s/veh	22.8			
Intersection LOS	C			
Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	750	524	144	436
Demand Flow Rate, veh/h	756	531	144	441
Vehicles Circulating, veh/h	531	164	993	496
Vehicles Exiting, veh/h	406	973	294	199
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	41.8	8.0	11.5	11.9
Approach LOS	E	A	B	B
Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976	4.976
Entry Flow, veh/h	756	531	144	441
Cap Entry Lane, veh/h	803	1167	501	832
Entry HV Adj Factor	0.992	0.987	1.000	0.989
Flow Entry, veh/h	750	524	144	436
Cap Entry, veh/h	796	1152	501	823
V/C Ratio	0.942	0.455	0.287	0.530
Control Delay, s/veh	41.8	8.0	11.5	11.9
LOS	E	A	B	B
95th %tile Queue, veh	14	2	1	3

Intersection				
Intersection Delay, s/veh	97.4			
Intersection LOS	F			
Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	700	1214	440	458
Demand Flow Rate, veh/h	706	1226	444	461
Vehicles Circulating, veh/h	532	357	789	1224
Vehicles Exiting, veh/h	1153	876	449	359
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	32.2	149.7	23.1	129.6
Approach LOS	D	F	C	F
Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976	4.976
Entry Flow, veh/h	706	1226	444	461
Cap Entry Lane, veh/h	802	959	617	396
Entry HV Adj Factor	0.991	0.990	0.992	0.993
Flow Entry, veh/h	700	1214	440	458
Cap Entry, veh/h	795	949	612	393
V/C Ratio	0.880	1.279	0.719	1.164
Control Delay, s/veh	32.2	149.7	23.1	129.6
LOS	D	F	C	F
95th %tile Queue, veh	11	44	6	18

Intersection						
Intersection Delay, s/veh	8.3					
Intersection LOS	A					
Approach	EB		WB		NB	
Entry Lanes	2		2		1	
Conflicting Circle Lanes	2		2		2	
Adj Approach Flow, veh/h	750		524		144	
Demand Flow Rate, veh/h	756		531		144	
Vehicles Circulating, veh/h	531		164		993	
Vehicles Exiting, veh/h	406		973		294	
Ped Vol Crossing Leg, #/h	0		0		0	
Ped Cap Adj	1.000		1.000		1.000	
Approach Delay, s/veh	9.6		5.0		8.9	
Approach LOS	A		A		A	
Lane	Left	Right	Left	Right	Left	Left
Designated Moves	LT	TR	LT	TR	LTR	LTR
Assumed Moves	LT	TR	LT	TR	LTR	LTR
RT Channelized						
Lane Util	0.470	0.530	0.471	0.529	1.000	1.000
Follow-Up Headway, s	2.667	2.535	2.667	2.535	2.535	2.535
Critical Headway, s	4.645	4.328	4.645	4.328	4.328	4.328
Entry Flow, veh/h	355	401	250	281	144	441
Cap Entry Lane, veh/h	828	904	1161	1235	611	932
Entry HV Adj Factor	0.993	0.991	0.985	0.988	1.000	0.989
Flow Entry, veh/h	352	397	246	278	144	436
Cap Entry, veh/h	822	896	1144	1221	611	921
V/C Ratio	0.429	0.443	0.215	0.227	0.236	0.473
Control Delay, s/veh	9.8	9.4	5.1	5.0	8.9	9.7
LOS	A	A	A	A	A	A
95th %tile Queue, veh	2	2	1	1	1	3

Intersection						
Intersection Delay, s/veh	18.2					
Intersection LOS	C					
Approach	EB		WB		NB	SB
Entry Lanes	2		2		1	1
Conflicting Circle Lanes	2		2		2	2
Adj Approach Flow, veh/h	700		1214		440	458
Demand Flow Rate, veh/h	706		1226		444	461
Vehicles Circulating, veh/h	532		357		789	1224
Vehicles Exiting, veh/h	1153		876		449	359
Ped Vol Crossing Leg, #/h	0		0		0	0
Ped Cap Adj	1.000		1.000		1.000	1.000
Approach Delay, s/veh	9.1		12.0		15.6	51.2
Approach LOS	A		B		C	F
Lane	Left	Right	Left	Right	Left	Left
Designated Moves	LT	TR	LT	TR	LTR	LTR
Assumed Moves	LT	TR	LT	TR	LTR	LTR
RT Channelized						
Lane Util	0.470	0.530	0.470	0.530	1.000	1.000
Follow-Up Headway, s	2.667	2.535	2.667	2.535	2.535	2.535
Critical Headway, s	4.645	4.328	4.645	4.328	4.328	4.328
Entry Flow, veh/h	332	374	576	650	444	461
Cap Entry Lane, veh/h	827	903	972	1048	726	502
Entry HV Adj Factor	0.991	0.992	0.990	0.990	0.992	0.993
Flow Entry, veh/h	329	371	570	643	440	458
Cap Entry, veh/h	820	896	963	1037	720	498
V/C Ratio	0.401	0.414	0.593	0.620	0.611	0.919
Control Delay, s/veh	9.3	8.9	12.0	12.1	15.6	51.2
LOS	A	A	B	B	C	F
95th %tile Queue, veh	2	2	4	4	4	11

Intersection				
Intersection Delay, s/veh	24.5			
Intersection LOS	C			
Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	755	555	147	438
Demand Flow Rate, veh/h	761	562	147	443
Vehicles Circulating, veh/h	544	164	1000	522
Vehicles Exiting, veh/h	421	983	305	204
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	45.9	8.4	11.7	12.5
Approach LOS	E	A	B	B
Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976	4.976
Entry Flow, veh/h	761	562	147	443
Cap Entry Lane, veh/h	792	1167	498	810
Entry HV Adj Factor	0.992	0.987	1.000	0.989
Flow Entry, veh/h	755	555	147	438
Cap Entry, veh/h	786	1152	498	801
V/C Ratio	0.961	0.481	0.295	0.547
Control Delay, s/veh	45.9	8.4	11.7	12.5
LOS	E	A	B	B
95th %tile Queue, veh	15	3	1	3

Intersection				
Intersection Delay, s/veh	105.1			
Intersection LOS	F			
Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	719	1235	452	464
Demand Flow Rate, veh/h	725	1247	456	467
Vehicles Circulating, veh/h	544	357	814	1241
Vehicles Exiting, veh/h	1164	913	455	363
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	37.5	158.9	26.2	143.3
Approach LOS	E	F	D	F
Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976	4.976
Entry Flow, veh/h	725	1247	456	467
Cap Entry Lane, veh/h	792	959	602	389
Entry HV Adj Factor	0.991	0.990	0.992	0.994
Flow Entry, veh/h	719	1235	452	464
Cap Entry, veh/h	785	949	597	387
V/C Ratio	0.915	1.301	0.758	1.200
Control Delay, s/veh	37.5	158.9	26.2	143.3
LOS	E	F	D	F
95th %tile Queue, veh	13	46	7	19

Intersection						
Intersection Delay, s/veh	8.5					
Intersection LOS	A					
Approach	EB		WB		NB	
Entry Lanes	2		2		1	
Conflicting Circle Lanes	2		2		2	
Adj Approach Flow, veh/h	755		555		147	
Demand Flow Rate, veh/h	761		562		147	
Vehicles Circulating, veh/h	544		164		1000	
Vehicles Exiting, veh/h	421		983		305	
Ped Vol Crossing Leg, #/h	0		0		0	
Ped Cap Adj	1.000		1.000		1.000	
Approach Delay, s/veh	9.8		5.1		9.0	
Approach LOS	A		A		A	
Lane	Left	Right	Left	Right	Left	Left
Designated Moves	LT	TR	LT	TR	LTR	LTR
Assumed Moves	LT	TR	LT	TR	LTR	LTR
RT Channelized						
Lane Util	0.470	0.530	0.470	0.530	1.000	1.000
Follow-Up Headway, s	2.667	2.535	2.667	2.535	2.535	2.535
Critical Headway, s	4.645	4.328	4.645	4.328	4.328	4.328
Entry Flow, veh/h	358	403	264	298	147	443
Cap Entry Lane, veh/h	818	894	1161	1235	607	911
Entry HV Adj Factor	0.991	0.993	0.988	0.987	1.000	0.989
Flow Entry, veh/h	355	400	261	294	147	438
Cap Entry, veh/h	811	888	1146	1219	607	901
V/C Ratio	0.437	0.451	0.227	0.241	0.242	0.486
Control Delay, s/veh	10.0	9.6	5.2	5.1	9.0	10.1
LOS	B	A	A	A	A	B
95th %tile Queue, veh	2	2	1	1	1	3

Intersection						
Intersection Delay, s/veh	19.5					
Intersection LOS	C					
Approach	EB		WB		NB	
Entry Lanes	2		2		1	
Conflicting Circle Lanes	2		2		2	
Adj Approach Flow, veh/h	719		1235		452	
Demand Flow Rate, veh/h	725		1247		456	
Vehicles Circulating, veh/h	544		357		814	
Vehicles Exiting, veh/h	1164		913		455	
Ped Vol Crossing Leg, #/h	0		0		0	
Ped Cap Adj	1.000		1.000		1.000	
Approach Delay, s/veh	9.4		12.3		17.0	
Approach LOS	A		B		C	
Lane	Left	Right	Left	Right	Left	Left
Designated Moves	LT	TR	LT	TR	LTR	LTR
Assumed Moves	LT	TR	LT	TR	LTR	LTR
RT Channelized						
Lane Util	0.470	0.530	0.470	0.530	1.000	1.000
Follow-Up Headway, s	2.667	2.535	2.667	2.535	2.535	2.535
Critical Headway, s	4.645	4.328	4.645	4.328	4.328	4.328
Entry Flow, veh/h	341	384	586	661	456	467
Cap Entry Lane, veh/h	818	894	972	1048	711	494
Entry HV Adj Factor	0.990	0.992	0.990	0.990	0.992	0.994
Flow Entry, veh/h	338	381	580	654	452	464
Cap Entry, veh/h	811	887	962	1038	705	491
V/C Ratio	0.417	0.429	0.603	0.631	0.641	0.944
Control Delay, s/veh	9.7	9.2	12.3	12.3	17.0	56.7
LOS	A	A	B	B	C	F
95th %tile Queue, veh	2	2	4	5	5	12

CR 100 N & RONALD REAGAN PARKWAY

TRAFFIC VOLUME COUNTS CAPACITY ANALYSIS

RONALD REAGAN PKWY & CR 100 N - TMC

Tue Jun 18, 2019

Full Length (6 AM-9 AM, 3 PM-7 PM)

All Classes (Lights and Motorcycles, Heavy)

All Movements

ID: 669468, Location: 39.778391, -86.343656



Provided by: A&F Engineering

8365 Keystone Crossing, Suite 201, Indianapolis, IN, 46240, US

Leg Direction	South Northbound					North Southbound					West Eastbound					East Westbound					
Time	L	T	R	U	App	L	T	R	U	App	L	T	R	U	App	L	T	R	U	App	Int
2019-06-18																					
6:00AM	5	47	15	0	67	4	35	10	0	49	23	93	24	0	140	7	14	8	0	29	285
6:15AM	7	84	15	0	106	8	53	12	0	73	29	109	29	0	167	9	30	6	0	45	391
6:30AM	4	65	22	0	91	5	86	8	0	99	38	134	46	0	218	19	40	11	0	70	478
6:45AM	8	97	36	0	141	4	68	16	0	88	43	168	34	0	245	18	40	13	0	71	545
Hourly Total	24	293	88	0	405	21	242	46	0	309	133	504	133	0	770	53	124	38	0	215	1699
7:00AM	12	72	21	0	105	4	66	19	0	89	55	125	43	0	223	14	35	14	0	63	480
7:15AM	7	104	20	0	131	16	65	44	0	125	65	129	62	0	256	17	51	14	0	82	594
7:30AM	9	114	31	0	154	11	76	24	0	111	56	105	63	0	224	29	45	11	0	85	574
7:45AM	9	96	38	0	143	17	88	49	0	154	50	112	61	0	223	20	61	12	0	93	613
Hourly Total	37	386	110	0	533	48	295	136	0	479	226	471	229	0	926	80	192	51	0	323	2261
8:00AM	16	79	28	0	123	13	83	41	1	138	45	121	50	0	216	17	56	7	0	80	557
8:15AM	10	85	27	0	122	12	90	40	0	142	43	118	41	0	202	25	43	15	0	83	549
8:30AM	18	74	18	0	110	9	84	26	0	119	36	117	33	0	186	21	69	13	0	103	518
8:45AM	16	80	22	0	118	8	85	35	0	128	36	113	33	0	182	36	73	15	0	124	552
Hourly Total	60	318	95	0	473	42	342	142	1	527	160	469	157	0	786	99	241	50	0	390	2176
9:00AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00PM	31	112	26	0	169	6	79	60	0	145	33	108	31	0	172	32	113	6	0	151	637
3:15PM	36	137	24	0	197	8	94	64	0	166	33	86	35	0	154	49	100	14	0	163	680
3:30PM	28	129	18	0	175	6	108	61	0	175	39	81	35	0	155	58	118	19	0	195	700
3:45PM	34	135	27	1	197	13	103	55	1	172	42	92	25	0	159	38	115	14	0	167	695
Hourly Total	129	513	95	1	738	33	384	240	1	658	147	367	126	0	640	177	446	53	0	676	2712
4:00PM	40	154	24	0	218	9	112	65	0	186	30	70	27	0	127	43	114	18	0	175	706
4:15PM	43	122	26	0	191	19	125	78	0	222	44	89	26	0	159	53	125	17	0	195	767
4:30PM	31	119	20	0	170	12	137	85	0	234	41	105	24	0	170	47	134	12	0	193	767
4:45PM	51	146	19	0	216	15	132	82	1	230	32	92	40	0	164	38	141	11	0	190	800
Hourly Total	165	541	89	0	795	55	506	310	1	872	147	356	117	0	620	181	514	58	0	753	3040
5:00PM	60	135	18	0	213	12	125	97	0	234	39	91	34	0	164	52	122	18	0	192	803
5:15PM	62	162	18	0	242	12	146	74	0	232	35	110	35	0	180	40	142	18	0	200	854
5:30PM	42	143	22	0	207	12	131	79	0	222	41	121	33	0	195	45	139	17	0	201	825
5:45PM	38	109	23	0	170	12	122	78	0	212	48	119	27	0	194	49	139	16	0	204	780
Hourly Total	202	549	81	0	832	48	524	328	0	900	163	441	129	0	733	186	542	69	0	797	3262
6:00PM	65	161	24	0	250	7	132	69	0	208	30	95	34	0	159	32	103	14	0	149	766
6:15PM	38	113	20	0	171	7	83	50	0	140	33	99	32	0	164	46	124	8	0	178	653
6:30PM	20	118	19	0	157	10	116	44	0	170	18	86	31	0	135	38	95	10	0	143	605
6:45PM	28	113	17	0	158	11	74	38	0	123	31	75	31	0	137	46	83	9	0	138	556
Hourly Total	151	505	80	0	736	35	405	201	0	641	112	355	128	0	595	162	405	41	0	608	2580
7:00PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	768	3105	638	1	4512	282	2698	1403	3	4386	1088	2963	1019	0	5070	938	2464	360	0	3762	17730
% Approach	17.0%	68.8%	14.1%	0%	-	6.4%	61.5%	32.0%	0.1%	-	21.5%	58.4%	20.1%	0%	-	24.9%	65.5%	9.6%	0%	-	-
% Total	4.3%	17.5%	3.6%	0%	25.4%	1.6%	15.2%	7.9%	0%	24.7%	6.1%	16.7%	5.7%	0%	28.6%	5.3%	13.9%	2.0%	0%	21.2%	-
Lights and Motorcycles	756	2978	632	1	4367	278	2591	1383	3	4255	1076	2938	1003	0	5017	932	2441	346	0	3719	17358
% Lights and Motorcycles	98.4%	95.9%	99.1%	100%	96.8%	98.6%	96.0%	98.6%	100%	97.0%	98.9%	99.2%	98.4%	0%	99.0%	99.4%	99.1%	96.1%	0%	98.9%	97.9%
Heavy	12	127	6	0	145	4	107	20	0	131	12	25	16	0	53	6	23	14	0	43	372
% Heavy	1.6%	4.1%	0.9%	0%	3.2%	1.4%	4.0%	1.4%	0%	3.0%	1.1%	0.8%	1.6%	0%	1.0%	0.6%	0.9%	3.9%	0%	1.1%	2.1%

*L: Left, R: Right, T: Thru, U: U-Turn

RONALD REAGAN PKWY & CR 100 N - TMC

Tue Jun 18, 2019

Full Length (6 AM-9 AM, 3 PM-7 PM)

All Classes (Lights and Motorcycles, Heavy)

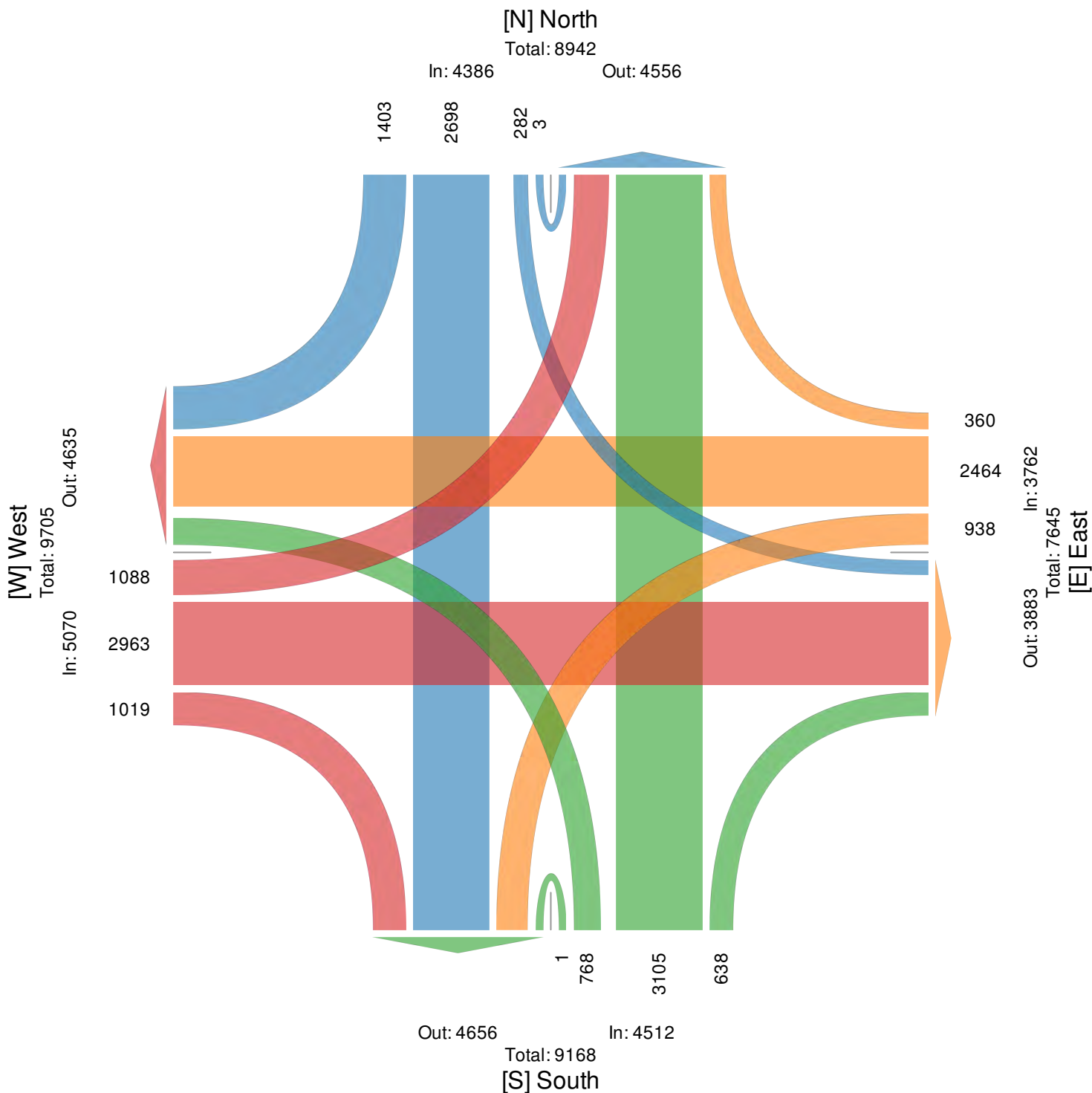
All Movements

ID: 669468, Location: 39.778391, -86.343656



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RONALD REAGAN PKWY & CR 100 N - TMC

Tue Jun 18, 2019

AM Peak (7:15 AM - 8:15 AM)

All Classes (Lights and Motorcycles, Heavy)

All Movements

ID: 669468, Location: 39.778391, -86.343656



Provided by: A&F Engineering

8365 Keystone Crossing, Suite 201, Indianapolis, IN, 46240, US

Leg Direction	South Northbound					North Southbound					West Eastbound					East Westbound					
Time	L	T	R	U	App	L	T	R	U	App	L	T	R	U	App	L	T	R	U	App	Int
2019-06-18 7:15AM	7	104	20	0	131	16	65	44	0	125	65	129	62	0	256	17	51	14	0	82	594
7:30AM	9	114	31	0	154	11	76	24	0	111	56	105	63	0	224	29	45	11	0	85	574
7:45AM	9	96	38	0	143	17	88	49	0	154	50	112	61	0	223	20	61	12	0	93	613
8:00AM	16	79	28	0	123	13	83	41	1	138	45	121	50	0	216	17	56	7	0	80	557
Total	41	393	117	0	551	57	312	158	1	528	216	467	236	0	919	83	213	44	0	340	2338
% Approach	7.4%	71.3%	21.2%	0%	-	10.8%	59.1%	29.9%	0.2%	-	23.5%	50.8%	25.7%	0%	-	24.4%	62.6%	12.9%	0%	-	-
% Total	1.8%	16.8%	5.0%	0%	23.6%	2.4%	13.3%	6.8%	0%	22.6%	9.2%	20.0%	10.1%	0%	39.3%	3.6%	9.1%	1.9%	0%	14.5%	-
PHF	0.641	0.862	0.770	-	0.894	0.838	0.886	0.806	0.250	0.857	0.831	0.905	0.937	-	0.897	0.716	0.873	0.786	-	0.914	0.954
Lights and Motorcycles	38	374	117	0	529	56	285	155	1	497	215	465	232	0	912	82	207	42	0	331	2269
% Lights and Motorcycles	92.7%	95.2%	100%	0%	96.0%	98.2%	91.3%	98.1%	100%	94.1%	99.5%	99.6%	98.3%	0%	99.2%	98.8%	97.2%	95.5%	0%	97.4%	97.0%
Heavy	3	19	0	0	22	1	27	3	0	31	1	2	4	0	7	1	6	2	0	9	69
% Heavy	7.3%	4.8%	0%	0%	4.0%	1.8%	8.7%	1.9%	0%	5.9%	0.5%	0.4%	1.7%	0%	0.8%	1.2%	2.8%	4.5%	0%	2.6%	3.0%

*L: Left, R: Right, T: Thru, U: U-Turn

RONALD REAGAN PKWY & CR 100 N - TMC

Tue Jun 18, 2019

AM Peak (7:15 AM - 8:15 AM)

All Classes (Lights and Motorcycles, Heavy)

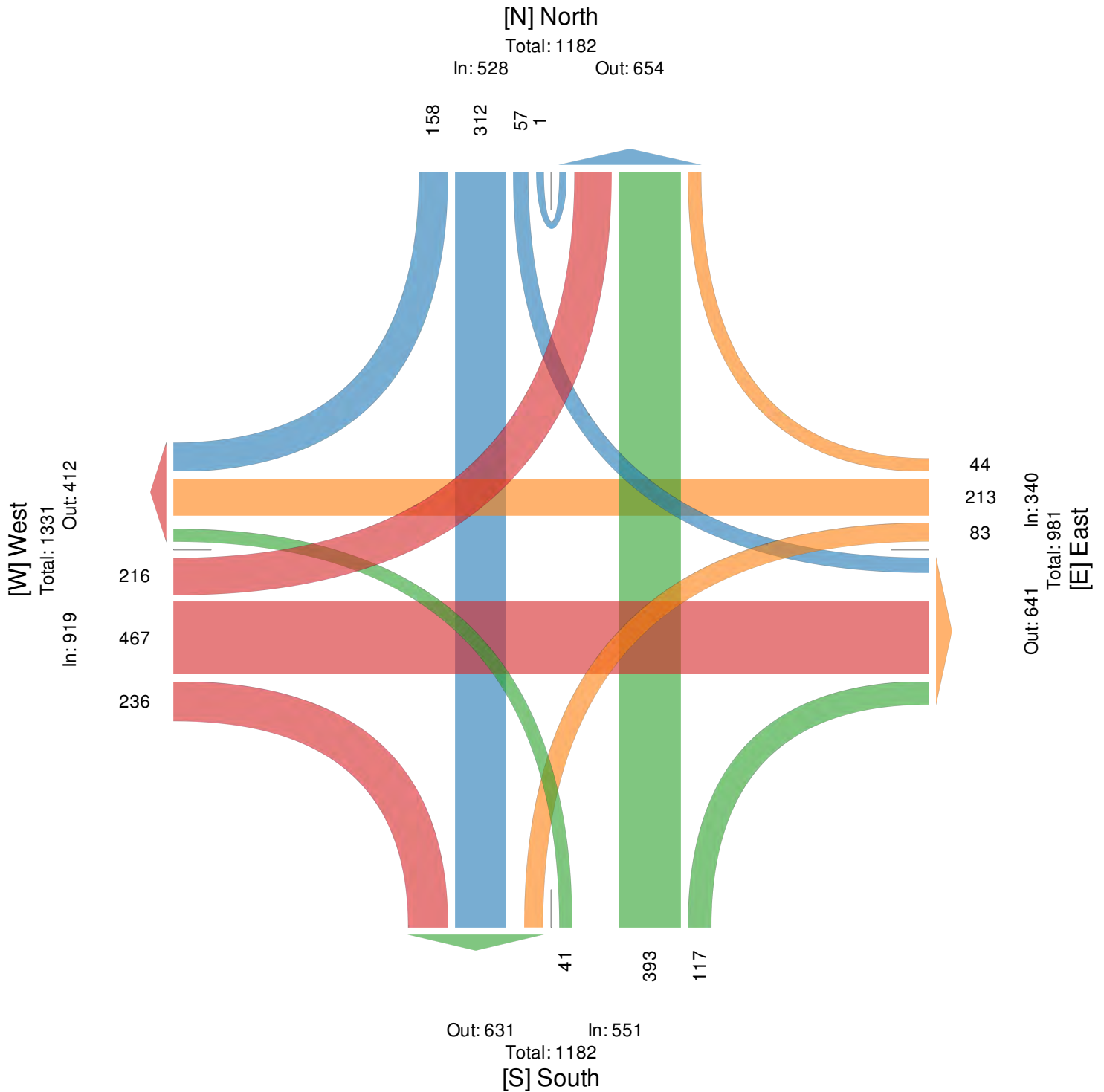
All Movements

ID: 669468, Location: 39.778391, -86.343656



Provided by: A&F Engineering

8365 Keystone Crossing, Suite 201, Indianapolis, IN, 46240, US



RONALD REAGAN PKWY & CR 100 N - TMC

Tue Jun 18, 2019

PM Peak (4:45 PM - 5:45 PM) - Overall Peak Hour

All Classes (Lights and Motorcycles, Heavy)

All Movements

ID: 669468, Location: 39.778391, -86.343656



Provided by: A&F Engineering

8365 Keystone Crossing, Suite 201, Indianapolis, IN, 46240, US

Leg Direction	South Northbound					North Southbound					West Eastbound					East Westbound					
Time	L	T	R	U	App	L	T	R	U	App	L	T	R	U	App	L	T	R	U	App	Int
2019-06-18 4:45PM	51	146	19	0	216	15	132	82	1	230	32	92	40	0	164	38	141	11	0	190	800
5:00PM	60	135	18	0	213	12	125	97	0	234	39	91	34	0	164	52	122	18	0	192	803
5:15PM	62	162	18	0	242	12	146	74	0	232	35	110	35	0	180	40	142	18	0	200	854
5:30PM	42	143	22	0	207	12	131	79	0	222	41	121	33	0	195	45	139	17	0	201	825
Total	215	586	77	0	878	51	534	332	1	918	147	414	142	0	703	175	544	64	0	783	3282
% Approach	24.5%	66.7%	8.8%	0%	-	5.6%	58.2%	36.2%	0.1%	-	20.9%	58.9%	20.2%	0%	-	22.3%	69.5%	8.2%	0%	-	-
% Total	6.6%	17.9%	2.3%	0%	26.8%	1.6%	16.3%	10.1%	0%	28.0%	4.5%	12.6%	4.3%	0%	21.4%	5.3%	16.6%	2.0%	0%	23.9%	-
PHF	0.867	0.904	0.875	-	0.907	0.850	0.914	0.856	0.250	0.981	0.896	0.855	0.888	-	0.901	0.841	0.958	0.889	-	0.974	0.961
Lights and Motorcycles	213	572	77	0	862	50	519	328	1	898	144	410	140	0	694	173	541	64	0	778	3232
% Lights and Motorcycles	99.1%	97.6%	100%	0%	98.2%	98.0%	97.2%	98.8%	100%	97.8%	98.0%	99.0%	98.6%	0%	98.7%	98.9%	99.4%	100%	0%	99.4%	98.5%
Heavy	2	14	0	0	16	1	15	4	0	20	3	4	2	0	9	2	3	0	0	5	50
% Heavy	0.9%	2.4%	0%	0%	1.8%	2.0%	2.8%	1.2%	0%	2.2%	2.0%	1.0%	1.4%	0%	1.3%	1.1%	0.6%	0%	0%	0.6%	1.5%

*L: Left, R: Right, T: Thru, U: U-Turn

RONALD REAGAN PKWY & CR 100 N - TMC

Tue Jun 18, 2019

PM Peak (4:45 PM - 5:45 PM) - Overall Peak Hour

All Classes (Lights and Motorcycles, Heavy)

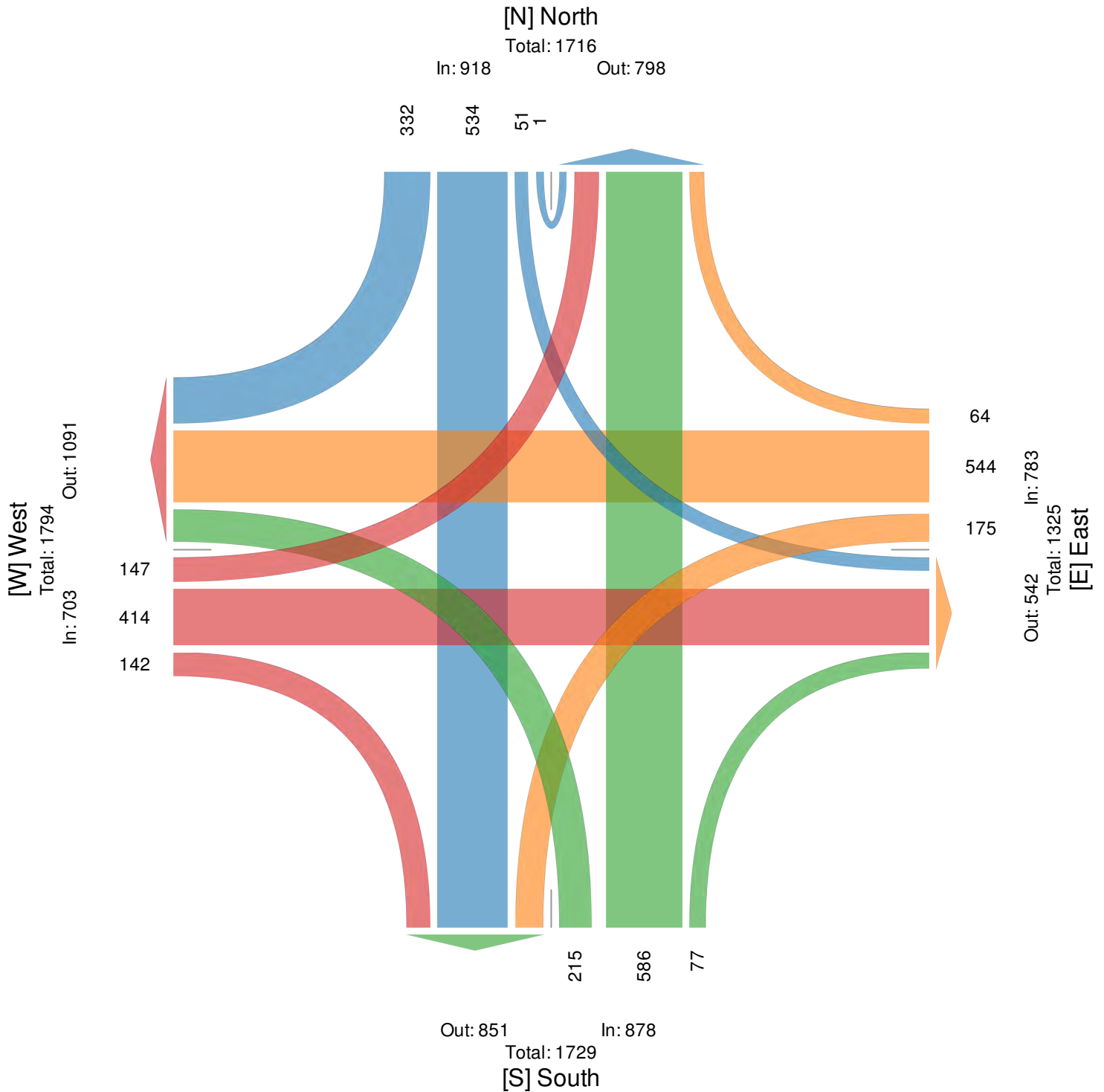
All Movements

ID: 669468, Location: 39.778391, -86.343656



Provided by: A&F Engineering

8365 Keystone Crossing, Suite 201, Indianapolis, IN, 46240, US



HCM 6th Signalized Intersection Summary

2: RR Parkway & CR 100

Existing AM
06/26/2019



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	216	467	236	83	213	44	41	393	117	57	312	158
Future Volume (veh/h)	216	467	236	83	213	44	41	393	117	57	312	158
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1885	1885	1870	1885	1856	1826	1796	1826	1900	1870	1767	1870
Adj Flow Rate, veh/h	227	492	248	87	224	46	43	414	123	60	328	166
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	2	1	3	5	7	5	0	2	9	2
Cap, veh/h	549	637	604	320	526	522	301	664	414	293	678	510
Arrive On Green	0.12	0.34	0.34	0.07	0.28	0.28	0.04	0.19	0.19	0.05	0.20	0.20
Sat Flow, veh/h	1795	1885	1585	1795	1856	1547	1711	3469	1610	1781	3357	1585
Grp Volume(v), veh/h	227	492	248	87	224	46	43	414	123	60	328	166
Grp Sat Flow(s),veh/h/ln	1795	1885	1585	1795	1856	1547	1711	1735	1610	1781	1678	1585
Q Serve(g_s), s	4.9	13.3	6.5	1.9	5.6	1.2	1.1	6.2	3.5	1.5	4.9	4.5
Cycle Q Clear(g_c), s	4.9	13.3	6.5	1.9	5.6	1.2	1.1	6.2	3.5	1.5	4.9	4.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	549	637	604	320	526	522	301	664	414	293	678	510
V/C Ratio(X)	0.41	0.77	0.41	0.27	0.43	0.09	0.14	0.62	0.30	0.20	0.48	0.33
Avail Cap(c_a), veh/h	617	1126	1015	423	1043	953	437	1341	728	417	1297	803
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	11.9	16.9	12.9	13.7	16.6	12.9	17.3	21.1	17.0	17.1	20.1	14.6
Incr Delay (d2), s/veh	0.5	2.0	0.4	0.5	0.5	0.1	0.2	1.0	0.4	0.3	0.5	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	5.4	2.1	0.7	2.2	0.4	0.4	2.4	1.2	0.6	1.8	1.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	12.4	18.9	13.4	14.2	17.2	13.0	17.5	22.1	17.4	17.5	20.6	15.0
LnGrp LOS	B	B	B	B	B	B	B	C	B	B	C	B
Approach Vol, veh/h	967			357			580			554		
Approach Delay, s/veh	16.0			15.9			20.8			18.6		
Approach LOS	B			B			C			B		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	15.9	8.7	24.2	7.5	16.5	11.8	21.1					
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0					
Max Green Setting (Gmax), s	22.0	7.0	34.0	7.0	22.0	9.0	32.0					
Max Q Clear Time (g_c+I), s	8.2	3.9	15.3	3.1	6.9	6.9	7.6					
Green Ext Time (p_c), s	0.0	2.7	0.0	3.9	0.0	2.4	0.1	1.4				

Intersection Summary

HCM 6th Ctrl Delay	17.7
HCM 6th LOS	B

HCM 6th Signalized Intersection Summary

2: RR Parkway & CR 100

Existing PM
06/26/2019



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	147	414	142	175	544	64	215	586	77	51	534	332
Future Volume (veh/h)	147	414	142	175	544	64	215	586	77	51	534	332
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1885	1885	1885	1885	1900	1885	1870	1900	1870	1856	1885
Adj Flow Rate, veh/h	153	431	148	182	567	67	224	610	80	53	556	346
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	1	1	1	1	0	1	2	0	2	3	1
Cap, veh/h	268	613	676	354	634	611	327	1057	623	279	855	512
Arrive On Green	0.08	0.33	0.33	0.09	0.34	0.34	0.10	0.30	0.30	0.04	0.24	0.24
Sat Flow, veh/h	1781	1885	1598	1795	1885	1610	1795	3554	1610	1781	3526	1598
Grp Volume(v), veh/h	153	431	148	182	567	67	224	610	80	53	556	346
Grp Sat Flow(s),veh/h/ln	1781	1885	1598	1795	1885	1610	1795	1777	1610	1781	1763	1598
Q Serve(g_s), s	4.6	16.3	4.8	5.4	23.3	2.2	7.5	11.9	2.6	1.8	11.6	15.3
Cycle Q Clear(g_c), s	4.6	16.3	4.8	5.4	23.3	2.2	7.5	11.9	2.6	1.8	11.6	15.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	268	613	676	354	634	611	327	1057	623	279	855	512
V/C Ratio(X)	0.57	0.70	0.22	0.51	0.89	0.11	0.69	0.58	0.13	0.19	0.65	0.68
Avail Cap(c_a), veh/h	281	716	763	370	739	700	327	1057	623	355	993	575
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.7	24.1	15.0	17.6	25.7	16.4	20.8	24.3	16.2	21.9	27.8	24.1
Incr Delay (d2), s/veh	2.5	2.6	0.2	1.2	12.1	0.1	5.9	0.8	0.1	0.3	1.2	2.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	7.4	1.7	2.2	12.0	0.8	3.5	4.9	0.9	0.8	4.9	5.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	22.2	26.7	15.1	18.8	37.8	16.5	26.7	25.1	16.2	22.2	29.0	26.8
LnGrp LOS	C	C	B	B	D	B	C	C	B	C	C	C
Approach Vol, veh/h	732			816			914			955		
Approach Delay, s/veh	23.4			31.8			24.7			27.8		
Approach LOS	C			C			C			C		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	8.5	29.3	12.3	31.6	13.0	24.8	11.4	32.5				
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0				
Max Green Setting (Gmax), s	24.0	24.0	8.0	31.0	8.0	23.0	7.0	32.0				
Max Q Clear Time (g_c+I), s	13.9	13.9	7.4	18.3	9.5	17.3	6.6	25.3				
Green Ext Time (p_c), s	0.0	3.2	0.0	2.6	0.0	2.5	0.0	2.2				

Intersection Summary

HCM 6th Ctrl Delay	27.0
HCM 6th LOS	C

HCM 6th Signalized Intersection Summary

2: RR Parkway & CR 100

Ex. + 1% + AD AM

06/26/2019



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	272	579	316	91	258	48	65	432	129	63	343	187
Future Volume (veh/h)	272	579	316	91	258	48	65	432	129	63	343	187
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1885	1885	1870	1885	1856	1826	1796	1826	1900	1870	1767	1870
Adj Flow Rate, veh/h	286	609	333	96	272	51	68	455	136	66	361	197
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	2	1	3	5	7	5	0	2	9	2
Cap, veh/h	567	739	707	282	595	578	276	659	407	259	635	513
Arrive On Green	0.13	0.39	0.39	0.06	0.32	0.32	0.05	0.19	0.19	0.05	0.19	0.19
Sat Flow, veh/h	1795	1885	1585	1795	1856	1547	1711	3469	1610	1781	3357	1585
Grp Volume(v), veh/h	286	609	333	96	272	51	68	455	136	66	361	197
Grp Sat Flow(s),veh/h/ln	1795	1885	1585	1795	1856	1547	1711	1735	1610	1781	1678	1585
Q Serve(g_s), s	6.5	19.2	9.8	2.3	7.7	1.4	2.1	8.1	4.6	1.9	6.5	6.4
Cycle Q Clear(g_c), s	6.5	19.2	9.8	2.3	7.7	1.4	2.1	8.1	4.6	1.9	6.5	6.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	567	739	707	282	595	578	276	659	407	259	635	513
V/C Ratio(X)	0.50	0.82	0.47	0.34	0.46	0.09	0.25	0.69	0.33	0.25	0.57	0.38
Avail Cap(c_a), veh/h	706	1026	948	360	813	760	365	1048	587	353	1014	692
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	11.5	18.1	12.9	15.2	17.9	13.4	20.1	25.0	20.2	20.3	24.4	17.3
Incr Delay (d2), s/veh	0.7	3.9	0.5	0.7	0.6	0.1	0.5	1.3	0.5	0.5	0.8	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	8.3	3.2	0.9	3.2	0.5	0.8	3.3	1.7	0.8	2.5	2.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	12.2	22.0	13.3	15.9	18.5	13.5	20.5	26.3	20.7	20.8	25.2	17.8
LnGrp LOS	B	C	B	B	B	B	C	C	C	C	C	B
Approach Vol, veh/h	1228			419			659			624		
Approach Delay, s/veh	17.4			17.3			24.5			22.4		
Approach LOS	B			B			C			C		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	8.5	17.6	9.1	30.9	8.6	17.5	13.9	26.2				
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0				
Max Green Setting (Gmax), s	7.0	20.0	7.0	36.0	7.0	20.0	14.0	29.0				
Max Q Clear Time (g_c+I), s	10.1	10.1	4.3	21.2	4.1	8.5	8.5	9.7				
Green Ext Time (p_c), s	0.0	2.5	0.0	4.7	0.0	2.4	0.4	1.6				

Intersection Summary

HCM 6th Ctrl Delay	20.0
HCM 6th LOS	C

HCM 6th Signalized Intersection Summary

2: RR Parkway & CR 100

Ex. + 1% + AD PM

06/26/2019



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	184	496	192	193	667	70	296	645	85	56	587	401
Future Volume (veh/h)	184	496	192	193	667	70	296	645	85	56	587	401
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1885	1885	1885	1885	1900	1885	1870	1900	1870	1856	1885
Adj Flow Rate, veh/h	192	517	200	201	695	73	308	672	89	58	611	418
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	1	1	1	1	0	1	2	0	2	3	1
Cap, veh/h	219	691	728	314	691	659	287	1033	593	244	862	515
Arrive On Green	0.08	0.37	0.37	0.08	0.37	0.37	0.09	0.29	0.29	0.04	0.24	0.24
Sat Flow, veh/h	1781	1885	1598	1795	1885	1610	1795	3554	1610	1781	3526	1598
Grp Volume(v), veh/h	192	517	200	201	695	73	308	672	89	58	611	418
Grp Sat Flow(s),veh/h/ln	1781	1885	1598	1795	1885	1610	1795	1777	1610	1781	1763	1598
Q Serve(g_s), s	6.0	21.5	7.0	6.3	33.0	2.5	8.0	14.9	3.3	2.2	14.3	21.6
Cycle Q Clear(g_c), s	6.0	21.5	7.0	6.3	33.0	2.5	8.0	14.9	3.3	2.2	14.3	21.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	219	691	728	314	691	659	287	1033	593	244	862	515
V/C Ratio(X)	0.88	0.75	0.27	0.64	1.01	0.11	1.07	0.65	0.15	0.24	0.71	0.81
Avail Cap(c_a), veh/h	219	691	728	314	691	659	287	1033	593	307	862	515
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.6	24.9	15.2	19.2	28.5	16.5	29.3	27.9	19.0	24.3	31.1	28.0
Incr Delay (d2), s/veh	30.8	4.5	0.2	4.3	35.6	0.1	73.7	1.4	0.1	0.5	2.7	9.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.2	10.1	2.5	2.9	20.9	0.9	8.2	6.4	1.2	0.9	6.2	9.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	52.5	29.4	15.5	23.5	64.1	16.5	103.0	29.4	19.1	24.8	33.8	37.6
LnGrp LOS	D	C	B	C	F	B	F	C	B	C	C	D
Approach Vol, veh/h	909			969			1069			1087		
Approach Delay, s/veh	31.2			52.1			49.7			34.8		
Approach LOS	C			D			D			C		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	8.8	31.2	12.0	38.0	13.0	27.0	12.0	38.0				
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0				
Max Green Setting (Gmax), s	23.0	7.0	33.0	8.0	22.0	7.0	33.0					
Max Q Clear Time (g_c+I1), s	16.9	8.3	23.5	10.0	23.6	8.0	35.0					
Green Ext Time (p_c), s	0.0	2.5	0.0	2.8	0.0	0.0	0.0					

Intersection Summary

HCM 6th Ctrl Delay	42.1
HCM 6th LOS	D

HCM 6th Signalized Intersection Summary

2: RR Parkway & CR 100

Ex. + 1% + AD + PD AM
06/26/2019



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	289	612	337	91	269	48	72	432	129	63	343	193
Future Volume (veh/h)	289	612	337	91	269	48	72	432	129	63	343	193
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1885	1885	1870	1885	1856	1826	1796	1826	1900	1870	1767	1870
Adj Flow Rate, veh/h	304	644	355	96	283	51	76	455	136	66	361	203
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	2	1	3	5	7	5	0	2	9	2
Cap, veh/h	574	767	733	271	610	590	270	651	401	252	617	512
Arrive On Green	0.14	0.41	0.41	0.06	0.33	0.33	0.06	0.19	0.19	0.05	0.18	0.18
Sat Flow, veh/h	1795	1885	1585	1795	1856	1547	1711	3469	1610	1781	3357	1585
Grp Volume(v), veh/h	304	644	355	96	283	51	76	455	136	66	361	203
Grp Sat Flow(s),veh/h/ln	1795	1885	1585	1795	1856	1547	1711	1735	1610	1781	1678	1585
Q Serve(g_s), s	7.0	21.1	10.6	2.4	8.3	1.4	2.4	8.4	4.7	2.0	6.7	6.8
Cycle Q Clear(g_c), s	7.0	21.1	10.6	2.4	8.3	1.4	2.4	8.4	4.7	2.0	6.7	6.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	574	767	733	271	610	590	270	651	401	252	617	512
V/C Ratio(X)	0.53	0.84	0.48	0.35	0.46	0.09	0.28	0.70	0.34	0.26	0.58	0.40
Avail Cap(c_a), veh/h	744	992	923	345	732	691	350	1014	569	341	981	684
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	11.5	18.3	12.7	15.6	18.2	13.6	21.1	26.0	21.1	21.3	25.5	18.0
Incr Delay (d2), s/veh	0.8	5.2	0.5	0.8	0.6	0.1	0.6	1.4	0.5	0.5	0.9	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.5	9.3	3.5	0.9	3.4	0.5	1.0	3.4	1.7	0.8	2.6	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	12.3	23.5	13.2	16.4	18.7	13.6	21.6	27.4	21.6	21.8	26.4	18.5
LnGrp LOS	B	C	B	B	B	B	C	C	C	C	C	B
Approach Vol, veh/h	1303			430			667			630		
Approach Delay, s/veh	18.1			17.6			25.5			23.4		
Approach LOS	B			B			C			C		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	8.6	17.8	9.2	32.8	8.8	17.6	14.5	27.5				
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0				
Max Green Setting (Gmax), s	20.0	7.0	36.0	7.0	20.0	16.0	27.0					
Max Q Clear Time (g_c+1.4), s	10.4	4.4	23.1	4.4	8.8	9.0	10.3					
Green Ext Time (p_c), s	0.0	2.4	0.0	4.8	0.0	2.4	0.5	1.6				

Intersection Summary

HCM 6th Ctrl Delay 20.7
HCM 6th LOS C

HCM 6th Signalized Intersection Summary

2: RR Parkway & CR 100

Ex. + 1% + AD + PD PM

06/26/2019



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	196	518	206	193	704	70	319	645	85	56	587	421
Future Volume (veh/h)	196	518	206	193	704	70	319	645	85	56	587	421
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1885	1885	1885	1885	1900	1885	1870	1900	1870	1856	1885
Adj Flow Rate, veh/h	204	540	215	201	733	73	332	672	89	58	611	439
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	1	1	1	1	0	1	2	0	2	3	1
Cap, veh/h	215	735	831	301	716	676	329	1066	596	240	740	463
Arrive On Green	0.08	0.39	0.39	0.07	0.38	0.38	0.13	0.30	0.30	0.04	0.21	0.21
Sat Flow, veh/h	1781	1885	1598	1795	1885	1610	1795	3554	1610	1781	3526	1598
Grp Volume(v), veh/h	204	540	215	201	733	73	332	672	89	58	611	439
Grp Sat Flow(s),veh/h/ln	1781	1885	1598	1795	1885	1610	1795	1777	1610	1781	1763	1598
Q Serve(g_s), s	7.3	24.5	7.5	6.9	38.0	2.8	13.0	16.3	3.7	2.5	16.6	21.0
Cycle Q Clear(g_c), s	7.3	24.5	7.5	6.9	38.0	2.8	13.0	16.3	3.7	2.5	16.6	21.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	215	735	831	301	716	676	329	1066	596	240	740	463
V/C Ratio(X)	0.95	0.73	0.26	0.67	1.02	0.11	1.01	0.63	0.15	0.24	0.83	0.95
Avail Cap(c_a), veh/h	215	735	831	301	716	676	329	1066	596	293	740	463
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.3	26.1	13.3	20.9	31.0	17.6	28.9	30.2	21.0	29.4	37.7	34.8
Incr Delay (d2), s/veh	47.6	3.8	0.2	5.5	39.6	0.1	51.6	1.2	0.1	0.5	7.6	28.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.6	11.4	2.6	3.2	24.4	1.0	10.7	7.0	1.4	1.1	7.8	13.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	72.9	29.9	13.5	26.4	70.6	17.7	80.5	31.4	21.1	29.9	45.3	63.7
LnGrp LOS	E	C	B	C	F	B	F	C	C	C	D	E
Approach Vol, veh/h	959			1007			1093			1108		
Approach Delay, s/veh	35.4			58.0			45.5			51.8		
Approach LOS	D			E			D			D		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	9.0	35.0	12.0	44.0	18.0	26.0	13.0	43.0				
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0				
Max Green Setting (Gmax), s	27.0	7.0	39.0	13.0	21.0	8.0	38.0					
Max Q Clear Time (g_c+I), s	18.3	8.9	26.5	15.0	23.0	9.3	40.0					
Green Ext Time (p_c), s	0.0	3.2	0.0	3.5	0.0	0.0	0.0	0.0				

Intersection Summary

HCM 6th Ctrl Delay 47.9
 HCM 6th LOS D

RONALD REAGAN PARKWAY & GARRISON LANE

TRAFFIC VOLUME COUNTS CAPACITY ANALYSIS

RONALD REAGAN PKWY & GARRISON LN - TMC

Tue Jun 18, 2019

Full Length (6 AM-9 AM, 3 PM-7 PM)

All Classes (Lights and Motorcycles, Heavy)

All Movements

ID: 669471, Location: 39.774815, -86.342636



Provided by: A&F Engineering

8365 Keystone Crossing, Suite 201, Indianapolis, IN, 46240, US

Leg Direction	South Northbound					North Southbound					West Eastbound					East Westbound					
Time	L	T	R	U	App	L	T	R	U	App	L	T	R	U	App	L	T	R	U	App	Int
2019-06-18																					
6:00AM	1	61	0	0	62	0	69	2	0	71	9	0	4	0	13	0	0	0	0	0	146
6:15AM	0	96	0	0	96	0	88	0	0	88	5	0	7	0	12	2	0	3	0	5	201
6:30AM	1	88	0	0	89	0	155	1	0	156	5	0	11	0	16	0	0	2	0	2	263
6:45AM	3	136	1	0	140	0	115	1	0	116	7	0	5	0	12	1	0	1	0	2	270
Hourly Total	5	381	1	0	387	0	427	4	0	431	26	0	27	0	53	3	0	6	0	9	880
7:00AM	4	102	0	1	107	0	119	3	0	122	2	0	10	0	12	1	0	1	0	2	243
7:15AM	2	122	1	0	125	0	143	2	0	145	11	0	11	0	22	1	0	1	0	2	294
7:30AM	1	137	0	0	138	1	170	3	0	174	11	0	14	0	25	0	0	7	0	7	344
7:45AM	3	161	0	0	164	0	167	2	0	169	4	0	13	0	17	2	0	0	0	2	352
Hourly Total	10	522	1	1	534	1	599	10	0	610	28	0	48	0	76	4	0	9	0	13	1233
8:00AM	1	116	0	0	117	1	148	4	0	153	7	0	7	0	14	2	0	4	0	6	290
8:15AM	3	106	0	0	109	0	156	2	0	158	6	0	8	0	14	1	0	1	0	2	283
8:30AM	0	112	2	0	114	0	136	1	0	137	4	1	4	0	9	1	1	3	0	5	265
8:45AM	1	109	2	0	112	1	154	1	0	156	4	1	3	0	8	3	0	3	0	6	282
Hourly Total	5	443	4	0	452	2	594	8	0	604	21	2	22	0	45	7	1	11	0	19	1120
9:00AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00PM	12	169	2	1	184	3	136	5	0	144	2	0	3	0	5	0	0	1	0	1	334
3:15PM	3	176	0	0	179	0	173	5	1	179	4	0	3	0	7	2	0	1	0	3	368
3:30PM	5	175	0	1	181	3	188	7	1	199	4	1	5	0	10	3	0	0	0	3	393
3:45PM	5	203	1	0	209	1	160	5	1	167	4	0	5	0	9	0	0	1	0	1	386
Hourly Total	25	723	3	2	753	7	657	22	3	689	14	1	16	0	31	5	0	3	0	8	1481
4:00PM	8	199	2	1	210	0	177	5	0	182	1	0	2	0	3	1	0	2	0	3	398
4:15PM	8	190	2	1	201	1	205	6	0	212	5	0	3	0	8	1	0	2	0	3	424
4:30PM	8	169	1	0	178	2	202	3	0	207	5	0	3	0	8	0	0	2	0	2	395
4:45PM	12	218	0	1	231	1	201	9	0	211	6	0	3	0	9	1	0	0	0	1	452
Hourly Total	36	776	5	3	820	4	785	23	0	812	17	0	11	0	28	3	0	6	0	9	1669
5:00PM	11	205	2	0	218	4	199	8	0	211	7	0	17	0	24	0	0	0	0	0	453
5:15PM	14	230	2	0	246	4	206	6	0	216	6	0	3	0	9	0	0	2	0	2	473
5:30PM	10	192	3	0	205	2	197	15	0	214	6	0	5	0	11	0	0	1	0	1	431
5:45PM	13	181	5	0	199	0	188	8	0	196	4	0	4	0	8	2	0	0	0	2	405
Hourly Total	48	808	12	0	868	10	790	37	0	837	23	0	29	0	52	2	0	3	0	5	1762
6:00PM	14	230	4	0	248	2	192	7	1	202	4	1	5	0	10	1	0	1	0	2	462
6:15PM	6	177	3	0	186	4	153	7	0	164	4	0	4	0	8	0	0	3	0	3	361
6:30PM	7	142	1	0	150	0	175	6	1	182	2	1	5	0	8	2	1	0	0	3	343
6:45PM	9	151	0	0	160	0	148	6	0	154	6	0	1	0	7	1	0	1	0	2	323
Hourly Total	36	700	8	0	744	6	668	26	2	702	16	2	15	0	33	4	1	5	0	10	1489
7:00PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	165	4353	34	6	4558	30	4520	130	5	4685	145	5	168	0	318	28	2	43	0	73	9634
% Approach	3.6%	95.5%	0.7%	0.1%	-	0.6%	96.5%	2.8%	0.1%	-	45.6%	1.6%	52.8%	0%	-	38.4%	2.7%	58.9%	0%	-	-
% Total	1.7%	45.2%	0.4%	0.1%	47.3%	0.3%	46.9%	1.3%	0.1%	48.6%	1.5%	0.1%	1.7%	0%	3.3%	0.3%	0%	0.4%	0%	0.8%	-
Lights and Motorcycles	162	4207	34	6	4409	28	4391	130	5	4554	144	4	168	0	316	28	1	41	0	70	9349
% Lights and Motorcycles	98.2%	96.6%	100%	100%	96.7%	93.3%	97.1%	100%	100%	97.2%	99.3%	80.0%	100%	0%	99.4%	100%	50.0%	95.3%	0%	95.9%	97.0%
Heavy	3	146	0	0	149	2	129	0	0	131	1	1	0	0	2	0	1	2	0	3	285
% Heavy	1.8%	3.4%	0%	0%	3.3%	6.7%	2.9%	0%	0%	2.8%	0.7%	20.0%	0%	0%	0.6%	0%	50.0%	4.7%	0%	4.1%	3.0%

* L: Left, R: Right, T: Thru, U: U-Turn

RONALD REAGAN PKWY & GARRISON LN - TMC

Tue Jun 18, 2019

Full Length (6 AM-9 AM, 3 PM-7 PM)

All Classes (Lights and Motorcycles, Heavy)

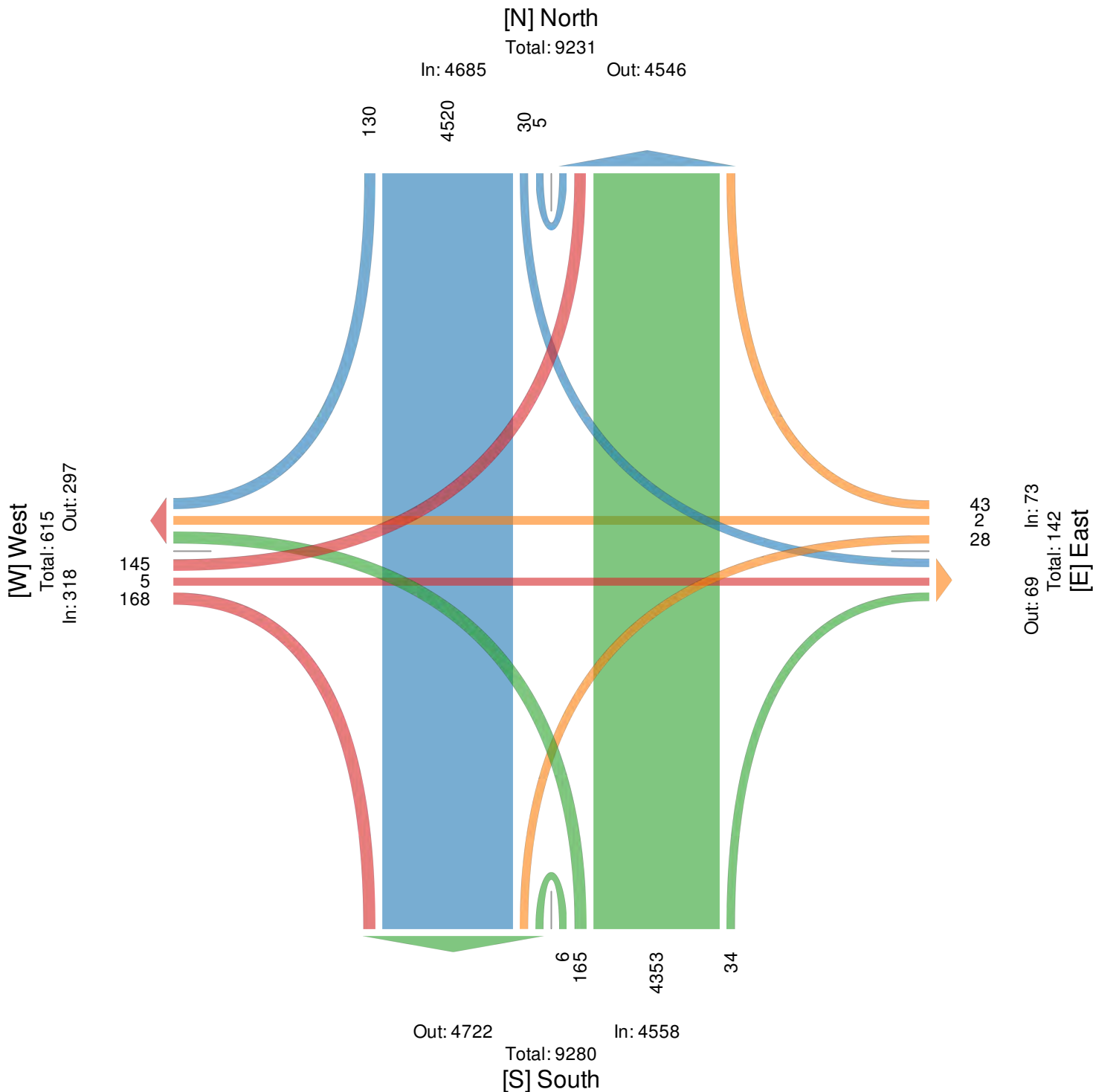
All Movements

ID: 669471, Location: 39.774815, -86.342636



Provided by: A&F Engineering

8365 Keystone Crossing, Suite 201, Indianapolis, IN, 46240, US



RONALD REAGAN PKWY & GARRISON LN - TMC

Tue Jun 18, 2019

AM Peak (7:15 AM - 8:15 AM)

All Classes (Lights and Motorcycles, Heavy)

All Movements

ID: 669471, Location: 39.774815, -86.342636



Provided by: A&F Engineering

8365 Keystone Crossing, Suite 201, Indianapolis, IN, 46240, US

Leg Direction	South Northbound					North Southbound					West Eastbound					East Westbound					
Time	L	T	R	U	App	L	T	R	U	App	L	T	R	U	App	L	T	R	U	App	Int
2019-06-18 7:15AM	2	122	1	0	125	0	143	2	0	145	11	0	11	0	22	1	0	1	0	2	294
7:30AM	1	137	0	0	138	1	170	3	0	174	11	0	14	0	25	0	0	7	0	7	344
7:45AM	3	161	0	0	164	0	167	2	0	169	4	0	13	0	17	2	0	0	0	2	352
8:00AM	1	116	0	0	117	1	148	4	0	153	7	0	7	0	14	2	0	4	0	6	290
Total	7	536	1	0	544	2	628	11	0	641	33	0	45	0	78	5	0	12	0	17	1280
% Approach	1.3%	98.5%	0.2%	0%	-	0.3%	98.0%	1.7%	0%	-	42.3%	0%	57.7%	0%	-	29.4%	0%	70.6%	0%	-	-
% Total	0.5%	41.9%	0.1%	0%	42.5%	0.2%	49.1%	0.9%	0%	50.1%	2.6%	0%	3.5%	0%	6.1%	0.4%	0%	0.9%	0%	1.3%	-
PHF	0.583	0.832	0.250	-	0.829	0.500	0.924	0.688	-	0.921	0.750	-	0.804	-	0.780	0.625	-	0.429	-	0.607	0.909
Lights and Motorcycles	6	509	1	0	516	1	596	11	0	608	33	0	45	0	78	5	0	12	0	17	1219
% Lights and Motorcycles	85.7%	95.0%	100%	0%	94.9%	50.0%	94.9%	100%	0%	94.9%	100%	0%	100%	0%	100%	100%	0%	100%	0%	100%	95.2%
Heavy	1	27	0	0	28	1	32	0	0	33	0	0	0	0	0	0	0	0	0	0	61
% Heavy	14.3%	5.0%	0%	0%	5.1%	50.0%	5.1%	0%	0%	5.1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	4.8%

*L: Left, R: Right, T: Thru, U: U-Turn

RONALD REAGAN PKWY & GARRISON LN - TMC

Tue Jun 18, 2019

AM Peak (7:15 AM - 8:15 AM)

All Classes (Lights and Motorcycles, Heavy)

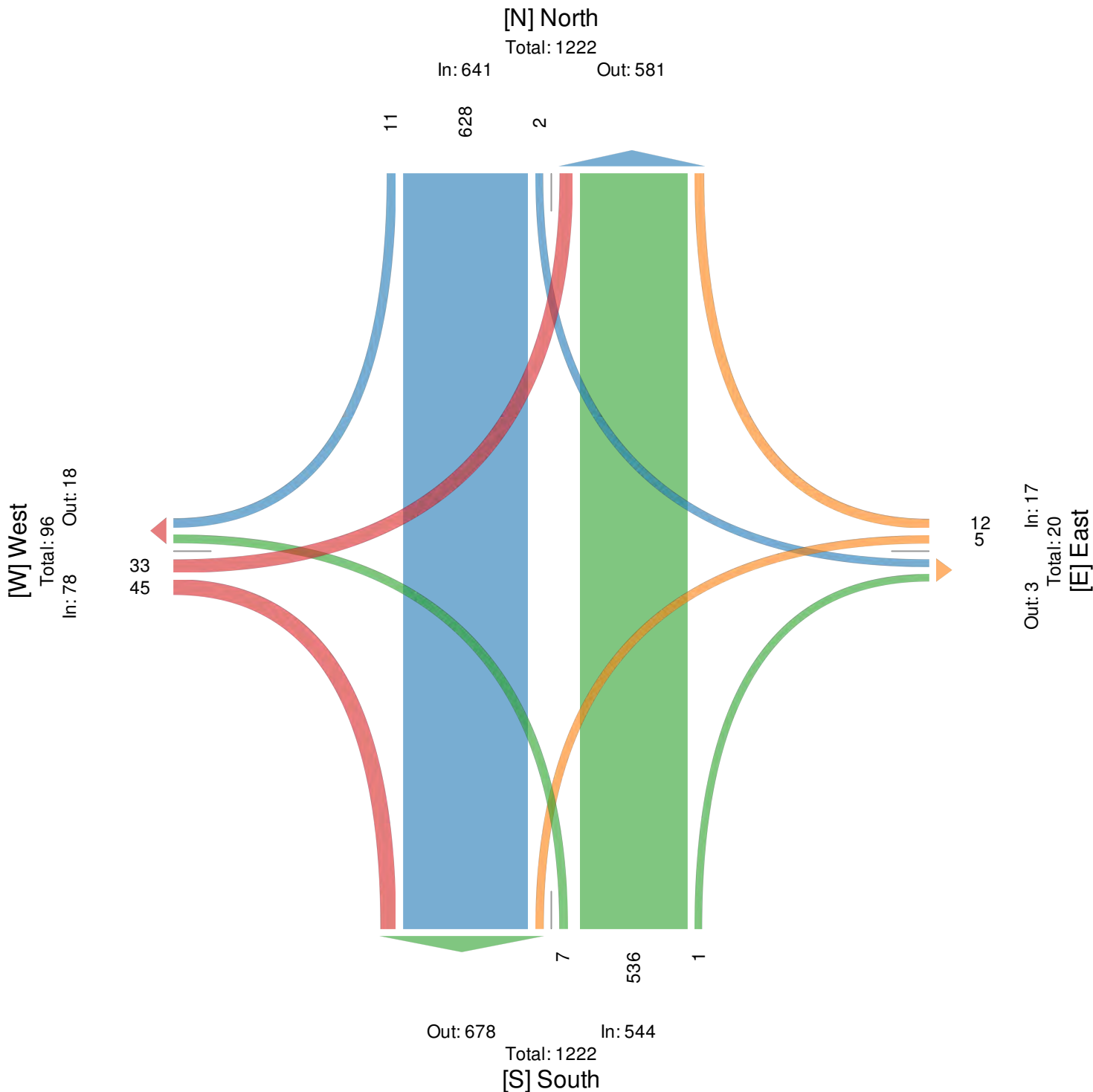
All Movements

ID: 669471, Location: 39.774815, -86.342636



Provided by: A&F Engineering

8365 Keystone Crossing, Suite 201, Indianapolis, IN, 46240, US



RONALD REAGAN PKWY & GARRISON LN - TMC

Tue Jun 18, 2019

PM Peak (4:45 PM - 5:45 PM) - Overall Peak Hour

All Classes (Lights and Motorcycles, Heavy)

All Movements

ID: 669471, Location: 39.774815, -86.342636



Provided by: A&F Engineering

8365 Keystone Crossing, Suite 201, Indianapolis, IN, 46240, US

Leg Direction	South Northbound					North Southbound					West Eastbound					East Westbound					
Time	L	T	R	U	App	L	T	R	U	App	L	T	R	U	App	L	T	R	U	App	Int
2019-06-18 4:45PM	12	218	0	1	231	1	201	9	0	211	6	0	3	0	9	1	0	0	0	1	452
5:00PM	11	205	2	0	218	4	199	8	0	211	7	0	17	0	24	0	0	0	0	0	453
5:15PM	14	230	2	0	246	4	206	6	0	216	6	0	3	0	9	0	0	2	0	2	473
5:30PM	10	192	3	0	205	2	197	15	0	214	6	0	5	0	11	0	0	1	0	1	431
Total	47	845	7	1	900	11	803	38	0	852	25	0	28	0	53	1	0	3	0	4	1809
% Approach	5.2%	93.9%	0.8%	0.1%	-	1.3%	94.2%	4.5%	0%	-	47.2%	0%	52.8%	0%	-	25.0%	0%	75.0%	0%	-	-
% Total	2.6%	46.7%	0.4%	0.1%	49.8%	0.6%	44.4%	2.1%	0%	47.1%	1.4%	0%	1.5%	0%	2.9%	0.1%	0%	0.2%	0%	0.2%	-
PHF	0.839	0.918	0.583	0.250	0.915	0.688	0.975	0.633	-	0.986	0.893	-	0.412	-	0.552	0.250	-	0.375	-	0.500	0.956
Lights and Motorcycles	45	831	7	1	884	10	784	38	0	832	24	0	28	0	52	1	0	2	0	3	1771
% Lights and Motorcycles	95.7%	98.3%	100%	100%	98.2%	90.9%	97.6%	100%	0%	97.7%	96.0%	0%	100%	0%	98.1%	100%	0%	66.7%	0%	75.0%	97.9%
Heavy	2	14	0	0	16	1	19	0	0	20	1	0	0	0	1	0	0	1	0	1	38
% Heavy	4.3%	1.7%	0%	0%	1.8%	9.1%	2.4%	0%	0%	2.3%	4.0%	0%	0%	0%	1.9%	0%	0%	33.3%	0%	25.0%	2.1%

*L: Left, R: Right, T: Thru, U: U-Turn

RONALD REAGAN PKWY & GARRISON LN - TMC

Tue Jun 18, 2019

PM Peak (4:45 PM - 5:45 PM) - Overall Peak Hour

All Classes (Lights and Motorcycles, Heavy)

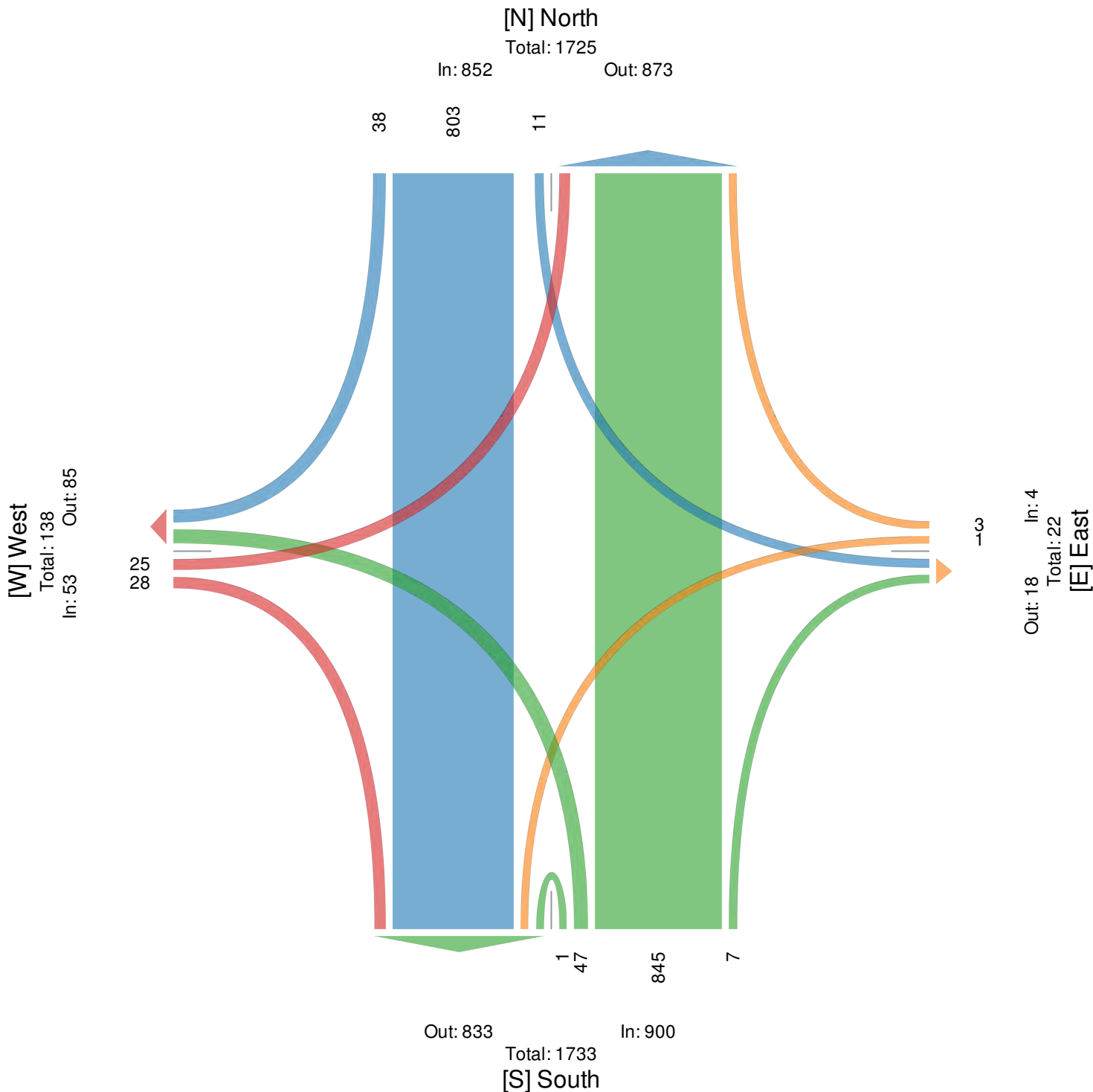
All Movements

ID: 669471, Location: 39.774815, -86.342636



Provided by: A&F Engineering

8365 Keystone Crossing, Suite 201, Indianapolis, IN, 46240, US



Intersection												
Int Delay, s/veh	1.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations		↕			↕		↕	↕	↕	↕	↕	↕
Traffic Vol, veh/h	33	0	45	5	0	12	2	628	11	7	536	1
Future Vol, veh/h	33	0	45	5	0	12	2	628	11	7	536	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	130	-	350	150	-	190
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	0	0	0	0	0	0	50	5	0	14	5	0
Mvmt Flow	36	0	49	5	0	13	2	690	12	8	589	1

Major/Minor	Minor1		Minor2		Major1			Major2				
Conflicting Flow All	1306	1300	690	1330	1311	589	590	0	0	702	0	0
Stage 1	694	694	-	605	605	-	-	-	-	-	-	-
Stage 2	612	606	-	725	706	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.6	-	-	4.24	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.65	-	-	2.326	-	-
Pot Cap-1 Maneuver	138	163	449	133	160	512	788	-	-	842	-	-
Stage 1	436	447	-	488	491	-	-	-	-	-	-	-
Stage 2	484	490	-	420	442	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	133	161	449	117	158	512	788	-	-	842	-	-
Mov Cap-2 Maneuver	266	285	-	242	281	-	-	-	-	-	-	-
Stage 1	435	446	-	487	486	-	-	-	-	-	-	-
Stage 2	467	485	-	373	441	-	-	-	-	-	-	-

Approach	EB		WB		SE		NW	
HCM Control Delay, s	18.7		14.8		0		0.1	
HCM LOS	C		B					

Minor Lane/Major Mvmt	NWL	NWT	NWR	EBLn1WBLn1	SEL	SET	SER
Capacity (veh/h)	842	-	-	348 385	788	-	-
HCM Lane V/C Ratio	0.009	-	-	0.246 0.049	0.003	-	-
HCM Control Delay (s)	9.3	-	-	18.7 14.8	9.6	-	-
HCM Lane LOS	A	-	-	C B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	1 0.2	0	-	-

Intersection												
Int Delay, s/veh	1.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations		↔			↔		↔	↑	↑	↔	↑	↔
Traffic Vol, veh/h	25	0	28	1	0	3	11	803	38	47	845	7
Future Vol, veh/h	25	0	28	1	0	3	11	803	38	47	845	7
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	130	-	350	150	-	190
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	4	0	0	0	0	33	9	2	0	4	2	0
Mvmt Flow	26	0	29	1	0	3	11	836	40	49	880	7

Major/Minor	Minor1		Minor2		Major1			Major2				
Conflicting Flow All	1841	1843	836	1871	1876	880	887	0	0	876	0	0
Stage 1	858	858	-	978	978	-	-	-	-	-	-	-
Stage 2	983	985	-	893	898	-	-	-	-	-	-	-
Critical Hdwy	7.14	6.5	6.2	7.1	6.5	6.53	4.19	-	-	4.14	-	-
Critical Hdwy Stg 1	6.14	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.14	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.536	4	3.3	3.5	4	3.597	2.281	-	-	2.236	-	-
Pot Cap-1 Maneuver	57	76	370	56	72	305	735	-	-	762	-	-
Stage 1	349	376	-	304	331	-	-	-	-	-	-	-
Stage 2	297	329	-	339	361	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	53	70	370	48	66	305	735	-	-	762	-	-
Mov Cap-2 Maneuver	160	182	-	149	171	-	-	-	-	-	-	-
Stage 1	344	370	-	299	310	-	-	-	-	-	-	-
Stage 2	275	308	-	308	356	-	-	-	-	-	-	-

Approach	EB		WB		SE		NW	
HCM Control Delay, s	25.6		20.1		0.1		0.5	
HCM LOS	D		C					

Minor Lane/Major Mvmt	NWL	NWT	NWR	EBLn1WBLn1	SEL	SET	SER
Capacity (veh/h)	762	-	-	229 242	735	-	-
HCM Lane V/C Ratio	0.064	-	-	0.241 0.017	0.016	-	-
HCM Control Delay (s)	10	-	-	25.6 20.1	10	-	-
HCM Lane LOS	B	-	-	D C	A	-	-
HCM 95th %tile Q(veh)	0.2	-	-	0.9 0.1	0	-	-

Intersection												
Int Delay, s/veh	1.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations		↔			↔		↔	↔	↔	↔	↔	↔
Traffic Vol, veh/h	33	0	45	5	0	12	2	747	11	7	610	1
Future Vol, veh/h	33	0	45	5	0	12	2	747	11	7	610	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	130	-	350	150	-	190
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	0	0	0	0	0	0	50	5	0	14	5	0
Mvmt Flow	36	0	49	5	0	13	2	821	12	8	670	1

Major/Minor	Minor1		Minor2		Major1		Major2					
Conflicting Flow All	1518	1512	821	1542	1523	670	671	0	0	833	0	0
Stage 1	825	825	-	686	686	-	-	-	-	-	-	-
Stage 2	693	687	-	856	837	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.6	-	-	4.24	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.65	-	-	2.326	-	-
Pot Cap-1 Maneuver	99	121	378	95	119	460	730	-	-	750	-	-
Stage 1	370	390	-	441	451	-	-	-	-	-	-	-
Stage 2	437	450	-	355	385	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	95	119	378	82	117	460	730	-	-	750	-	-
Mov Cap-2 Maneuver	222	243	-	199	239	-	-	-	-	-	-	-
Stage 1	369	389	-	440	446	-	-	-	-	-	-	-
Stage 2	420	445	-	308	384	-	-	-	-	-	-	-

Approach	EB	WB	SE	NW
HCM Control Delay, s	22.5	16.5	0	0.1
HCM LOS	C	C		

Minor Lane/Major Mvmt	NWL	NWT	NWR	EBLn1WBLn1	SEL	SET	SER
Capacity (veh/h)	750	-	-	291 332	730	-	-
HCM Lane V/C Ratio	0.01	-	-	0.295 0.056	0.003	-	-
HCM Control Delay (s)	9.8	-	-	22.5 16.5	9.9	-	-
HCM Lane LOS	A	-	-	C C	A	-	-
HCM 95th %tile Q(veh)	0	-	-	1.2 0.2	0	-	-

Intersection												
Int Delay, s/veh	1.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations		↕			↕		↕	↑	↕	↕	↑	↕
Traffic Vol, veh/h	25	0	28	1	0	3	11	919	38	47	989	7
Future Vol, veh/h	25	0	28	1	0	3	11	919	38	47	989	7
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	130	-	350	150	-	190
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	4	0	0	0	0	33	9	2	0	4	2	0
Mvmt Flow	26	0	29	1	0	3	11	957	40	49	1030	7

Major/Minor	Minor1		Minor2		Major1		Major2					
Conflicting Flow All	2112	2114	957	2142	2147	1030	1037	0	0	997	0	0
Stage 1	979	979	-	1128	1128	-	-	-	-	-	-	-
Stage 2	1133	1135	-	1014	1019	-	-	-	-	-	-	-
Critical Hdwy	7.14	6.5	6.2	7.1	6.5	6.53	4.19	-	-	4.14	-	-
Critical Hdwy Stg 1	6.14	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.14	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.536	4	3.3	3.5	4	3.597	2.281	-	-	2.236	-	-
Pot Cap-1 Maneuver	37	51	315	36	49	247	644	-	-	686	-	-
Stage 1	298	331	-	250	282	-	-	-	-	-	-	-
Stage 2	244	280	-	290	317	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	34	47	315	30	45	247	644	-	-	686	-	-
Mov Cap-2 Maneuver	128	150	-	117	140	-	-	-	-	-	-	-
Stage 1	293	325	-	246	262	-	-	-	-	-	-	-
Stage 2	224	260	-	259	312	-	-	-	-	-	-	-

Approach	EB	WB	SE	NW
HCM Control Delay, s	32.3	24.1	0.1	0.5
HCM LOS	D	C		

Minor Lane/Major Mvmt	NWL	NWT	NWR	EBLn1WBLn1	SEL	SET	SER
Capacity (veh/h)	686	-	-	186	193	644	-
HCM Lane V/C Ratio	0.071	-	-	0.297	0.022	0.018	-
HCM Control Delay (s)	10.7	-	-	32.3	24.1	10.7	-
HCM Lane LOS	B	-	-	D	C	B	-
HCM 95th %tile Q(veh)	0.2	-	-	1.2	0.1	0.1	-

Intersection												
Int Delay, s/veh	1.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations		↕			↕		↕	↕	↕	↕	↕	↕
Traffic Vol, veh/h	33	0	53	5	0	12	2	768	11	10	617	1
Future Vol, veh/h	33	0	53	5	0	12	2	768	11	10	617	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	130	-	350	150	-	190
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	0	0	0	0	0	0	50	5	0	14	5	0
Mvmt Flow	36	0	58	5	0	13	2	844	12	11	678	1

Major/Minor	Minor1		Minor2		Major1		Major2					
Conflicting Flow All	1555	1549	844	1583	1560	678	679	0	0	856	0	0
Stage 1	848	848	-	700	700	-	-	-	-	-	-	-
Stage 2	707	701	-	883	860	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.6	-	-	4.24	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.65	-	-	2.326	-	-
Pot Cap-1 Maneuver	93	115	366	89	113	456	725	-	-	735	-	-
Stage 1	359	380	-	433	444	-	-	-	-	-	-	-
Stage 2	429	444	-	343	376	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	89	113	366	74	111	456	725	-	-	735	-	-
Mov Cap-2 Maneuver	214	236	-	186	231	-	-	-	-	-	-	-
Stage 1	358	379	-	432	437	-	-	-	-	-	-	-
Stage 2	410	437	-	288	375	-	-	-	-	-	-	-

Approach	EB		WB		SE		NW	
HCM Control Delay, s	23.5		16.9		0		0.2	
HCM LOS	C		C					

Minor Lane/Major Mvmt	NWL	NWT	NWR	EBLn1WBLn1	SEL	SET	SER
Capacity (veh/h)	735	-	-	288	320	725	-
HCM Lane V/C Ratio	0.015	-	-	0.328	0.058	0.003	-
HCM Control Delay (s)	10	-	-	23.5	16.9	10	-
HCM Lane LOS	A	-	-	C	C	A	-
HCM 95th %tile Q(veh)	0	-	-	1.4	0.2	0	-

Intersection												
Int Delay, s/veh	1.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Vol, veh/h	25	0	33	1	0	3	11	933	38	56	1012	7
Future Vol, veh/h	25	0	33	1	0	3	11	933	38	56	1012	7
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	130	-	350	150	-	190
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	4	0	0	0	0	33	9	2	0	4	2	0
Mvmt Flow	26	0	34	1	0	3	11	972	40	58	1054	7
Major/Minor	Minor1		Minor2		Major1		Major2					
Conflicting Flow All	2169	2171	972	2201	2204	1054	1061	0	0	1012	0	0
Stage 1	994	994	-	1170	1170	-	-	-	-	-	-	-
Stage 2	1175	1177	-	1031	1034	-	-	-	-	-	-	-
Critical Hdwy	7.14	6.5	6.2	7.1	6.5	6.53	4.19	-	-	4.14	-	-
Critical Hdwy Stg 1	6.14	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.14	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.536	4	3.3	3.5	4	3.597	2.281	-	-	2.236	-	-
Pot Cap-1 Maneuver	33	47	309	32	45	239	631	-	-	677	-	-
Stage 1	293	326	-	237	269	-	-	-	-	-	-	-
Stage 2	231	267	-	284	312	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	30	42	309	26	40	239	631	-	-	677	-	-
Mov Cap-2 Maneuver	120	142	-	107	131	-	-	-	-	-	-	-
Stage 1	288	320	-	233	246	-	-	-	-	-	-	-
Stage 2	208	244	-	248	307	-	-	-	-	-	-	-
Approach	EB		WB		SE		NW					
HCM Control Delay, s	33.8		25.1		0.1		0.6					
HCM LOS	D		D									
Minor Lane/Major Mvmt	NWL	NWT	NWR	EBLn1	WBLn1	SEL	SET	SER				
Capacity (veh/h)	677	-	-	184	183	631	-	-				
HCM Lane V/C Ratio	0.086	-	-	0.328	0.023	0.018	-	-				
HCM Control Delay (s)	10.8	-	-	33.8	25.1	10.8	-	-				
HCM Lane LOS	B	-	-	D	D	B	-	-				
HCM 95th %tile Q(veh)	0.3	-	-	1.3	0.1	0.1	-	-				

CR 100 N & PROPOSED ACCESS DRIVE

CAPACITY ANALYSIS

HCM 6th TWSC
4: Proposed Access Dr/Camden Access Dr & CR 100

Ex. + 1% + AD + PD AM
06/26/2019

Intersection												
Int Delay, s/veh	14											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	8	1017	10	24	497	20	30	0	71	52	0	21
Future Vol, veh/h	8	1017	10	24	497	20	30	0	71	52	0	21
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	-	100	-	100	0	-	0	0	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	2	0	0	2	0	0	0	0	0	0	0
Mvmt Flow	9	1105	11	26	540	22	33	0	77	57	0	23
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	562	0	0	1116	0	0	1744	-	1111	1759	-	540
Stage 1	-	-	-	-	-	-	1129	-	-	592	-	-
Stage 2	-	-	-	-	-	-	615	-	-	1167	-	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	-	6.2	7.1	-	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	-	-	6.1	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	-	-	6.1	-	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	-	3.3	3.5	-	3.3
Pot Cap-1 Maneuver	1019	-	-	633	-	-	69	0	257	67	0	546
Stage 1	-	-	-	-	-	-	250	0	-	496	0	-
Stage 2	-	-	-	-	-	-	482	0	-	238	0	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1019	-	-	633	-	-	64	-	257	~ 45	-	546
Mov Cap-2 Maneuver	-	-	-	-	-	-	64	-	-	~ 45	-	-
Stage 1	-	-	-	-	-	-	248	-	-	492	-	-
Stage 2	-	-	-	-	-	-	443	-	-	165	-	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.1			0.5			49.9			261.9		
HCM LOS							E			F		
Minor Lane/Major Mvmt	NBLn1 NBLn2		EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2		
Capacity (veh/h)	64 257 1019			-	-	633	-	-	45	546		
HCM Lane V/C Ratio	0.51 0.3 0.009			-	-	0.041	-	-	1.256	0.042		
HCM Control Delay (s)	109.2 24.9 8.6			-	-	10.9	-	-	\$ 362.9	11.9		
HCM Lane LOS	F C A			-	-	B	-	-	F B			
HCM 95th %tile Q(veh)	2 1.2 0			-	-	0.1	-	-	5.4	0.1		
Notes												
~: Volume exceeds capacity		\$: Delay exceeds 300s			+: Computation Not Defined				*: All major volume in platoon			

Intersection												
Int Delay, s/veh	21											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	21	809	35	80	1227	53	20	0	48	32	0	13
Future Vol, veh/h	21	809	35	80	1227	53	20	0	48	32	0	13
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	-	100	-	100	0	-	0	0	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	2	0	0	2	0	0	0	0	0	0	0
Mvmt Flow	23	879	38	87	1334	58	22	0	52	35	0	14
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1392	0	0	917	0	0	2488	-	898	2478	-	1334
Stage 1	-	-	-	-	-	-	944	-	-	1508	-	-
Stage 2	-	-	-	-	-	-	1544	-	-	970	-	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	-	6.2	7.1	-	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	-	-	6.1	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	-	-	6.1	-	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	-	3.3	3.5	-	3.3
Pot Cap-1 Maneuver	498	-	-	752	-	-	~ 20	0	341	~ 21	0	190
Stage 1	-	-	-	-	-	-	317	0	-	152	0	-
Stage 2	-	-	-	-	-	-	145	0	-	307	0	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	498	-	-	752	-	-	~ 16	-	341	~ 16	-	190
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 16	-	-	~ 16	-	-
Stage 1	-	-	-	-	-	-	302	-	-	145	-	-
Stage 2	-	-	-	-	-	-	119	-	-	248	-	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.3			0.6			215.4			\$ 741.6		
HCM LOS							F			F		
Minor Lane/Major Mvmt	NBLn1		NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2	
Capacity (veh/h)	16		341	498	-	-	752	-	-	16	190	
HCM Lane V/C Ratio	1.359		0.153	0.046	-	-	0.116	-	-	2.174	0.074	
HCM Control Delay (s)	\$ 690.3		17.5	12.6	-	-	10.4	-	-	\$ 1032.5	25.5	
HCM Lane LOS	F		C	B	-	-	B	-	-	F	D	
HCM 95th %tile Q(veh)	3.2		0.5	0.1	-	-	0.4	-	-	5	0.2	
Notes												
~: Volume exceeds capacity		\$: Delay exceeds 300s			+: Computation Not Defined				*: All major volume in platoon			

STUDIES & SURVEY'S

FISCAL IMPACT ANALYSIS

[See Attached]

TOWN OF AVON, INDIANA

Brookstone PUD

July 15, 2019



2680 East Main Street
Suite 223
Plainfield, IN 46168
317.837.4933

TOWN OF AVON, INDIANA

Brookstone PUD

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July 15, 2019

Pulte Group

Attn: Mr. David Compton
11590 N. Meridian Street
Suite 530
Carmel, IN 46032

VIA EMAIL: David.Compton@PulteGroup.com

RE: BROOKSTONE PUD

Mr. Compton:

In connection with the proposed residential development in the Town of Avon, Indiana (the "Town"), in Brookstone PUD (the "Development"), we have, at your request, prepared this Special Report (the "Report"), which includes the following:

- **General Comments;**
- **Summary of Impact of Development on Taxing Districts;**
- **Estimated Revenue and Expenditure Impact on Overlapping Taxing Units;**
- **Summary of Estimated School Property Tax Levy Impact - Development Only;**
- **Estimated School Property Tax Revenue and Assessed Value Impact - Development Only;**
- **Estimated Number of Students Added per Year;**
- **Summary of Estimated Assessed Value Added over the Duration of the Build Out of the Development; and**
- **Number of Housing Units and Number of Residents Added per Year.**

The schedules and underlying assumptions are based upon information provided to us by representatives of the Town, Pulte Group, Hendricks County Assessor's and Treasurer's offices and the Indiana Department of Local Government Finance (DLGF). In preparing these schedules, assumptions were made (as noted) regarding certain future events. As is the case with such assumptions regarding future events and transactions, some or all may not occur as expected and the resulting differences could be material. We express no opinion, nor do we provide any other form of assurance thereon, and we have no responsibility to prepare subsequent reports.

TOWN OF AVON, INDIANA

Brookstone PUD

Proposed Development

The purpose of this Report is to provide an analysis of the impact on revenue and expenditures if the Development occurs. Revenue and expenditures directly related to the Development are the primary focus of this Report. Impacts caused by other factors, such as reassessment or legislative changes, are not reflected in the detail of this Report. The Report is intended to be an objective assessment of the possible impacts from the Development.

Methodology

This impact analysis is based upon the estimated assessed value and the estimated number of residents and students created by the Development. The Development is proposed on approximately 81 acres that has a current total assessed value (for taxes payable in 2019) of \$294,300. The parcels are located on the south side of County Road 100 North west of Ronald Reagan Parkway. Water and wastewater utilities are currently available nearby.

The Development is currently located in the Avon taxing district. The Pay 2019 tax rate for the Avon taxing district is \$3.1985, which includes a new \$.3414 School Operating Referendum tax rate. The total tax rate is composed of Hendricks County, Washington Township, Town of Avon, Avon Community School Corporation and Washington Township Library tax rates. For this analysis, tax rates are assumed to remain constant.

The total gross assessed value of the Development is estimated at approximately \$62,354,810. The Development contains two types of single-family homes – the Landings Series and the Crossings Series. The Developer estimates that there will be about 80 Landings Series and 119 Crossing Series homes. We have assumed an average gross assessed value of each single-family unit based upon estimated selling prices and comparable developments provided to us by the Developer. The assumed gross assessed value for the Landings is \$280,840 and the gross assessed value for the Crossings is \$335,190. These averages are based upon the actual assessed values for similar developments completed in 2016-2018. We have also assumed that each home will receive the \$45,000 homestead deduction, the \$3,000 mortgage exemption and the supplemental 35% homestead deduction. This results in an estimated total net assessed value of the Development of \$27,756,000.

The property tax revenue estimates were generated by multiplying the current tax rate for the underlying districts by the estimated assessed value less the estimated Circuit Breaker impact. Revised property tax rates are not reflected in this Report and no adjustments to assessed values or levies, in the future, were included.

No additional non-property tax revenue, for all taxing districts (except for the Town and Township Fire, was included in this Report. The Town estimates are based on information provided by the Town's Financial Advisor and include increases in Local

Option Income Tax, Local Roads and Streets revenue, Motor Vehicle Highway funds and other fees/taxes. The Township Fire estimates are based on the 2019 Certified Budget information.

A number of services provided by the Town, Townships, County and Libraries are likely to experience expenditure increases. Town departments which will most likely experience increased expenditures include Police, Town Court, Public Works, Planning & Building and Parks. Although not all departments will experience increased costs immediately, over time the Development will contribute to those costs. For Township expenditures, it has been assumed that increased expenditures will come from providing Fire Protection, while Administrative and Poor Relief expenditures are assumed to not increase.

It is important to note that not all property taxes paid by the Development represent additional revenue for the taxing units; rather, they represent the portion of the unit's levy which will be paid by the Development. Due to statutory limitations, taxing units are not able to simply increase their levy by the amount which could be generated by the Development, holding all other factors constant. Some taxing units have the ability to appeal for an increase in their levy due to growth and this Development could contribute to that growth appeal validation.

Town Impact

Based on information provided by DLGF and the Town's Financial Advisor, clarifying property tax revenue, non-property tax revenue and expenditures have been included in the report.

Township Impact

The only increase in assumed expenditures relates to the cost of providing Fire Protection. This has been estimated to increase at the same per capita rate as currently exists. No other expenditures related to other Township services (such as Poor Relief and General Administrative functions) are assumed to increase. To offset minor potential increases in expenditures, we did not include any growth assumptions related to the non-property tax revenue for Non-Fire funds.

County and Library Impact

County and Library expenditures were also estimated to increase as a result of the Development. We have not assumed any increase in non-property tax revenue.

School Impact

The estimated School Impact is based on the 2019 Budget, 2019 property tax rates and the 2019 State School Funding Formula. School Funding in Indiana is experiencing dramatic changes, beginning in 2019, which will impact future funding and school tax rates. The full impact of these changes cannot be calculated at this time. In addition, Avon School Corporation passed an Operating Referendum, in May 2018, which will impact property tax rates and school funding beginning in 2019.

The estimated impact on the School district, in both new students and property tax revenue, is also shown in this Report. The current estimated property tax revenue 'per student' amount for Avon Schools is \$5,632 (derived from information provided by DLGF and IDOE). Fifty-eight percent (58%) of the School tax rate is for debt service. We have assumed that no new debt service would result from the Development. Therefore, we have only utilized the Referendum and Operations levy amount of \$2,353, per student, in our analysis. It is important to note that this amount includes residential as well as commercial properties (entire School District) in the calculation. If it was based solely on residential property tax revenue, the amount would be lower. Currently, School operating costs (including teacher salaries and benefits) are primarily paid from State Aid and not property taxes. It has been assumed that State Aid will increase to offset some of the increases in operating costs as a result of the Development. The School property tax revenue is used for a portion of operating costs, debt service, capital projects and transportation costs. The remaining costs, per student, are paid from State Aid and Miscellaneous Revenue.

Additional Economic Impact

The proposed Development will have a positive impact on businesses in the area, including a direct impact of over \$45,000,000 and an indirect impact of \$35,513,000 during the construction phase. This impact will result in new jobs and increased spending in the area.

Recommendation

Based upon the information presented in the attached Report, we recommend that the Town request a financial contribution from the Developer in order to offset a portion of the expected revenue shortfalls. The Development has the lowest possible property tax cap rate of 1% (homesteads) and the proposed project will create a demand for additional governmental services.

It is important to note that, based upon the current property tax system and the current Avon tax rate, most residential developments will not provide a positive fiscal impact to local units of government due to the Circuit Breaker. However, the total impact may be positive if additional commercial development occurs in response to new residents.

TOWN OF AVON, INDIANA

Brookstone PUD

Summary of Impact of Development on Taxing Districts

<u>Estimated Surplus/ (Shortfall)</u>	<u>Proposed Development</u>		
	<u>Year 1</u>	<u>Year 3</u>	<u>Year 5</u>
Town Portion (Pg. 6)	\$ (1,302)	\$ (11,536)	\$ (18,625)
Township Portion (Pg. 7)	(2,031)	(18,074)	(29,724)
County Portion (Pg. 8)	(1,240)	(11,007)	(17,929)
Library Portion (Pg. 8)	(539)	(4,818)	(8,056)

Summary of Estimated School Tax Levy per Student

	<u>Current Avon Schools</u>	<u>Proposed Development</u>		
		<u>Year 1</u>	<u>Year 3</u>	<u>Year 5</u>
School Portion (Pg.9) (1)	\$ 2,353	\$ 2,355	\$ 2,371	\$ 2,383

(1) We have assumed that no new debt service costs or capital project costs would be needed as a result of the Development. Avon Schools passed an Operating Referendum in 2018 and will begin to collect additional property taxes in 2019 for operating costs.

TOWN OF AVON, INDIANA

Brookstone PUD

Estimated Revenue and Expenditure Impact on Overlapping Taxing Units

<u>Town</u>	<u>Multiplier</u>	<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>	<u>Year 4</u>	<u>Year 5</u>
<i>Estimated Revenue (Assumed)</i>						
Property Tax Illustration (1)	0.3874	\$ 5,543	\$ 27,714	\$ 49,884	\$ 72,055	\$ 85,900
Non-Property Tax (2)	\$ 137	5,069	25,345	45,484	65,760	77,405
Totals		<u>\$ 10,612</u>	<u>\$ 53,059</u>	<u>\$ 95,368</u>	<u>\$ 137,815</u>	<u>\$ 163,305</u>
<i>Estimated Expenditures (3)</i>						
	322	\$ 11,914	\$ 59,570	\$ 106,904	\$ 154,560	\$ 181,930
Totals		<u>\$ 11,914</u>	<u>\$ 59,570</u>	<u>\$ 106,904</u>	<u>\$ 154,560</u>	<u>\$ 181,930</u>
Surplus/(Shortfall) (4)		<u>\$ (1,302)</u>	<u>\$ (6,511)</u>	<u>\$ (11,536)</u>	<u>\$ (16,745)</u>	<u>\$ (18,625)</u>

- (1) Based on current property tax rate times estimated assessed value, see Page 12. Property taxes paid by the Development do not necessarily represent additional revenue for the Town; rather, they represent the portion of the Town's tax levy which will be paid by the Development. Estimated property taxes have been reduced by 35% for estimated Circuit Breaker impact.
- (2) Based on the non-property tax revenue per capita and multiplied by estimated number of residents in the Development, provided by the Town's Financial Advisor
- (3) Based on the Town's per capita for Police, Town Court, Public Works, Planning & Building and Parks departments and multiplied by estimated number of residents in the Development, provided by the Town's Financial Advisor
- (4) Represents the estimated surplus/(shortfall) related to the Development. A surplus does not necessarily represent funds available for other purposes, as the increase in revenue partially consists of property taxes, which represent the portion paid by the Development, not necessarily new revenue.

TOWN OF AVON, INDIANA

Brookstone PUD

Estimated Revenue and Expenditure Impact on Overlapping Taxing Units
(Continued)

<u>Township</u>	<u>Multiplier</u>	<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>	<u>Year 4</u>	<u>Year 5</u>
<i>Estimated Revenue</i>						
Non-Fire Related Funds						
Property Tax Estimation (1)	0.0364	\$ 521	\$ 2,604	\$ 4,687	\$ 6,770	\$ 8,071
Non-Property Tax (2)	\$ -	-	-	-	-	-
Fire Related Funds						
Property Tax Estimation (1)	0.3621	5,181	25,904	46,627	67,349	80,290
Non-Property Tax (2)	\$ 100	3,700	18,500	33,200	48,000	56,500
Totals		<u>\$ 9,402</u>	<u>\$ 47,008</u>	<u>\$ 84,514</u>	<u>\$ 122,120</u>	<u>\$ 144,861</u>
<i>Estimated Expenditures</i>						
Non-Fire Related Funds (3)	\$ 39	\$ 1,443	\$ 7,215	\$ 12,948	\$ 18,720	\$ 22,035
Fire Related Funds (4)	\$ 270	9,990	49,950	89,640	129,600	152,550
Totals		<u>\$ 11,433</u>	<u>\$ 57,165</u>	<u>\$ 102,588</u>	<u>\$ 148,320</u>	<u>\$ 174,585</u>
Surplus/(Shortfall)		<u>\$ (2,031)</u>	<u>\$ (10,157)</u>	<u>\$ (18,074)</u>	<u>\$ (26,200)</u>	<u>\$ (29,724)</u>

- (1) Based on current property tax rate times estimated assessed value, see Page 12. Property taxes paid by the proposed development do not necessarily represent additional revenue for the Township; rather, they represent the portion of the Township's tax levy which will be paid by the development. Estimated property taxes have been reduced by 35% for estimated Circuit Breaker impact.**
- (2) Based on non-property tax revenue per capita and multiplied by estimated number of residents in the Development**
- (3) Based on Township General Fund, Recreation and Township Assistance Fund expenditures per capita and multiplied by the number of new residents.**
- (4) Based on Fire General, Emergency Fire Loan and Fire Cumulative Fire Fund expenditures per capita and multiplied by the number of new residents in the Development**

TOWN OF AVON, INDIANA

Brookstone PUD

Estimated Revenue and Expenditure Impact on Overlapping Taxing Units
 (Continued)

<u>County</u>	<u>Multiplier</u>	<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>	<u>Year 4</u>	<u>Year 5</u>
<i>Estimated Revenue</i>						
Property Tax Estimation (1)	0.3090	\$ 4,421	\$ 22,105	\$ 39,789	\$ 57,473	\$ 68,516
Estimated Expenditures (2)	\$ 153	<u>5,661</u>	<u>28,305</u>	<u>50,796</u>	<u>73,440</u>	<u>86,445</u>
Surplus/(Shortfall) (3)		<u>\$ (1,240)</u>	<u>\$ (6,200)</u>	<u>\$ (11,007)</u>	<u>\$ (15,967)</u>	<u>\$ (17,929)</u>
 <u>Library</u>						
<i>Estimated Revenue</i>						
Property Tax Estimation (1)	0.0554	\$ 793	\$ 3,963	\$ 7,134	\$ 10,304	\$ 12,284
Estimated Expenditures (2)	\$ 36	<u>1,332</u>	<u>6,660</u>	<u>11,952</u>	<u>17,280</u>	<u>20,340</u>
Surplus/(Shortfall) (3)		<u>\$ (539)</u>	<u>\$ (2,697)</u>	<u>\$ (4,818)</u>	<u>\$ (6,976)</u>	<u>\$ (8,056)</u>

(1) Based on current property tax rate times estimated assessed value, see Page 12. Property taxes paid by the Development do not necessarily represent additional revenue for the County & Library; rather, they represent the portion of the County & Library's tax levy which will be paid by the Development. Estimated property taxes have been reduced by 35% for estimated Circuit Breaker impact.

(2) Estimated per capita expenditures based on 2010 census and 2019 budget

(3) Represents the estimated surplus/(shortfall) related to the Development. A surplus does not necessarily represent funds available for other purposes, as the increase in revenue partially consists of property taxes, which represent the portion paid by the Development, not necessarily new revenue.

TOWN OF AVON, INDIANA

Brookstone PUD

Estimated Revenue and Expenditure Impact on Overlapping Taxing Units
(Continued)

* Beginning in 2019, funding for school corporations changed in Indiana. All non-debt property tax funds were collapsed into 1 "Operations" Fund. In addition, Avon Schools passed an operating referendum which also began in 2019.

	<u>Current Avon Schools</u>	<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>	<u>Year 4</u>	<u>Year 5</u>
Estimated Tax Levy/Student (1)	\$ 2,353	\$ 2,355	\$ 2,363	\$ 2,371	\$ 2,378	\$ 2,383
Difference from Current Situation		1	10	17	25	30
Cumulative Number of Students from Proposed Development		<u>7</u>	<u>33</u>	<u>59</u>	<u>85</u>	<u>100</u>
Surplus/(Shortfall) (2)		<u>\$ 12,243</u>	<u>\$ 94,176</u>	<u>\$ 169,517</u>	<u>\$ 244,857</u>	<u>\$ 291,904</u>

(1) Estimated Current Tax Levy is for Operations and Referendum Funds only (See Page 10).

(2) Represents the estimated property tax collections from the proposed development.

NOTE: The School tax levy is used for some operating costs, debt service, capital projects and transportation costs.
Some School operating costs are paid from State Aid.

TOWN OF AVON, INDIANA

Brookstone PUD

Estimated School Property Tax Revenue and Assessed Value Impact - Development Only

* Beginning in 2019, funding for school corporations changed in Indiana. All non-debt property tax funds were collapsed into 1 "Operations" Fund. In addition, Avon Schools passed an operating referendum which also began in 2019.

	Current Avon Schools	Year 1	Year 2	Year 3	Year 4	Year 5
Students (1)	9,766	7	33	59	85	100
School Tax Rates						
Debt Service and Pension Debt	\$ 0.011925	\$ 0.011925	\$ 0.011925	\$ 0.011925	\$ 0.011925	\$ 0.011925
Referendum	0.003414	0.003414	0.003414	0.003414	0.003414	0.003414
Operations	0.005143	0.005143	0.005143	0.005143	0.005143	0.005143
Total School Tax Rate	0.020482	0.020482	0.020482	0.020482	0.020482	0.020482
Net AV Increase (2)	\$2,685,735,916	\$ 2,201,144	\$ 11,005,720	\$ 19,810,296	\$ 28,614,872	\$ 34,112,936
Estimated Operations Tax Levy as A Result of New Developments (2)	\$ 22,981,842	\$ 12,243	\$ 94,176	\$ 169,517	\$ 244,857	\$ 291,904
Operation & Referendum Tax Levy/Student	\$ 2,353	\$ 2,355	\$ 2,363	\$ 2,371	\$ 2,378	\$ 2,383
Development Assessed Value/Student (Net AV/Students)		\$ 338,638	\$ 338,638	\$ 338,638	\$ 338,638	\$ 338,638
District Assessed Value/Student (Includes Commercial)		\$ 275,051	\$ 275,220	\$ 275,388	\$ 275,555	\$ 275,693

(1) See Page 11.

(2) Based upon current year information provided by the Department of Local Government Finance (DLGF) for taxes payable in 2019 and estimated increase in assessed value as shown on Page 12

TOWN OF AVON, INDIANA

Brookstone PUD

Estimated Number of Students Added per Year

Description	Number of Units	Student Multiplier (1)	Total Number of Students	Year 1	Year 2	Year 3	Year 4	Year 5	Totals
Students per Year	199	0.50	<u>100</u>	<u>7</u>	<u>26</u>	<u>26</u>	<u>26</u>	<u>15</u>	<u>100</u>
Cumulative Number of Students				<u>7</u>	<u>33</u>	<u>59</u>	<u>85</u>	<u>100</u>	
			Current Avon Schools	Year 1	Year 2	Year 3	Year 4	Year 5	
Expense/Student (2)			\$ 11,737	\$ 12,089	\$ 12,452	\$ 12,825	\$ 13,210	\$ 13,607	
Students			9,766	<u>7</u>	<u>33</u>	<u>59</u>	<u>85</u>	<u>100</u>	
Total Estimated Expense				<u>\$ 78,580</u>	<u>\$ 404,688</u>	<u>\$ 750,291</u>	<u>\$ 1,116,266</u>	<u>\$ 1,353,852</u>	

(1) Estimated school aged students per unit based on average of all types of units in the planned Development

(2) Based upon information provided by Avon Schools and an inflation factor

NOTE: Some school operating costs are paid from State Aid. In addition, Avon Schools passed an Operating Referendum, in 2018, and will begin to collect additional property taxes, in 2019, for operating costs.

TOWN OF AVON, INDIANA

Brookstone PUD

Summary of Estimated Assessed Value Added over the Duration of the Build Out of the Development

Description	Year 1	Year 2	Year 3	Year 4	Year 5
Residential Portion					
Total Number of Units	13	52	52	52	30
Number of Units					
Single Family Homes - Landings	6	24	24	24	2
Single Family Homes - Crossings	7	28	28	28	28
Estimated Net Value per Unit (1)					
Single Family Homes - Landings	\$ 280,840	\$ 280,840	\$ 280,840	\$ 280,840	\$ 280,840
Single Family Homes - Crossings	335,190	335,190	335,190	335,190	335,190
Deductions - Landings (2)	\$ 130,544	\$ 130,544	\$ 130,544	\$ 130,544	\$ 130,544
Deductions - Crossings (2)	149,566	149,566	149,566	149,566	149,566
Estimated Residential NAV					
Single Family Homes - Landings	\$ 901,776	\$ 3,607,104	\$ 3,607,104	\$ 3,607,104	\$ 300,592
Single Family Homes - Crossings	1,299,368	5,197,472	5,197,472	5,197,472	5,197,472
Total Estimated NAV	<u>\$ 2,201,144</u>	<u>\$ 8,804,576</u>	<u>\$ 8,804,576</u>	<u>\$ 8,804,576</u>	<u>\$ 5,498,064</u>
Non-Residential (Commercial) Portion	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>
Net Assessed Value Increase	<u>\$ 2,201,144</u>	<u>\$ 8,804,576</u>	<u>\$ 8,804,576</u>	<u>\$ 8,804,576</u>	<u>\$ 5,498,064</u>
Cumulative Net Assessed Value Increase	<u>\$ 2,201,144</u>	<u>\$ 11,005,720</u>	<u>\$ 19,810,296</u>	<u>\$ 28,614,872</u>	<u>\$ 34,112,936</u>

(1) Estimated based on expected sales price of each type of unit in the proposed Development and the actual assessed values of similar properties

(2) Estimated net assessed value reduced by the Homestead (\$45,000), Supplemental Homestead (35%) and Mortgage (\$3,000) deductions

TOWN OF AVON, INDIANA

Brookstone PUD

**Number of Housing Units and Number of Residents Added per Year
(per Developer and Census Bureau)**

<u>Description</u>	<u>Total Number of Units</u>	<u>Number of Units per Year</u>					<u>Total</u>
		<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>	<u>Year 4</u>	<u>Year 5</u>	
Units per Year	199	<u>13</u>	<u>52</u>	<u>52</u>	<u>52.00</u>	<u>30.00</u>	<u><u>199</u></u>
Single Family Homes - Landings		<u>6</u>	<u>24</u>	<u>24</u>	<u>24</u>	<u>2</u>	
Single Family Homes - Crossings		<u>7</u>	<u>28</u>	<u>28</u>	<u>28</u>	<u>28</u>	
Cumulative Number of Units		<u><u>13</u></u>	<u><u>65</u></u>	<u><u>117</u></u>	<u><u>169</u></u>	<u><u>199</u></u>	
	<u>People per Unit</u>	<u>Cumulative Number of People per Year</u>					
		<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>	<u>Year 4</u>	<u>Year 5</u>	
Cumulative Number of New People (1)	2.84	<u>37</u>	<u>185</u>	<u>332</u>	<u>480</u>	<u>565</u>	

(1) Based upon the average of all types of units in the proposed development

TOWN OF AVON, INDIANA**Brookstone PUD****Estimated Economic Impact of Estimated Construction Cost**

Total Estimated Construction Cost	<u><u>\$ 45,000,000</u></u>
Estimated Additional Economic Impact from Spinoff	<u><u>\$ 35,513,000</u></u>

TOWN OF AVON, INDIANA

Brookstone PUD

Parcel Listing

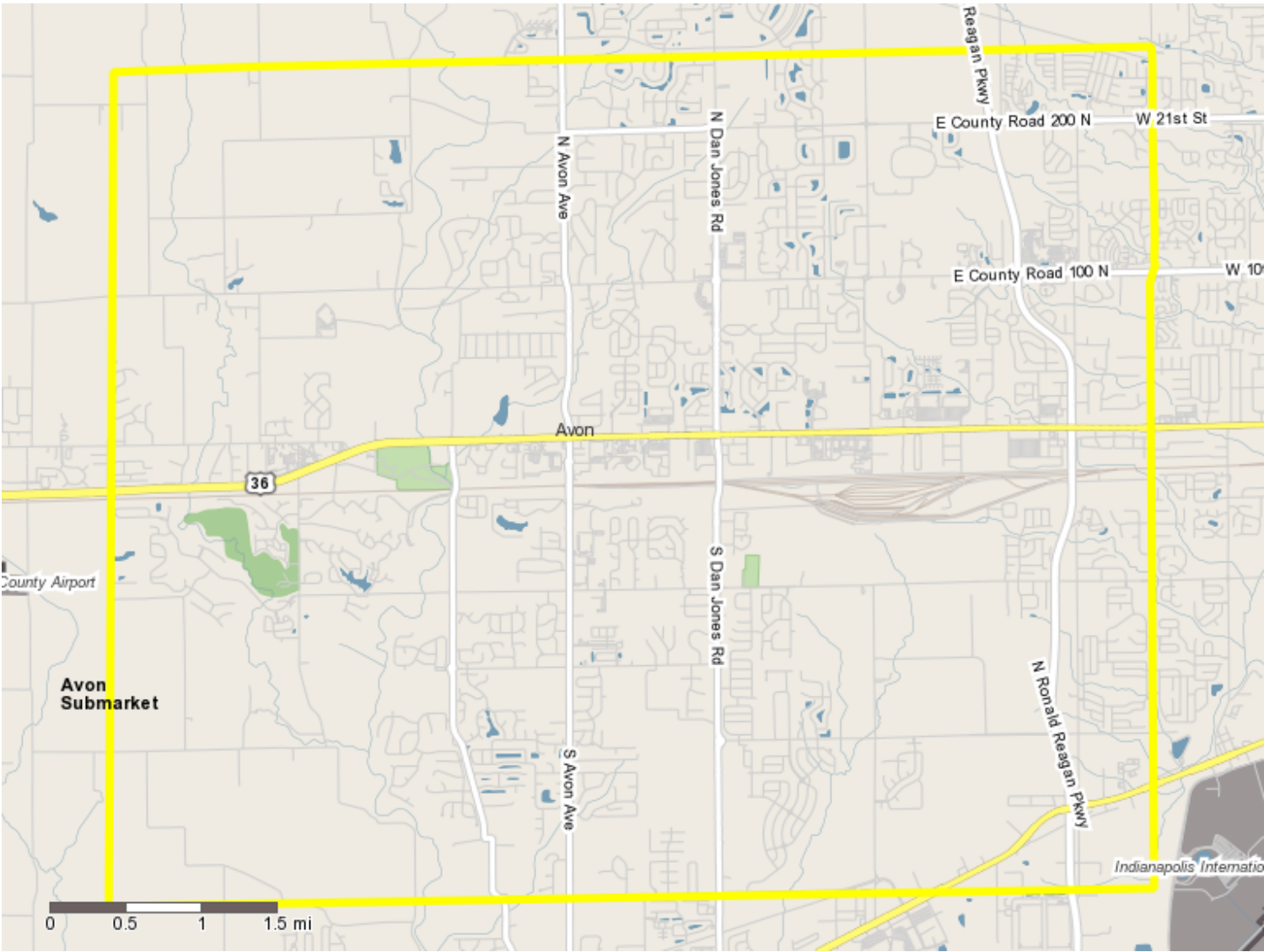
Parcel ID	Net Assessed Value	Number of Acres
32-09-06-200-001.000-022	\$ 160,000	2.50
32-09-06-200-007.000-022	134,300	78.70
	<u>\$ 294,300</u>	<u>81.20</u>

STUDIES & SURVEY'S

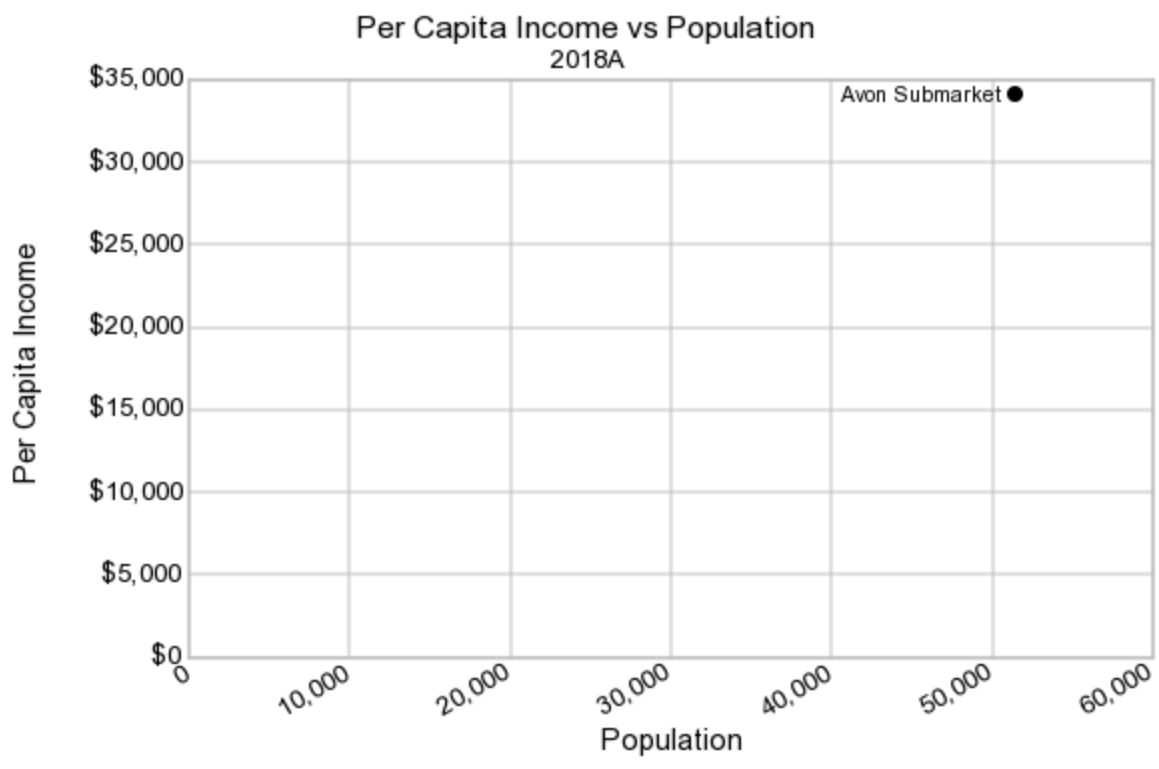
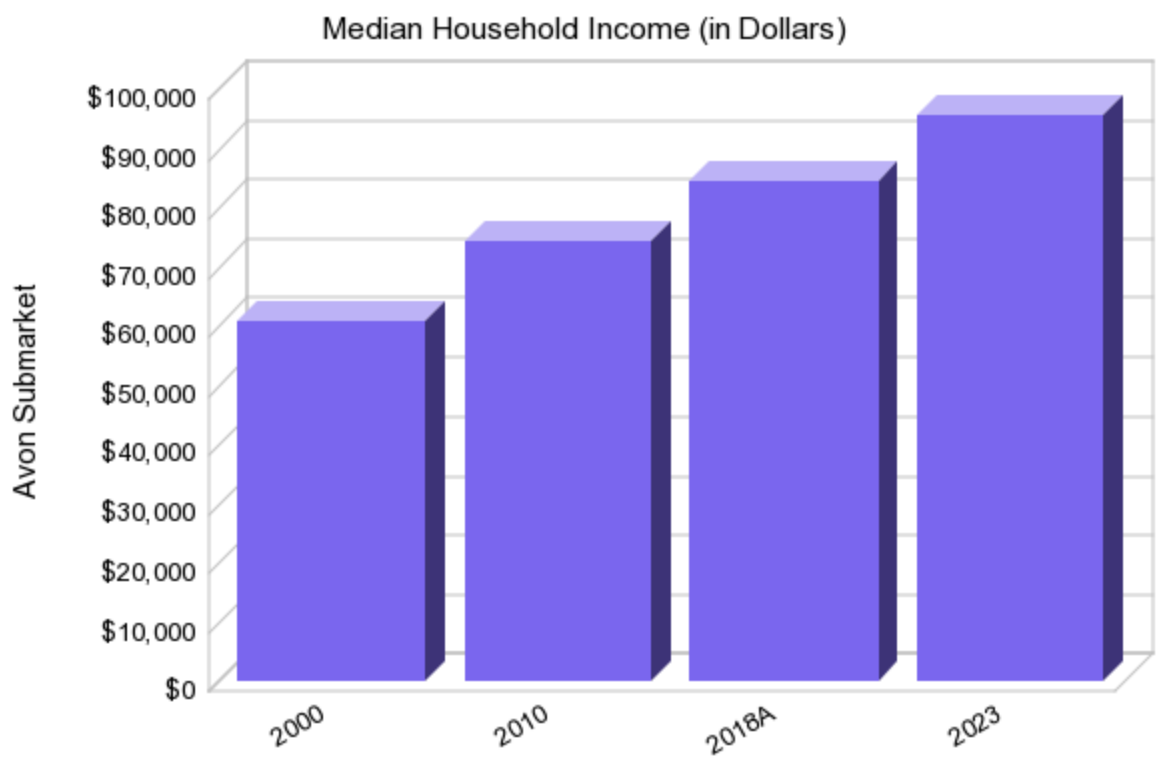
MARKET SURVEY

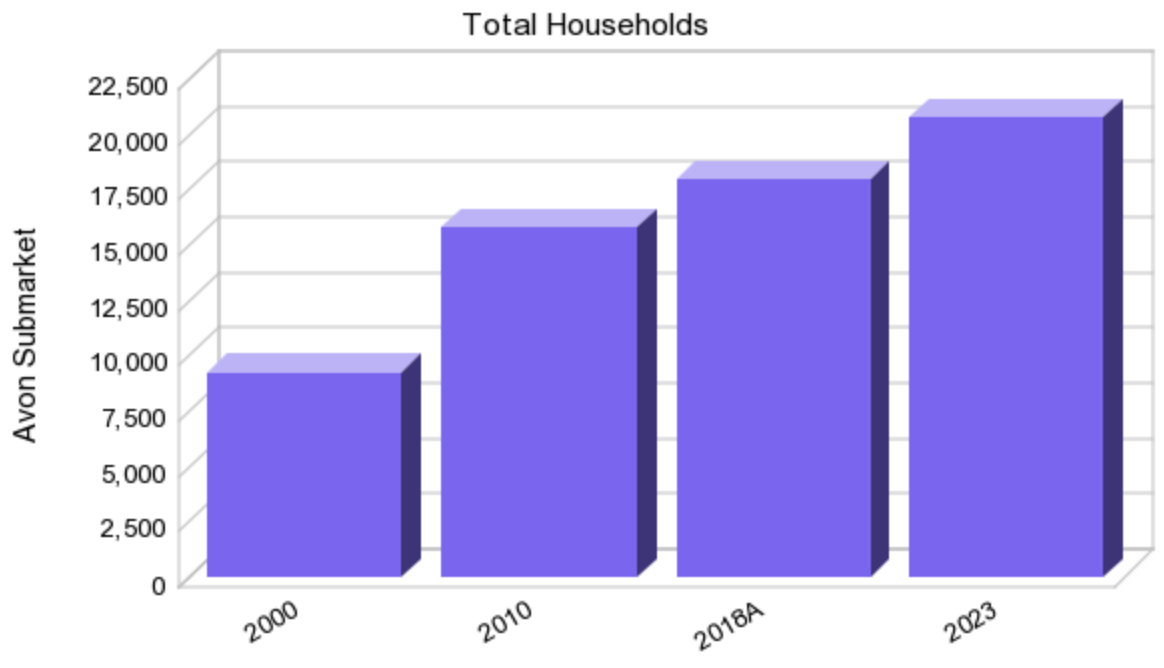
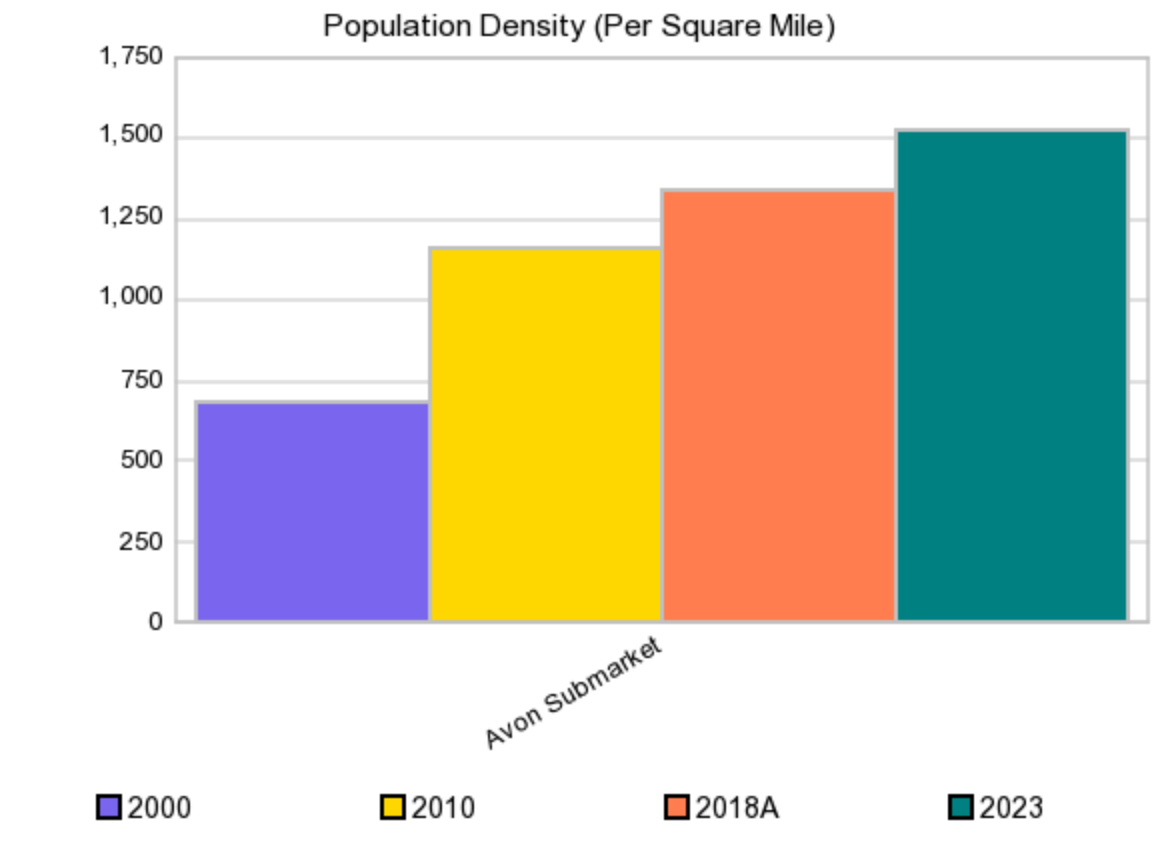
[See Attached]

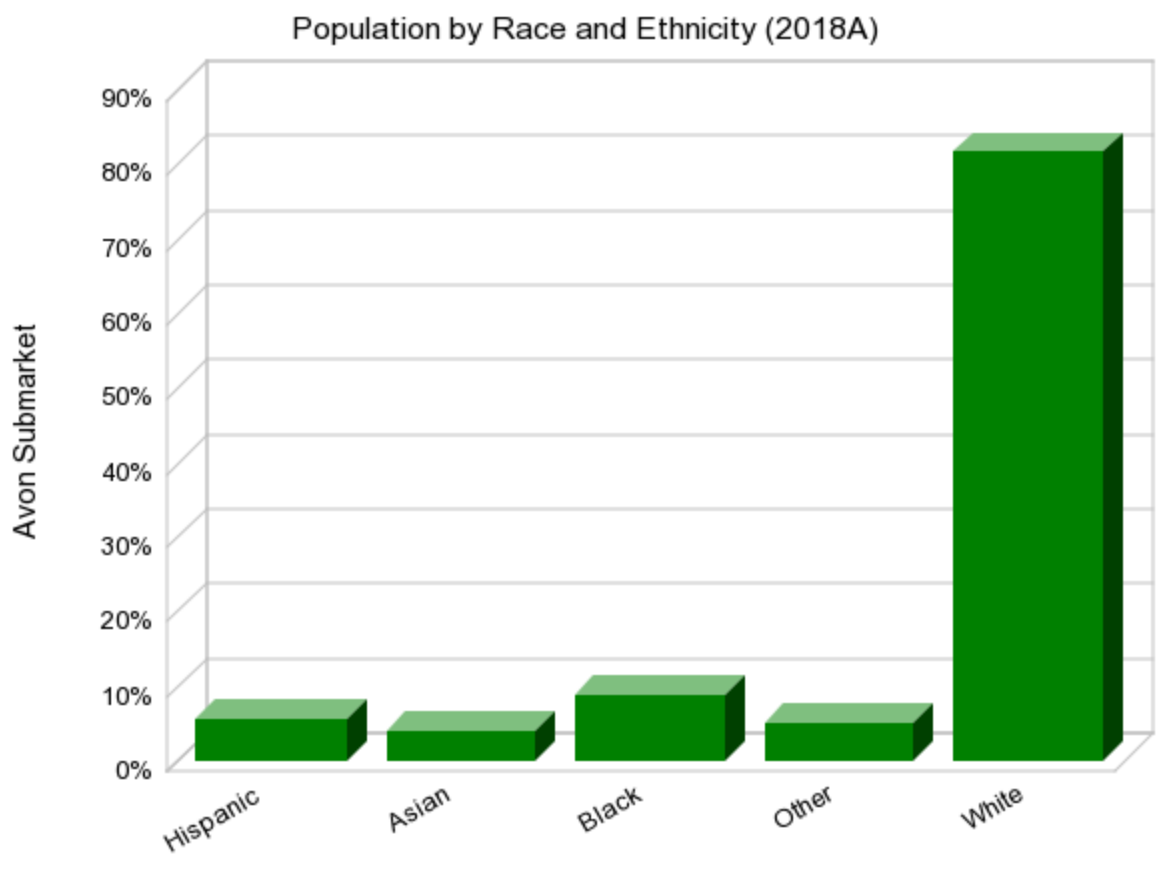
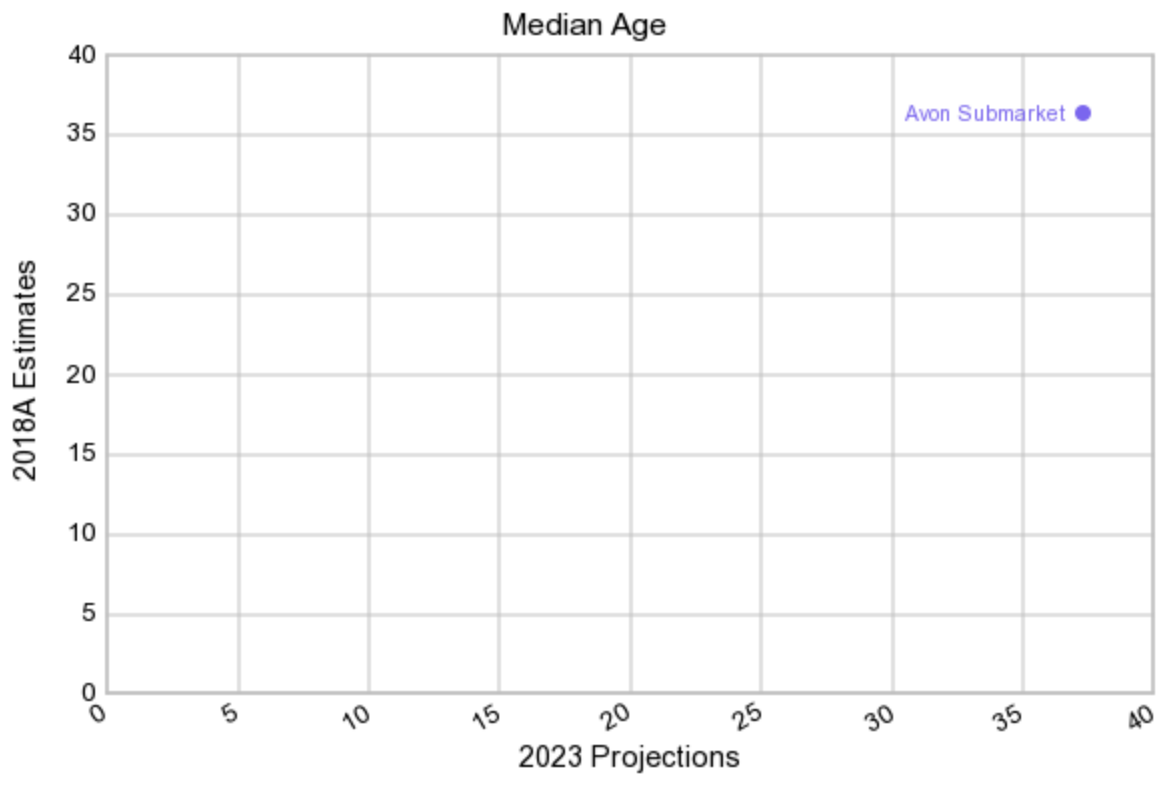
PulteGroup Geography Selection Overview

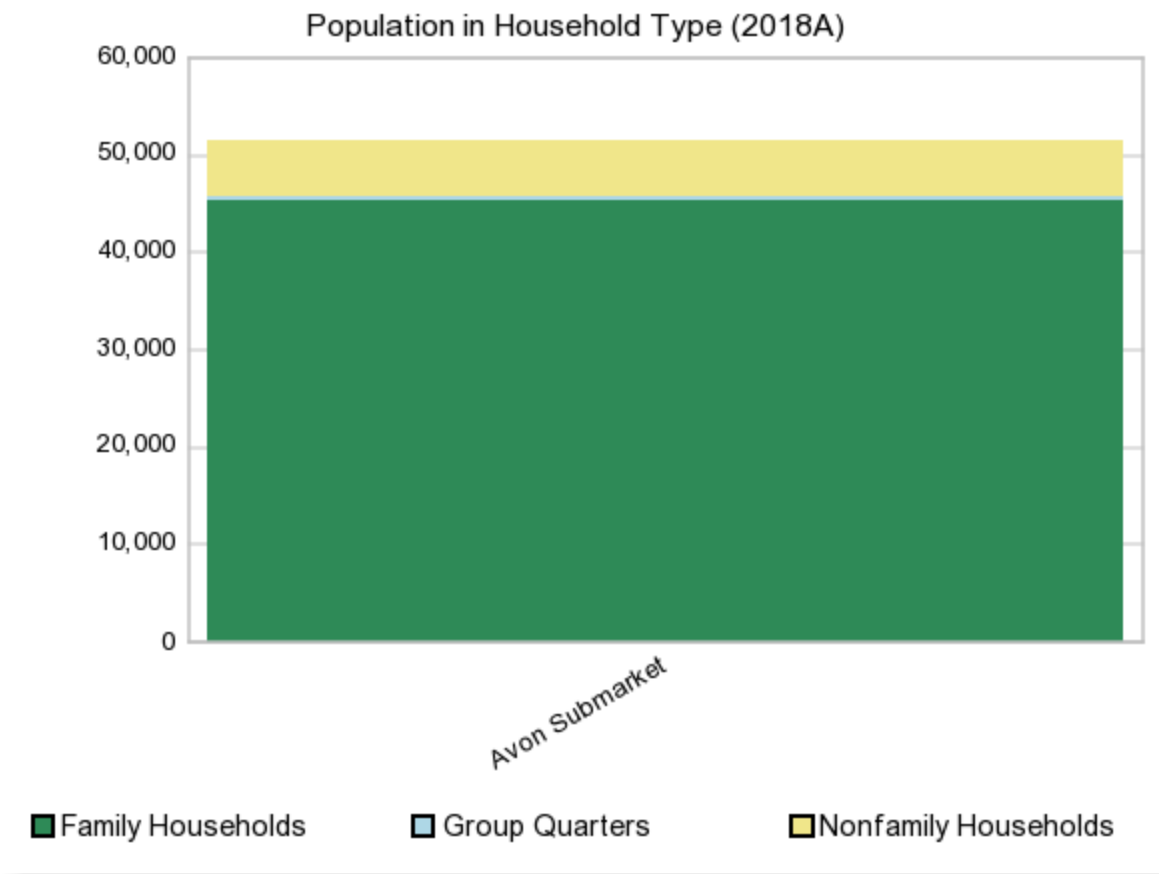


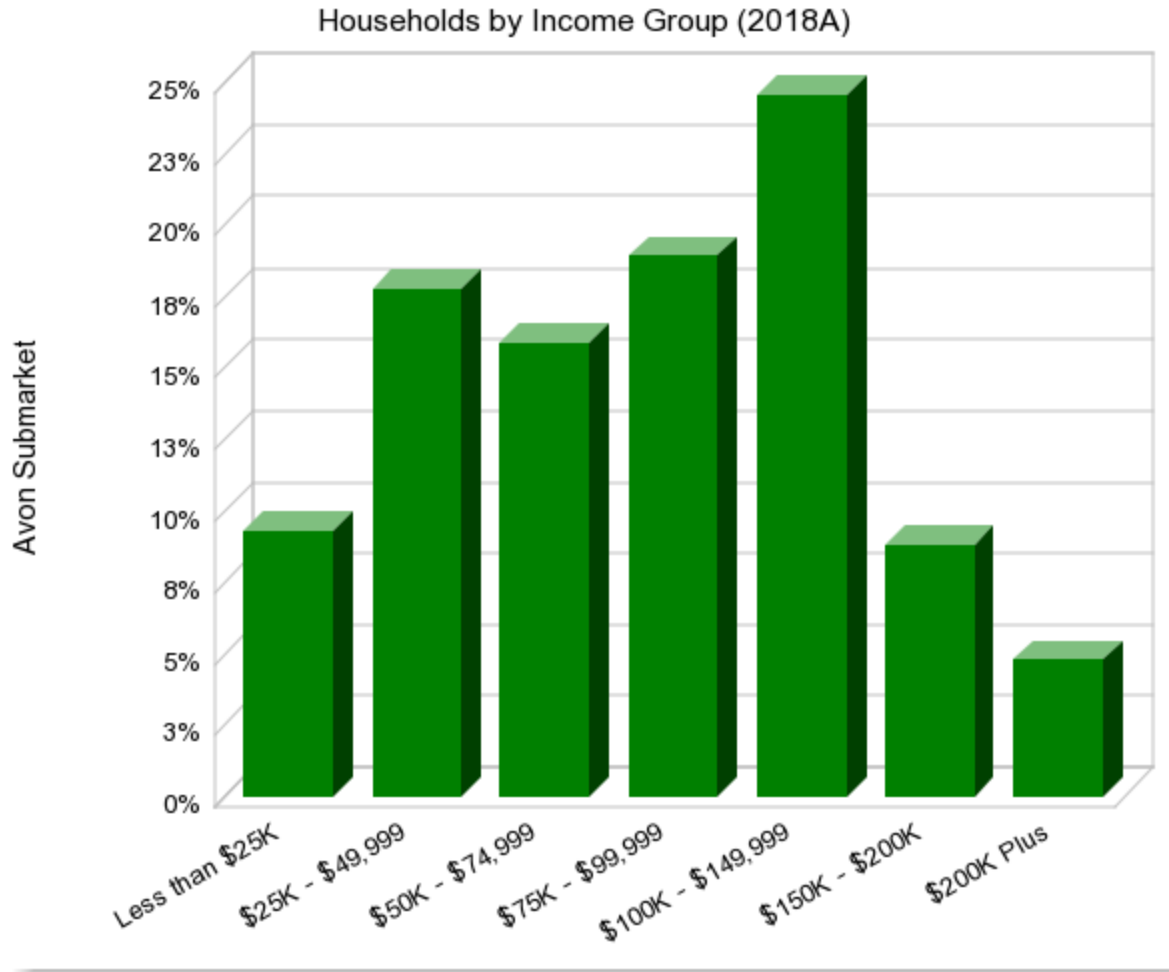
Basic Demographic Comparison Chart for Indianapolis-Carmel-Anderson, IN|Avon Submarket

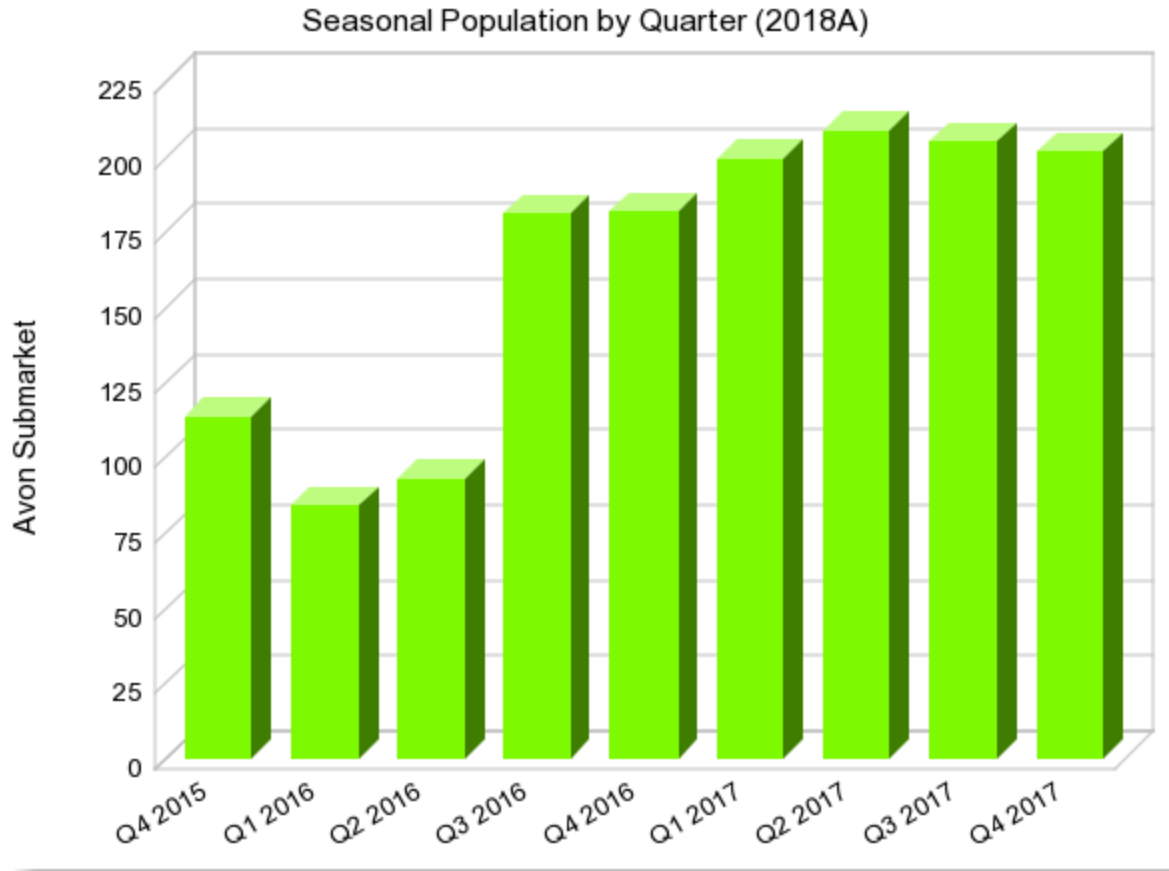












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[Experian Data Methodology](#)

Complete Demographic Comparison Report for Indianapolis-Carmel-Anderson, IN|Avon Submarket

Avon Submarket

2018A Demographics:

Q1 2019 Employees	16,701
Q1 2019 Establishments*	1,444
Total Population	51,513
Total Households	17,983
Female Population	26,495
% Female	51.4%
Male Population	25,018
% Male	48.6%
Population Density (per Sq. Mi.)	1,338.22

Employed Civilian Population 16+

Total	28,010
White Collar	67.9%
Blue Collar	32.1%

Seasonal Population by Quarter:

Q4 2015	114
Q1 2016	84
Q2 2016	93
Q3 2016	181
Q4 2016	182
Q1 2017	199
Q2 2017	209
Q3 2017	205
Q4 2017	202

Age:

Age 0 - 4	6.7%
Age 5 - 14	16.1%
Age 15 - 19	7.1%
Age 20 - 24	5.3%
Age 25 - 34	12.7%
Age 35 - 44	15.1%
Age 45 - 54	13.6%
Age 55 - 64	11.7%

Avon Submarket

Age 65 - 74	7.3%
Age 75 - 84	3.0%
Age 85 +	1.3%
Median Age	36.4

Housing Units

Total Housing Units	18,802
Occupied Housing Units	95.6%
Vacant Housing Units	4.4%

Housing Units by Tenure

Total Households in Tenure	17,983
Owner Occupied Housing Units	14,587
Owner Occupied free and clear	16.4%
Owner Occupied with a mortgage or loan	83.6%
Renter Occupied Housing Units	3,396

Race and Ethnicity

American Indian, Eskimo, Aleut	0.3%
Asian	4.2%
Black	8.8%
Hawaiian/Pacific Islander	0.1%
White	81.7%
Other	1.9%
Multi-Race	3.0%
Hispanic Ethnicity	5.8%
Not of Hispanic Ethnicity	94.2%

Race of Hispanics

Hispanics	3,007
American Indian	1.4%
Asian	2.5%
Black	2.5%
Hawaiian/Pacific Islander	0.2%
White	54.7%
Other	29.4%
Multi-Race	9.5%

Race of Non Hispanics

Non Hispanics	48,506
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Avon Submarket

American Indian	0.2%
Asian	4.3%
Black	9.2%
Hawaiian/Pacific Islander	0.1%
White	83.4%
Other	0.2%
Multi-Race	2.6%

Marital Status:

Age 15 + Population	39,735
Divorced	11.3%
Never Married	24.7%
Now Married	59.9%
Now Married - Separated	1.2%
Widowed	4.1%

Educational Attainment:

Total Population Age 25+	33,346
Grade K - 8	1.1%
Grade 9 - 12	3.9%
High School Graduate	26.0%
Associates Degree	9.7%
Bachelor's Degree	26.6%
Graduate Degree	12.1%
Some College, No Degree	20.2%
No Schooling Completed	0.4%

Household Income:

Income \$ 0 - \$9,999	2.4%
Income \$ 10,000 - \$14,999	1.7%
Income \$ 15,000 - \$24,999	5.2%
Income \$ 25,000 - \$34,999	6.3%
Income \$ 35,000 - \$49,999	11.5%
Income \$ 50,000 - \$74,999	15.9%
Income \$ 75,000 - \$99,999	18.9%
Income \$100,000 - \$124,999	15.7%
Income \$125,000 - \$149,999	8.8%
Income \$150,000 +	13.6%

Average Household Income	\$97,299
Median Household Income	\$84,432

Avon Submarket

Per Capita Income	\$34,058
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Poverty: Status of Families by Family Type/Presence of Children 18 Yrs and Under

Total Families (Family Households)	13,776
Husband-Wife Family, Own Children, Below Poverty	335
Husband-Wife Family, No Own Children, Below Poverty	47
Male Householder, Own Children, Below Poverty	6
Male Householder, No Own Children, Below Poverty	33
Female Householder, Own Children, Below Poverty	214
Female Householder, No Own Children, Below Poverty	79
Husband-Wife Family, Own Children, At/Above Poverty	5,230
Husband-Wife Family, No Own Children, At/Above Poverty	5,535
Male Householder, Own Children, At/Above Poverty	442
Male Householder, No Own Children, At/Above Poverty	339
Female Householder, Own Children, At/Above Poverty	948
Female Householder, No Own Children, At/Above Poverty	566

Poverty: Popn, Ratio of Income to Poverty Level

Total Population for whom poverty status is determined	51,513
Less Than .50	1,173
.50 - .99	2,008
1.00 - 1.24	1,463
1.25 - 1.49	1,668
1.50 - 1.84	2,629
1.85 - 1.99	879
2.00+	41,693

Poverty: Popn by Race
By Race

White, Below Poverty Level	2,179
White, Above Poverty Level	39,902
Black, Below Poverty Level	541
Black, Above Poverty Level	4,015
AI/Alaskan Native, Below Poverty Level	32
AI/Alaskan Native, Above Poverty Level	118
Asian, Below Poverty Level	132
Asian, Above Poverty Level	2,043
NH/PI, Below Poverty Level	17
NH/PI, Above Poverty Level	16
Some Other Race, Below Poverty Level	164
Some Other Race, Above Poverty Level	823

Avon Submarket

2+ Races, Below Poverty Level	115
2+ Races, Above Poverty Level	1,416

Poverty: Popn by Ethnicity
Hispanic/Latino

Hispanic/Latino, Below Poverty Level	389
Hispanic/Latino, Above Poverty Level	2,618
Non-Hispanic/Latino, Below Poverty Level	2,791
Non-Hispanic/Latino, Above Poverty Level	45,715

Non-Hispanic/Latino by Race

White, Below Poverty Level	2,018
White, Above Poverty Level	38,419
Other than White, Below Poverty Level	1,163
Other than White, Above Poverty Level	9,913

Vehicles Available

0 Vehicles Available	2.3%
1 Vehicle Available	25.6%
2+ Vehicles Available	72.2%
Average Vehicles Per Household	2.08
Total Vehicles Available	37,451

2023 Demographics:

Total Population	58,783
Total Households	20,766
Female Population	30,196
% Female	51.4%
Male Population	28,587
% Male	48.6%

Population Density (per Sq. Mi.)	1,527.08
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Employed Civilian Population 16+

Total	32,481
% White Collar	67.9%
% Blue Collar	32.1%

Age:

Avon Submarket

Age 0 - 4	6.7%
Age 5 - 14	15.0%
Age 15 - 19	7.1%
Age 20 - 24	5.5%
Age 25 - 34	12.3%
Age 35 - 44	15.1%
Age 45 - 54	13.0%
Age 55 - 64	11.6%
Age 65 - 74	8.6%
Age 75 - 84	3.8%
Age 85 +	1.3%
Median Age	37.4

Housing Units

Total Housing Units	21,644
Occupied Housing Units	95.9%
Vacant Housing Units	4.1%

Housing Units by Tenure

Total Households in Tenure	20,766
Owner Occupied Housing Units	16,765
Owner Occupied free and clear	16.8%
Owner Occupied with a mortgage or loan	83.2%
Renter Occupied Housing Units	4,001

Race and Ethnicity

American Indian, Eskimo, Aleut	0.3%
Asian	4.7%
Black	9.5%
Hawaiian/Pacific Islander	0.1%
White	79.8%
Other	2.2%
Multi-Race	3.5%

Hispanic Ethnicity	6.7%
Not of Hispanic Ethnicity	93.3%

Race of Hispanics

Hispanics	3,939
American Indian	1.3%
Asian	2.5%

Avon Submarket

Black	2.4%
Hawaiian/Pacific Islander	0.2%
White	54.2%
Other	29.7%
Multi-Race	9.7%

Race of Non Hispanics

Non Hispanics	54,844
American Indian	0.2%
Asian	4.8%
Black	10.0%
Hawaiian/Pacific Islander	0.1%
White	81.6%
Other	0.2%
Multi-Race	3.0%

Marital Status:

Age 15 + Population	46,059
Divorced	11.6%
Never Married	25.2%
Now Married	59.0%
Now Married - Separated	1.3%
Widowed	4.2%

Educational Attainment:

Total Population Age 25+	38,653
Grade K - 9	1.0%
Grade 9 - 12	4.0%
High School Graduate	25.8%
Associates Degree	9.7%
Bachelor's Degree	26.7%
Graduate Degree	12.3%
Some College, No Degree	20.2%
No Schooling Completed	0.4%

Household Income:

Income \$ 0 - \$9,999	1.8%
Income \$ 10,000 - \$14,999	1.5%
Income \$ 15,000 - \$24,999	4.5%
Income \$ 25,000 - \$34,999	5.3%
Income \$ 35,000 - \$49,999	9.9%

Avon Submarket

Income \$ 50,000 - \$74,999	13.1%
Income \$ 75,000 - \$99,999	17.1%
Income \$100,000 - \$124,999	18.6%
Income \$125,000 - \$149,999	11.3%
Income \$150,000 +	17.0%
Average Household Income	\$109,000
Median Household Income	\$95,682
Per Capita Income	\$38,587

Vehicles Available

0 Vehicles Available	2.2%
1 Vehicle Available	25.7%
2+ Vehicles Available	72.0%
Average Vehicles Per Household	2.08
Total Vehicles Available	43,267

2010 Demographics:

Total Population	44,690
Total Households	15,749
Female Population	22,924
% Female	51.3%
Male Population	21,766
% Male	48.7%
Population Density (per Sq. Mi.)	1,160.97

Employed Civilian Population 16+

Total	21,103
% White Collar	67.8%
% Blue Collar	32.2%

Age:

Age 0 - 4	7.8%
Age 5 - 14	16.6%
Age 15 - 19	7.0%
Age 20 - 24	4.5%
Age 25 - 34	13.7%
Age 35 - 44	16.2%
Age 45 - 54	14.6%

Avon Submarket

Age 55 - 64	10.6%
Age 65 - 74	5.3%
Age 75 - 84	2.5%
Age 85 +	1.1%
Median Age	35.2

Housing Units

Total Housing Units	16,645
Occupied Housing Units	94.6%
Vacant Housing Units	5.4%

Housing Units by Tenure

Total Households in Tenure	15,749
Owner Occupied Housing Units	13,170
Owner Occupied free and clear	13.2%
Owner Occupied with a mortgage or loan	86.8%
Renter Occupied Housing Units	2,578

Race and Ethnicity

American Indian, Eskimo, Aleut	0.2%
Asian	3.4%
Black	6.9%
Hawaiian/Pacific Islander	0.1%
White	85.6%
Other	1.6%
Multi-Race	2.2%

Hispanic Ethnicity	4.6%
Not of Hispanic Ethnicity	95.4%

Race of Hispanics

Hispanics	2,076
American Indian	1.3%
Asian	1.3%
Black	1.9%
Hawaiian/Pacific Islander	0.1%
White	57.6%
Other	29.4%
Multi-Race	8.5%

Avon Submarket

Race of Non Hispanics

Non Hispanics	42,614
American Indian	0.2%
Asian	3.5%
Black	7.2%
Hawaiian/Pacific Islander	0.0%
White	87.0%
Other	0.2%
Multi-Race	1.9%

Marital Status:

Age 15 + Population	33,797
Divorced	10.4%
Never Married	23.2%
Now Married	62.2%
Now Married - Separated	0.8%
Widowed	4.2%

Educational Attainment:

Total Population Age 25+	28,637
Grade K - 8	1.1%
Grade 9 - 12	3.6%
High School Graduate	28.8%
Associates Degree	9.7%
Bachelor's Degree	26.0%
Graduate Degree	10.6%
Some College, No Degree	19.9%
No Schooling Completed	0.2%

Household Income:

Income \$ 0 - \$9,999	2.2%
Income \$ 10,000 - \$14,999	2.7%
Income \$ 15,000 - \$24,999	5.8%
Income \$ 25,000 - \$34,999	7.0%
Income \$ 35,000 - \$49,999	12.6%
Income \$ 50,000 - \$74,999	20.2%
Income \$ 75,000 - \$99,999	19.2%
Income \$100,000 - \$124,999	15.0%
Income \$125,000 - \$149,999	7.1%
Income \$150,000 +	8.3%

Avon Submarket

Average Household Income	\$85,638
Median Household Income	\$74,396
Per Capita Income	\$30,270

Vehicles Available

0 Vehicles Available	2.6%
1 Vehicle Available	23.7%
2+ Vehicles Available	73.6%
Average Vehicles Per Household	2.06
Total Vehicles Available	32,513

2000 Census Demographics:

Total Population	26,186
Total Households	9,217
Female Population	13,219
% Female	50.5%
Male Population	12,967
% Male	49.5%

Employed Civilian Population 16+

Total	14,058
% White Collar	65.4%
% Blue Collar	34.6%

Age:

Age 0 - 4	8.5%
Age 5 - 14	17.2%
Age 15 - 19	5.9%
Age 20 - 24	4.6%
Age 25 - 34	14.7%
Age 35 - 44	19.0%
Age 45 - 54	15.1%
Age 55 - 64	8.4%
Age 65 - 74	4.0%
Age 75 - 84	1.8%
Age 85 +	0.8%

Median Age	34.5
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Avon Submarket

Housing Units

Total Housing Units	9,928
Owner Occupied Housing Units	82.7%
Renter Occupied Housing Units	10.2%
Vacant Housing Units	7.2%

Race and Ethnicity

American Indian, Eskimo, Aleut	0.1%
Asian	0.7%
Hawaiian or other Pacific Islander	0.0%
Black	0.6%
White	95.7%
Other	0.6%
Two or More Races	2.3%
Hispanic Ethnicity	1.1%
Not of Hispanic Ethnicity	98.9%

Marital Status:

Age 15 + Population	19,446
Divorced	7.9%
Never Married	18.0%
Now Married	68.7%
Separated	2.4%
Widowed	2.8%

Educational Attainment:

Total Population Age 25+	16,658
Grade K - 8	2.2%
Grade 9 - 11, No diploma	7.5%
High School Graduate	34.8%
Associates Degree	9.7%
Bachelor's Degree	19.0%
Graduate Degree	6.7%
Some College, No Degree	19.7%
No Schooling Completed	0.3%
Public School Enrollment	83.4%
Private School Enrollment	16.6%

Household Income:

Avon Submarket

Income \$ 0 - \$9,999	3.7%
Income \$ 10,000 - \$14,999	2.7%
Income \$ 15,000 - \$24,999	4.8%
Income \$ 25,000 - \$34,999	9.2%
Income \$ 35,000 - \$49,999	15.7%
Income \$ 50,000 - \$74,999	28.3%
Income \$ 75,000 - \$99,999	18.0%
Income \$100,000 - \$124,999	9.9%
Income \$125,000 - \$149,999	4.0%
Income \$150,000 - \$199,999	2.9%
Income \$200,000 or More	0.9%

Average Household Income	\$68,855
Median Household Income	\$60,963
Per Capita Income	\$24,237

Vehicles Available

0 Vehicles Available	1.4%
1 Vehicle Available	19.8%
2 Vehicles Available	54.7%
3+ Vehicles Available	24.1%
Average Vehicles Per Household	1.90
Total Vehicles Available	19,299

Population Trend

2000	26,186
2010	44,690
Change 2000 to 2010	70.7%
2018A	51,513
2023	58,783
Change 2018A to 2023	14.1%

Household Trend

2000	9,217
2010	15,749
Change 2000 to 2010	95.1%
2018A	17,983
2023	20,766
Change 2018A to 2023	15.5%

Avon Submarket

Average Household Size Trend

2000	2.8
2010	2.8
Change 2000 to 2010	-0.2%
2018A	2.8
2023	2.8
Change 2018A to 2023	-0.7%

Median Age Trend

2000	34.5
2010	35.2
2018A	36.4
2023	37.4

Housing Units Trend

Total Housing Units

Change 2000 to 2010	67.7%
Change 2018A to 2023	15.1%

Owner Occupied Housing Units

Change 2000 to 2010	60.5%
Change 2018A to 2023	14.9%

Renter Occupied Housing Units

Change 2000 to 2010	155.1%
Change 2018A to 2023	17.8%

Vacant Housing Units

Change 2000 to 2010	26.1%
Change 2018A to 2023	7.2%

Race and Ethnicity Trend

American Indian, Eskimo, Aleut

Change 2000 to 2010	252.9%
Change 2018A to 2023	19.6%

Asian and Native Hawaiian/Other Pacific Islander

Change 2000 to 2010	694.9%
Change 2018A to 2023	26.1%

Black

Change 2000 to 2010	1,843.8%
Change 2018A to 2023	22.6%

Avon Submarket

White

Change 2000 to 2010	52.7%
Change 2018A to 2023	11.5%

Other

Change 2000 to 2010	382.9%
Change 2018A to 2023	30.5%

Two or More Races

Change 2000 to 2010	67.1%
Change 2018A to 2023	33.2%

Hispanic Ethnicity

Change 2000 to 2010	604.4%
Change 2018A to 2023	31.0%

Not of Hispanic Ethnicity

Change 2000 to 2010	64.6%
Change 2018A to 2023	13.1%

*Report counts include D&B business location records that have a valid telephone, known SIC code and D&B rating as well as exclude cottage industries (businesses that operate from a residence).

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Demographic Trend Comparison for Indianapolis-Carmel-Anderson, IN|Avon Submarket

	Avon Submarket		
	2018A Estimates	2023 Projections	Percent Change
Households	17,983	20,766	15.5%
Population	51,513	58,783	14.1%
Female Population	51.4%	51.4%	-0.1%
Male Population	48.6%	48.6%	0.1%
Household Income			
\$0 - \$9,999	2.4%	1.8%	-25.5%
\$10,000 - \$14,999	1.7%	1.5%	-9.1%
\$15,000 - \$24,999	5.2%	4.5%	-14.7%
\$25,000 - \$34,999	6.3%	5.3%	-15.8%
\$35,000 - \$49,999	11.5%	9.9%	-14.1%
\$50,000 - \$74,999	15.9%	13.1%	-17.5%
\$75,000 - \$99,999	18.9%	17.1%	-9.6%
\$100,000 - \$124,999	15.7%	18.6%	18.7%
\$125,000 - \$149,999	8.8%	11.3%	27.8%
\$150,000 +	13.6%	17.0%	24.6%
Population by Age			
Age 0 - 4	6.7%	6.7%	-0.9%
Age 5 - 14	16.1%	15.0%	-7.2%
Age 15 - 19	7.1%	7.1%	-0.6%
Age 20 - 24	5.3%	5.5%	4.6%
Age 25 - 34	12.7%	12.3%	-3.1%
Age 35 - 44	15.1%	15.1%	-0.1%
Age 45 - 54	13.6%	13.0%	-4.4%
Age 55 - 64	11.7%	11.6%	-1.0%
Age 65 - 74	7.3%	8.6%	17.4%
Age 75 - 84	3.0%	3.8%	27.5%
Age 85 +	1.2%	1.3%	3.3%
Population by Race and Ethnicity			
American Indian, Eskimo, Aleut	0.3%	0.3%	4.8%
Asian, Pacific Islander	4.3%	4.7%	10.5%
Black	8.8%	9.5%	7.4%
White	81.7%	79.8%	-2.3%

Avon Submarket

Other	1.9%	2.2%	0.0%
Two or More Races	3.0%	3.5%	16.7%
Hispanic Ethnicity	5.8%	6.7%	14.8%
Not of Hispanic Ethnicity	94.2%	93.3%	-0.9%

	2000 Census	2010 Census	Percent Change
Households	9,217	15,749	70.9%
Population	26,186	44,690	70.7%
Female Population	50.5%	51.3%	1.6%
Male Population	49.5%	48.7%	-1.6%

Household Income

\$0 - \$9,999	3.7%	2.2%	-39.7%
\$10,000 - \$19,999	5.3%	5.4%	2.9%
\$20,000 - \$29,999	5.9%	6.2%	6.3%
\$30,000 - \$39,999	9.6%	7.5%	-21.8%
\$40,000 - \$49,999	11.7%	8.9%	-23.9%
\$50,000 - \$74,999	28.3%	20.2%	-28.8%
\$75,000 - \$99,999	18.0%	19.2%	6.6%
\$100,000 - \$124,999	9.9%	15.0%	50.7%
\$125,000 - \$149,999	4.0%	7.1%	78.8%
\$150,000 +	3.7%	8.3%	123.7%

Population by Age

Age 0 - 4	8.5%	7.8%	-8.9%
Age 5 - 14	17.2%	16.6%	-3.5%
Age 15 - 19	5.9%	7.0%	19.7%
Age 20 - 24	4.6%	4.5%	-0.8%
Age 25 - 34	14.7%	13.7%	-6.6%
Age 35 - 44	19.0%	16.2%	-14.6%
Age 45 - 54	15.1%	14.6%	-3.0%
Age 55 - 64	8.4%	10.6%	25.5%
Age 65 - 74	4.0%	5.3%	32.5%
Age 75 - 84	1.8%	2.5%	41.2%
Age 85 +	0.8%	1.1%	32.2%

Population by Race and Ethnicity

American Indian, Eskimo, Aleut	0.1%	0.2%	106.8%
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	Avon Submarket		
Asian, Pacific Islander	0.7%	3.4%	365.7%
Black	0.6%	6.9%	1,039.0%
White	95.7%	85.6%	-10.5%
Other	0.5%	1.6%	183.0%
Two or More Races	2.3%	2.2%	-2.1%
Hispanic Ethnicity	1.1%	4.6%	312.8%
Not of Hispanic Ethnicity	98.9%	95.4%	-3.6%

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Household Comparison Report for Indianapolis-Carmel-Anderson, IN|Avon Submarket

Avon Submarket

2018A Households:

2018A Population & Household Overview

Population	51,513
Household Population	51,111
Family Population	88.8%
Non-family Population	11.2%
Group Quarters Population	402
Households	17,983
Family Households	78.9%
Non-family Households	21.1%

2018A Households Type and Presence of Children

Total Households	17,983
Family Hhlds	14,187
One Person, Female Householder	9.9%
One Person, Male Householder	7.0%
Two+ people, Husband-Wife Family, Own Children	30.9%
Two+ people, Husband-Wife Family, No Own Children	31.0%
Non-family Hhlds	1,168
Two+ people, Female Householder	2.7%
Two+ people, Male Householder	3.8%
Other Family Hhlds	2,628
Female Householder, No Own Children	3.6%
Male Householder, No Own Children	2.1%
Female Householder, Own Children	6.5%
Male Householder, Own Children	2.5%

2018A Size of Household

1 Person Households	16.9%
2 Person Households	33.3%
3 Person Households	18.5%
4 Person Households	18.7%
5 Person Households	8.5%

Avon Submarket

6 Person Households	3.0%
7+ Person Households	1.2%

Average Household Size	2.84
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2018A Length of Residence

Average Length of Residence (Years)	11
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2018A Vehicles Available

0 Vehicles Available	2.3%
1 Vehicle Available	25.6%
2+ Vehicles Available	72.2%

Avg Vehicles Per Hhld	2.08
-----------------------	------

2023 Households:
2023 Population & Household Overview

Population	58,783
Household Population	58,373
Family Population	88.5%
Non-family Population	11.5%
Group Quarters Population	410
Households	20,766
Family Households	78.7%
Non-family Households	21.3%

2023 Households Type and Presence of Children

Total Households	20,766
Family Hhlds	16,347
One Person, Female Householder	10.4%
One Person, Male Householder	7.3%
Two+ people, Husband-Wife Family, Own Children	30.4%
Two+ people, Husband-Wife Family, No Own Children	30.6%
Non-family Hhlds	1,395
Two+ people, Female Householder	2.8%
Two+ people, Male Householder	3.9%

Avon Submarket

Other Family Hhlds	3,025
Female Householder, No Own Children	3.6%
Male Householder, No Own Children	2.1%
Female Householder, Own Children	6.5%
Male Householder, Own Children	2.5%

2023 Size of Household

1 Person Households	17.7%
2 Person Households	33.1%
3 Person Households	18.3%
4 Person Households	18.4%
5 Person Households	8.4%
6 Person Households	3.0%
7+ Person Households	1.2%

Average Household Size	2.82
------------------------	------

2023 Vehicles Available

0 Vehicles Available	2.2%
1 Vehicle Available	25.7%
2+ Vehicles Available	72.0%

Avg Vehicles Per Hhld	2.08
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2010 Census Households:
2010 Population & Household Overview

Population	44,690
Household Population	44,341
Family Population	90.0%
Non-family Population	10.0%
Group Quarters Population	349
Households	15,749
Family Households	81.7%
Non-family Households	18.3%

2010 Households Type and Presence of Children

Avon Submarket

Total Households	15,749
Family Hhlds	12,865
One Person, Female Householder	10.1%
One Person, Male Householder	7.9%
Two+ people, Husband-Wife Family, Own Children	31.9%
Two+ people, Husband-Wife Family, No Own Children	31.8%
Non-family Hhlds	709
Two+ people, Female Householder	1.9%
Two+ people, Male Householder	2.6%
Other Family Hhlds	2,175
Female Householder, No Own Children	3.6%
Male Householder, No Own Children	1.5%
Female Householder, Own Children	6.2%
Male Householder, Own Children	2.6%

2010 Size of Household

1 Person Households	18.0%
2 Person Households	33.1%
3 Person Households	18.2%
4 Person Households	18.2%
5 Person Households	8.4%
6 Person Households	3.0%
7+ Person Households	1.3%

Average Household Size	2.81
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2010 Length of Residence

Average Length of Residence (Years)	9
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2010 Vehicles Available

0 Vehicles Available	2.6%
1 Vehicle Available	23.7%
2+ Vehicles Available	73.6%

Avg Vehicles Per Hhld	2.06
-----------------------	------

Avon Submarket

2000 Census Households:
2000 Population & Household Overview

Population	26,186
Household Population	25,944
Family Population	91.6%
Non-family Population	8.7%
Group Quarters Population	162

Households	9,217
Family Households	81.3%
Non-family Households	18.7%

2000 Households by Presence of Children

Total Households with Children	4,058
Family Hhlds with Children	4,058
Married Couple	84.2%
Male Hhldr-No Spouse	6.4%
Female Hhldr-No Spouse	9.5%
Non-family Hhlds with Children	0
Male Hhldr-No Spouse	0.0%
Female Hhldr-No Spouse	0.0%
Total Households w/out Children	5,162
Family Hhlds w/out Children	3,439
Married Couple	61.9%
Male Hhldr-No Spouse	1.3%
Female Hhldr-No Spouse	3.4%
Non-family Hhlds w/out Children (N/A)	424
Male Hhldr-No Spouse	5.3%
Female Hhldr-No Spouse	3.0%

2000 Size of Household

1 Person Households	14.1%
2 Person Households	35.1%
3 Person Households	19.4%

Avon Submarket

4 Person Households	20.9%
5 Person Households	8.0%
6 Person Households	1.8%
7 + Person Households	0.6%

Average Household Size	2.81
------------------------	------

2000 Vehicles Available

0 Vehicles Available	2.3%
1 Vehicle Available	25.6%
2+ Vehicles Available	72.2%

Avg Vehicles Per Hhld	1.90
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Housing Units Comparison Report for Indianapolis-Carmel-Anderson, IN|Avon Submarket

Avon Submarket

2018A Housing Units

Total Housing Units:	18,802
Housing Units: Occupied	95.6%
Housing Units: Vacant	4.4%
Total Households	17,983
Owner-Occupied: Owned free and clear	13.3%
Owner-Occupied: Owned with a mortgage or loan	67.8%
Renter-Occupied	18.9%

Housing Value:

\$ 0 - \$24,999	2.9%
\$ 25,000 - \$34,999	0.4%
\$ 35,000 - \$49,999	0.2%
\$ 50,000 - \$79,999	0.3%
\$ 80,000 - \$99,999	2.0%
\$100,000 - \$149,999	19.4%
\$150,000 - \$199,999	26.5%
\$200,000 - \$299,999	29.6%
\$300,000 - \$399,999	10.7%
\$400,000 - \$499,999	4.4%
\$500,000 - \$749,999	2.6%
\$750,000 - \$999,999	0.6%
\$1,000,000 or more	0.4%

Median Home Value	\$196,554
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Units In Structure:

1, Attached	5.5%
1, Detached	80.5%
2	0.5%
3 - 4	1.5%
5 - 9	2.8%
10 - 19	3.8%
20 - 49	0.4%
50 or more	2.2%
Mobile Home/Trailer	2.8%
Other	0.0%

Avon Submarket

Vehicles Available:

No Vehicles	2.3%
1 Vehicle	25.6%
2 Vehicles	48.6%
3 Vehicles	16.7%
4 Vehicles	5.2%
5+ Vehicles	1.6%

Year Hholder Moved In:

1969 or Earlier	0.9%
1970-1979	1.3%
1980-1989	3.6%
1990-1999	11.7%
2000-2009	28.9%
2010 or Later	53.7%

Year Structure Built:

Before 1939	1.2%
1940 to 1949	0.5%
1950 to 1959	2.2%
1960 to 1969	4.3%
1970 to 1979	6.2%
1980 to 1989	6.4%
1990 to 1999	22.3%
2000 to 2009	23.5%
2010 or later	39.5%

2023 Housing Units

Total Housing Units:	21,644
Housing Units: Occupied	95.9%
Housing Units: Vacant	4.1%
Total Households	20,766
Owner-Occupied: Owned free and clear	67.2%
Owner-Occupied: Owned with a mortgage or loan	13.6%
Renter-Occupied	19.3%

Housing Value:

\$ 0 - \$24,999	2.4%
\$ 25,000 - \$34,999	0.4%
\$ 35,000 - \$49,999	0.2%

Avon Submarket

\$ 50,000 - \$79,999	0.2%
\$ 80,000 - \$99,999	1.4%
\$100,000 - \$149,999	14.4%
\$150,000 - \$199,999	21.3%
\$200,000 - \$299,999	32.6%
\$300,000 - \$399,999	14.4%
\$400,000 - \$499,999	7.1%
\$500,000 - \$749,999	3.8%
\$750,000 - \$999,999	1.2%
\$1,000,000 or more	0.6%

Median Home Value	\$231,800
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Units In Structure:

1, Attached	5.5%
1, Detached	80.6%
2	0.5%
3 - 4	1.6%
5 - 9	2.7%
10 - 19	3.7%
20 - 49	0.4%
50 or more	2.2%
Mobile Home/Trailer	2.8%
Other	0.0%

Vehicles Available:

No Vehicles	2.2%
1 Vehicle	25.7%
2 Vehicles	48.4%
3 Vehicles	16.7%
4 Vehicles	5.2%
5+ Vehicles	1.7%

Year Hholder Moved In:

1969 or Earlier	0.7%
1970-1979	1.1%
1980-1989	3.0%
1990-1999	9.8%
2000-2009	27.2%
2010 or Later	71.4%

Avon Submarket

Year Structure Built:

Before 1939	0.9%
1940 to 1949	0.4%
1950 to 1959	1.9%
1960 to 1969	3.7%
1970 to 1979	5.2%
1980 to 1989	5.5%
1990 to 1999	19.3%
2000 to 2009	23.5%
2010 or later	39.5%

2010 Housing Units

Total Housing Units:	16,645
Housing Units: Occupied	94.6%
Housing Units: Vacant	5.4%
Total Households	15,749
Owner-Occupied: Owned free and clear	72.6%
Owner-Occupied: Owned with a mortgage or loan	11.1%
Renter-Occupied	16.4%

Housing Value:

\$ 0 - \$24,999	3.5%
\$ 25,000 - \$34,999	0.4%
\$ 35,000 - \$49,999	0.2%
\$ 50,000 - \$79,999	0.2%
\$ 80,000 - \$99,999	2.4%
\$100,000 - \$149,999	31.0%
\$150,000 - \$199,999	31.3%
\$200,000 - \$299,999	20.8%
\$300,000 - \$399,999	7.1%
\$400,000 - \$499,999	1.9%
\$500,000 - \$749,999	1.3%
\$750,000 - \$999,999	0.1%
\$1,000,000 or more	0.1%

Median Home Value	\$166,224
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Units In Structure:

1, Attached	4.8%
1, Detached	81.6%

Avon Submarket

2	0.3%
3 - 4	1.0%
5 - 9	2.0%
10 - 19	4.8%
20 - 49	0.2%
50 or more	2.2%
Mobile Home/Trailer	3.1%
Other	0.0%

Vehicles Available:

No Vehicles	2.6%
1 Vehicle	23.7%
2 Vehicles	52.0%
3 Vehicles	15.5%
4 Vehicles	5.1%
5+ Vehicles	1.0%

Year Hholder Moved In:

1969 or Earlier	1.6%
1970-1979	2.2%
1980-1989	5.7%
1990-1999	19.4%
2000-2009	26.0%
2010-CYE	45.1%

Year Structure Built:

Before 1939	1.6%
1940 to 1949	0.6%
1950 to 1959	2.6%
1960 to 1969	5.1%
1970 to 1979	7.5%
1980 to 1989	7.4%
1990 to 1999	25.6%
2000 to 2009	32.9%
2010 or later	16.6%

2000 Housing Units

Total Housing Units:	9,928
Owner-Occupied	82.7%

Avon Submarket

Renter-Occupied	10.2%
Vacant	7.2%

Owner Occupied Home Value:

\$ 0 - \$24,999	7.8%
\$ 25,000 - \$34,999	0.7%
\$ 35,000 - \$49,999	0.8%
\$ 50,000 - \$79,999	2.2%
\$ 80,000 - \$99,999	7.5%
\$100,000 - \$149,999	40.4%
\$150,000 - \$199,999	24.7%
\$200,000 - \$299,999	12.1%
\$300,000 - \$399,999	2.8%
\$400,000 - \$499,999	0.5%
\$500,000 - \$749,999	0.6%
\$750,000 - \$999,999	0.1%
\$1,000,000 or more	0.0%

Median Home Value	\$139,377
-------------------	-----------

Cash Rent:

\$ 0 - \$100	0.0%
\$ 100 - \$199	0.2%
\$ 200 - \$299	6.7%
\$ 300 - \$399	4.4%
\$ 400 - \$499	10.8%
\$ 500 - \$599	12.1%
\$ 600 - \$699	18.2%
\$ 700 - \$799	19.8%
\$ 800 - \$899	8.6%
\$ 900 - \$999	11.1%
\$1,000 - \$1,249	0.6%
\$1,250 - \$1,499	0.0%
\$1,500 - \$1,999	4.2%
\$2,000 or more	0.0%
No Cash Rent	3.3%

Average Contract Rent	\$665
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Units In Structure:

1, Attached	4.8%
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Avon Submarket

1, Detached	80.0%
2	0.8%
3 - 4	0.8%
5 - 9	1.9%
10 - 19	2.4%
20 - 49	0.4%
50 or more	0.1%
Mobile Home/Trailer	8.8%
Other	0.0%

Vehicles Available:

No Vehicles	1.4%
1 Vehicle	19.8%
2 Vehicles	54.7%
3 Vehicles	18.3%
4 Vehicles	3.7%
5+ Vehicles	2.0%

Year Moved In:

1969 or Earlier	4.1%
1970-1979	6.4%
1980-1989	12.7%
1990-1994	18.8%
1995-1998	34.4%
1999-March 2000	23.6%

Year Structure Built:

Before 1939	2.7%
1940 to 1949	1.8%
1950 to 1959	3.8%
1960 to 1969	8.8%
1970 to 1979	18.4%
1980 to 1989	13.5%
1990 to 1994	14.8%
1995 to 1998	23.2%
1999 to March 2000	12.9%

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Income Comparison Report for Indianapolis-Carmel-Anderson, IN|Avon Submarket

Avon Submarket

Total Households	17,983
2018A Household Income:	
\$ 0 - \$9,999	2.4%
\$ 10,000 - \$19,999	4.5%
\$ 20,000 - \$29,999	4.9%
\$ 30,000 - \$39,999	7.5%
\$ 40,000 - \$49,999	7.8%
\$ 50,000 - \$59,999	6.1%
\$ 60,000 - \$74,999	9.8%
\$ 75,000 - \$99,999	18.9%
\$100,000 - \$124,999	15.7%
\$125,000 - \$149,999	8.8%
\$150,000 +	13.6%
Average Household Income	\$97,299
Median Household Income	\$84,432
Per Capita Income	\$34,058

Poverty: Status of Families by Family Type/Presence of Children 18 Yrs and Under

Total Families (Family Households)	13,776
Husband-Wife Family, Own Children, Below Poverty	335
Husband-Wife Family, No Own Children, Below Poverty	47
Male Householder, Own Children, Below Poverty	6
Male Householder, No Own Children, Below Poverty	33
Female Householder, Own Children, Below Poverty	214
Female Householder, No Own Children, Below Poverty	79
Husband-Wife Family, Own Children, At/Above Poverty	5,230
Husband-Wife Family, No Own Children, At/Above Poverty	5,535
Male Householder, Own Children, At/Above Poverty	442
Male Householder, No Own Children, At/Above Poverty	339
Female Householder, Own Children, At/Above Poverty	948
Female Householder, No Own Children, At/Above Poverty	566

Poverty: Popn, Ratio of Income to Poverty Level

Total Population for whom poverty status is determined	51,513
Less Than .50	1,173
.50 - .99	2,008
1.00 - 1.24	1,463

1.25 - 1.49	1,668
1.50 - 1.84	2,629
1.85 - 1.99	879
2.00+	41,693

Poverty: Popn by Race

By Race

White, Below Poverty Level	2,179
White, Above Poverty Level	39,902
Black, Below Poverty Level	541
Black, Above Poverty Level	4,015
AI/Alaskan Native, Below Poverty Level	32
AI/Alaskan Native, Above Poverty Level	118
Asian, Below Poverty Level	132
Asian, Above Poverty Level	2,043
NH/PI, Below Poverty Level	17
NH/PI, Above Poverty Level	16
Some Other Race, Below Poverty Level	164
Some Other Race, Above Poverty Level	823
2+ Races, Below Poverty Level	115
2+ Races, Above Poverty Level	1,416

Poverty: Popn by Ethnicity

Hispanic/Latino

Hispanic/Latino, Below Poverty Level	389
Hispanic/Latino, Above Poverty Level	2,618
Non-Hispanic/Latino, Below Poverty Level	2,791
Non-Hispanic/Latino, Above Poverty Level	45,715

Non-Hispanic/Latino by Race

White, Below Poverty Level	2,018
White, Above Poverty Level	38,419
Other than White, Below Poverty Level	1,163
Other than White, Above Poverty Level	9,913

Avon Submarket

2023 Household Income:

Total Households	20,766
------------------	--------

2023 Household Income:

\$ 0 - \$9,999	1.8%
\$ 10,000 - \$19,999	3.8%
\$ 20,000 - \$29,999	4.3%

\$ 30,000 - \$39,999	6.4%
\$ 40,000 - \$49,999	6.7%
\$ 50,000 - \$59,999	5.0%
\$ 60,000 - \$74,999	8.1%
\$ 75,000 - \$99,999	17.1%
\$100,000 - \$124,999	18.6%
\$125,000 - \$149,999	11.3%
\$150,000 +	17.0%
Average Household Income	\$109,000
Median Household Income	\$95,682
Per Capita Income	\$38,587

Avon Submarket

2010 Census Household Income:

Total Households	15,749
------------------	--------

2010 Census Household Income:

\$ 0 - \$9,999	2.2%
\$ 10,000 - \$19,999	5.4%
\$ 20,000 - \$29,999	6.2%
\$ 30,000 - \$39,999	7.5%
\$ 40,000 - \$49,999	8.9%
\$ 50,000 - \$59,999	8.5%
\$ 60,000 - \$74,999	11.6%
\$ 75,000 - \$99,999	19.2%
\$100,000 - \$124,999	15.0%
\$125,000 - \$149,999	7.1%
\$150,000 +	8.3%

Average Household Income	\$85,638
Median Household Income	\$74,396
Per Capita Income	\$30,270

Avon Submarket

2000 Census Household Income:

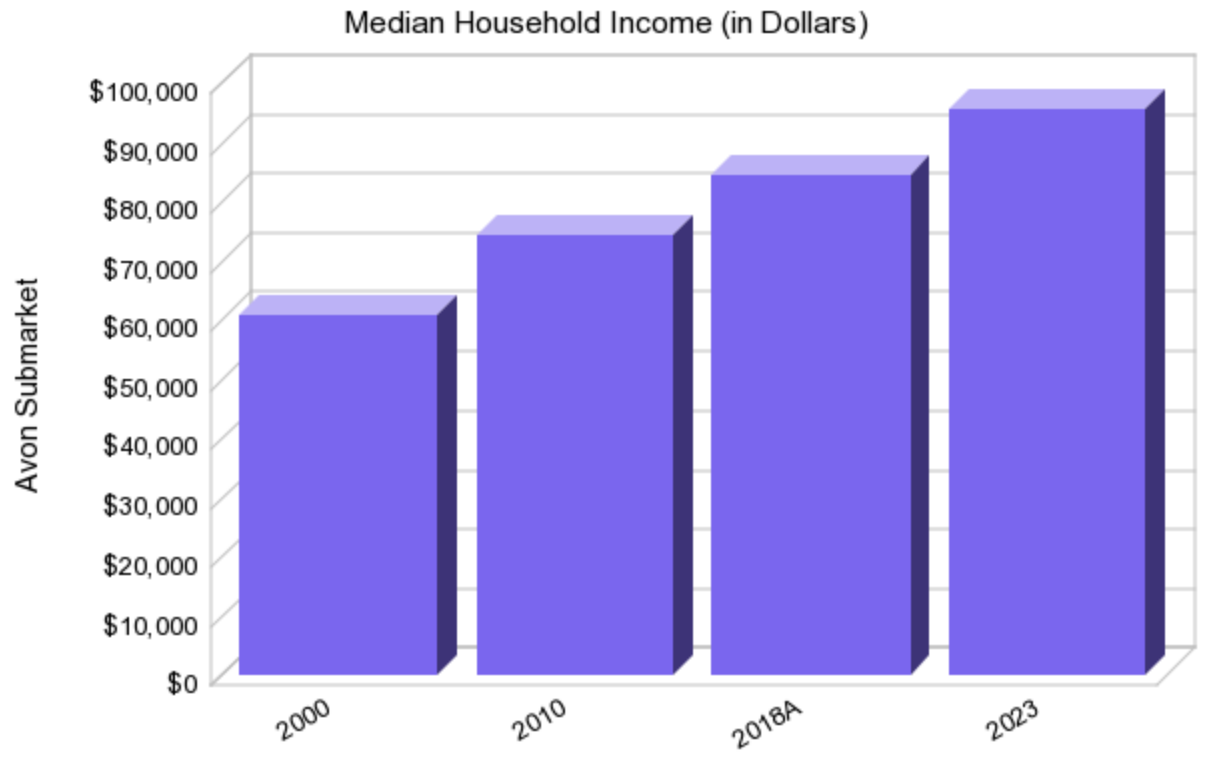
Total Households	9,217
------------------	-------

2000 Census Household Income:

\$ 0 - \$9,999	3.7%
\$ 10,000 - \$19,999	5.3%
\$ 20,000 - \$29,999	5.9%
\$ 30,000 - \$39,999	9.6%
\$ 40,000 - \$49,999	11.7%
\$ 50,000 - \$59,999	12.8%
\$ 60,000 - \$74,999	15.6%
\$ 75,000 - \$99,999	18.0%
\$100,000 - \$124,999	9.9%
\$125,000 - \$149,999	4.0%
\$150,000 +	3.7%

Average Household Income	\$68,855
Median Household Income	\$60,963
Per Capita Income	\$24,237

Avon Submarket



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Income By Age Summary Report for Indianapolis-Carmel-Anderson, IN|Avon Submarket, trade area of Avon Submarket: Submarket

Household Demographics

	2010 Census		2018A Estimate		2023 Projection		% Change 2010 to 2018A	% Change 2018A to 2023
Total Households	15,749		17,983		20,766		14.2%	15.5%
Age 15 - 24	427	2.7%	469	2.6%	520	2.5%	9.7%	10.9%
Age 25 - 34	2,846	18.1%	2,801	15.6%	3,054	14.7%	-1.6%	9.0%
Age 35 - 44	3,783	24.0%	3,955	22.0%	4,468	21.5%	4.6%	13.0%
Age 45 - 54	3,678	23.4%	3,892	21.6%	4,219	20.3%	5.8%	8.4%
Age 55 - 64	2,685	17.0%	3,360	18.7%	3,765	18.1%	25.2%	12.1%
Age 65 - 74	1,408	8.9%	2,245	12.5%	2,987	14.4%	59.4%	33.1%
Age 75 +	921	5.8%	1,261	7.0%	1,753	8.4%	36.8%	39.0%
Median Age of Head of Household	47.1		49.5		50.4			

Income by Age of Head of Householder

Age Less than 25 Years

	2010 Census		2018A Estimate		2023 Projection		% Change 2010 to 2018A	% Change 2018A to 2023
\$ 0 - \$19,999	54	12.6%	33	7.1%	27	5.1%	-38.2%	-19.6%
\$ 20,000 - \$39,999	129	30.3%	139	29.7%	134	25.9%	7.6%	-3.4%
\$ 40,000 - \$59,999	105	24.7%	132	28.1%	136	26.2%	25.1%	3.3%
\$ 60,000 - \$74,999	44	10.3%	55	11.8%	62	12.0%	25.3%	12.5%
\$ 75,000 - \$99,999	40	9.5%	42	9.0%	45	8.7%	3.7%	7.1%
\$100,000 - \$124,999	36	8.3%	46	9.9%	71	13.7%	30.0%	54.2%
\$125,000 - \$149,999	10	2.3%	20	4.3%	31	6.0%	100.0%	55.0%
\$150,000 +	9	2.0%	1	0.2%	13	2.4%	-88.5%	1,172.9%

Age 25 - 34 Years

	2010 Census		2018A Estimate		2023 Projection		% Change 2010 to 2018A	% Change 2018A to 2023
\$ 0 - \$19,999	214	7.5%	210	7.5%	176	5.7%	-1.5%	-16.6%
\$ 20,000 - \$39,999	426	15.0%	346	12.4%	333	10.9%	-18.7%	-3.7%
\$ 40,000 - \$59,999	731	25.7%	590	21.1%	560	18.3%	-19.3%	-5.1%
\$ 60,000 - \$74,999	391	13.7%	316	11.3%	287	9.4%	-19.2%	-9.3%
\$ 75,000 - \$99,999	597	21.0%	616	22.0%	660	21.6%	3.2%	7.2%
\$100,000 - \$124,999	267	9.4%	335	12.0%	497	16.3%	25.6%	48.3%
\$125,000 - \$149,999	95	3.3%	151	5.4%	221	7.2%	58.5%	46.4%

	2010 Census		2018A Estimate		2023 Projection		% Change 2010 to 2018A	% Change 2018A to 2023
\$150,000 +	126	4.4%	237	8.4%	321	10.5%	87.0%	35.6%

Age 35 - 44 Years

	2010 Census		2018A Estimate		2023 Projection		% Change 2010 to 2018A	% Change 2018A to 2023
\$ 0 - \$19,999	48	1.3%	35	0.9%	30	0.7%	-26.7%	-15.6%
\$ 20,000 - \$39,999	308	8.1%	221	5.6%	197	4.4%	-28.2%	-10.6%
\$ 40,000 - \$59,999	473	12.5%	309	7.8%	273	6.1%	-34.7%	-11.6%
\$ 60,000 - \$74,999	423	11.2%	342	8.7%	288	6.4%	-19.1%	-16.0%
\$ 75,000 - \$99,999	968	25.6%	929	23.5%	857	19.2%	-4.0%	-7.8%
\$100,000 - \$124,999	786	20.8%	870	22.0%	1,119	25.0%	10.7%	28.6%
\$125,000 - \$149,999	267	7.1%	353	8.9%	498	11.1%	32.3%	40.9%
\$150,000 +	510	13.5%	895	22.6%	1,207	27.0%	75.4%	34.8%

Age 45 - 54 Years

	2010 Census		2018A Estimate		2023 Projection		% Change 2010 to 2018A	% Change 2018A to 2023
\$ 0 - \$19,999	186	5.0%	189	4.9%	161	3.8%	1.8%	-15.0%
\$ 20,000 - \$39,999	234	6.3%	222	5.7%	190	4.5%	-4.8%	-14.7%
\$ 40,000 - \$59,999	515	14.0%	411	10.6%	337	8.0%	-20.1%	-18.1%
\$ 60,000 - \$74,999	364	9.9%	282	7.3%	216	5.1%	-22.5%	-23.4%
\$ 75,000 - \$99,999	796	21.6%	800	20.6%	721	17.1%	0.5%	-9.9%
\$100,000 - \$124,999	811	22.1%	890	22.9%	1,101	26.1%	9.7%	23.8%
\$125,000 - \$149,999	385	10.5%	476	12.2%	648	15.4%	23.7%	36.3%
\$150,000 +	388	10.6%	622	16.0%	845	20.0%	60.2%	35.9%

Age 55 - 64 Years

	2010 Census		2018A Estimate		2023 Projection		% Change 2010 to 2018A	% Change 2018A to 2023
\$ 0 - \$19,999	286	11.0%	302	9.1%	238	6.3%	5.5%	-21.2%
\$ 20,000 - \$39,999	429	16.0%	476	14.2%	440	11.7%	10.9%	-7.5%
\$ 40,000 - \$59,999	496	18.0%	492	14.5%	431	11.5%	-0.8%	-12.4%
\$ 60,000 - \$74,999	345	12.9%	351	10.5%	296	7.8%	1.6%	-15.6%
\$ 75,000 - \$99,999	371	13.9%	497	14.8%	514	13.7%	33.9%	3.4%
\$100,000 - \$124,999	323	12.0%	460	13.7%	660	17.5%	42.4%	43.5%
\$125,000 - \$149,999	314	11.7%	476	14.2%	719	19.1%	51.5%	50.9%
\$150,000 +	120	4.5%	307	9.1%	468	12.5%	156.6%	52.4%

Age 65 - 74 Years

	2010 Census		2018A Estimate		2023 Projection		% Change 2010 to 2018A	% Change 2018A to 2023
\$ 0 - \$19,999	157	10.7%	208	8.7%	220	7.0%	32.4%	5.6%
\$ 20,000 - \$39,999	340	24.9%	446	20.9%	472	16.3%	31.3%	5.8%
\$ 40,000 - \$59,999	250	17.8%	324	14.4%	379	12.6%	29.5%	16.9%
\$ 60,000 - \$74,999	248	19.3%	387	19.0%	496	17.9%	56.1%	28.2%
\$ 75,000 - \$99,999	225	14.4%	460	19.1%	646	20.6%	104.7%	40.4%
\$100,000 - \$124,999	38	3.5%	74	4.2%	167	6.7%	94.4%	126.1%
\$125,000 - \$149,999	22	1.8%	53	2.5%	110	3.9%	140.0%	107.5%
\$150,000 +	128	7.6%	292	11.2%	497	15.0%	128.6%	70.3%

Age 75 Plus Years

	2010 Census		2018A Estimate		2023 Projection		% Change 2010 to 2018A	% Change 2018A to 2023
\$ 0 - \$19,999	257	27.9%	258	20.7%	314	18.2%	0.4%	21.7%
\$ 20,000 - \$39,999	300	32.9%	380	30.3%	447	25.9%	26.8%	17.6%
\$ 40,000 - \$59,999	177	18.5%	236	18.0%	308	16.7%	33.7%	30.5%
\$ 60,000 - \$74,999	17	1.8%	26	1.9%	30	1.5%	52.9%	15.4%
\$ 75,000 - \$99,999	24	2.4%	61	4.3%	114	5.3%	160.3%	85.5%
\$100,000 - \$124,999	96	11.1%	147	12.6%	252	15.7%	53.6%	71.5%
\$125,000 - \$149,999	23	2.6%	56	4.6%	113	6.6%	143.3%	102.2%
\$150,000 +	28	2.9%	96	7.7%	174	10.1%	238.9%	81.9%

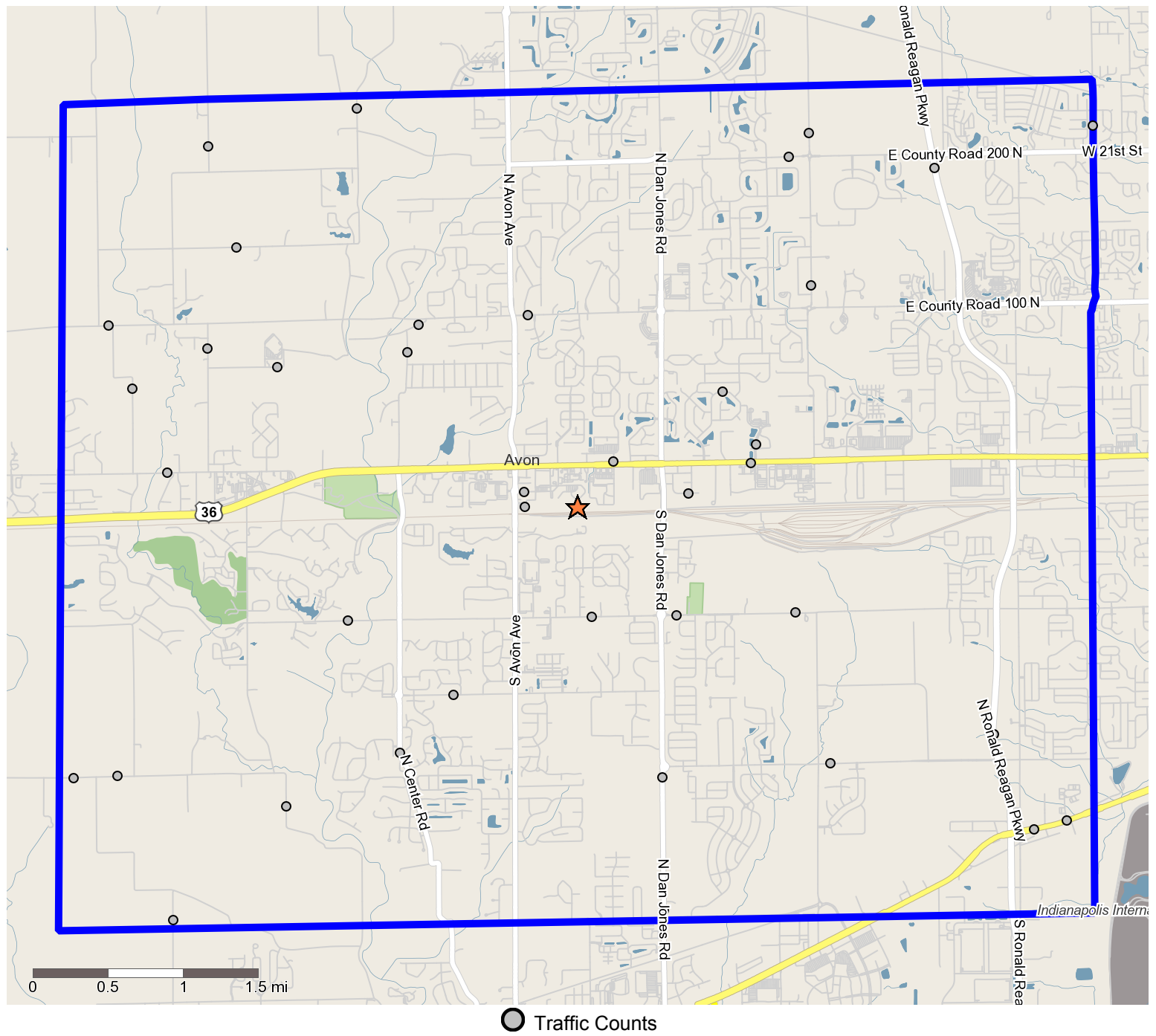
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Map of traffic counts within the selected trade area(s) for Indianapolis-Carmel-Anderson, IN|Avon Submarket:
Submarket



List of traffic counts within the selected trade area(s) for Indianapolis-Carmel-Anderson, IN|Avon Submarket:
Submarket

Pulte Geography	Street	Cross Street	Type of Count	Year	Traffic Count
Indianapolis-Carmel-Anderson, IN Avon Submarket	School Rd	State Rd 267	ADT	2013	1,038
Indianapolis-Carmel-Anderson, IN Avon Submarket	E Co Rd 25 S		ADT	2013	891
Indianapolis-Carmel-Anderson, IN Avon Submarket	Beechwood Dr	Beechwood Centre Rd	ADT	2011	3,207
Indianapolis-Carmel-Anderson, IN Avon Submarket	E Co Rd 100 S	Weeping Way Ln	ADT	2008	6,941
Indianapolis-Carmel-Anderson, IN Avon Submarket	Kingston St	Dover St	ADT	2011	243
Indianapolis-Carmel-Anderson, IN Avon Submarket	E Co Rd 100 S	S Dan Jones Rd	ADT	2011	9,545
Indianapolis-Carmel-Anderson, IN Avon Submarket	State Rd 267	Parke Dr	ADT	2013	11,011
Indianapolis-Carmel-Anderson, IN Avon Submarket	Rockville Rd	Casco Dr	AADT	2010	34,540
Indianapolis-Carmel-Anderson, IN Avon Submarket	Austin Dr	Bayshore Ln	ADT	2007	268
Indianapolis-Carmel-Anderson, IN Avon Submarket			ADT	2013	2,433
Indianapolis-Carmel-Anderson, IN Avon Submarket	E Co Rd 100 N	Sheffield Dr	AADT	2018	8,912
Indianapolis-Carmel-Anderson, IN Avon Submarket	W Jessup Rd	Runningbrook Ln	AADT	2018	2,969
Indianapolis-Carmel-Anderson, IN Avon Submarket	N Co Rd 625 E	Juliet Dr	AADT	2018	1,258
Indianapolis-Carmel-Anderson, IN Avon Submarket	Co Rd 91 N	E Co Rd 100 N	AADT	2018	1,869
Indianapolis-Carmel-Anderson, IN Avon Submarket	E Co Rd 100 S	S Co Rd 900 E	ADT	2011	9,059
Indianapolis-Carmel-Anderson, IN Avon Submarket	E Co Rd 100 S	Ridge Hill Way	AADT	2014	4,227
Indianapolis-Carmel-Anderson, IN Avon Submarket	S Dan Jones Rd	E Co Rd 200 S	ADT	2011	12,726
Indianapolis-Carmel-Anderson, IN Avon Submarket	Center Rd	Ginger Dr	ADT	2012	4,957
Indianapolis-Carmel-Anderson, IN Avon Submarket	Griswold Rd N	11 St	AADT	2018	2,506
Indianapolis-Carmel-Anderson, IN Avon Submarket	E Co Rd 75 N	N Co Rd 500 E	ADT	2011	514
Indianapolis-Carmel-Anderson, IN Avon Submarket	E Co Rd 200 S	S Co Rd 900 E	ADT	2006	2,038
Indianapolis-Carmel-Anderson, IN Avon Submarket	N Co Rd 500 E	Valley Vista Dr	ADT	2012	2,266
Indianapolis-Carmel-Anderson, IN Avon Submarket	Co Rd 200 N	Griswold Rd N	ADT	2012	7,244
Indianapolis-Carmel-Anderson, IN Avon Submarket	E Main St	Abner Creek Pkwy	ADT	2014	6,969
Indianapolis-Carmel-Anderson, IN Avon Submarket	S Dan Jones Rd	Township Line Rd	ADT	2013	11,772
Indianapolis-Carmel-Anderson, IN Avon Submarket	Vestal Rd	E Co Rd 200 S	AADT	2017	1,712
Indianapolis-Carmel-Anderson, IN Avon Submarket	Co Rd 100 N	Yates Ln	AADT	2017	15,551
Indianapolis-Carmel-Anderson, IN Avon Submarket	E Co Rd 150 N	Co Rd 475 E	ADT	2014	183
Indianapolis-Carmel-Anderson, IN Avon Submarket	Griswold Rd N	Cr 900 E	ADT	2004	2,905
Indianapolis-Carmel-Anderson, IN Avon Submarket	W 10th St	West Dr	AADT	2017	15,531
Indianapolis-Carmel-Anderson, IN Avon Submarket	N Co Rd 600 E	Co Rd 600 E	ADT	2014	445
Indianapolis-Carmel-Anderson, IN Avon Submarket	N Co Rd 450 E	E Co Rd 100 N	ADT	2002	260
Indianapolis-Carmel-Anderson, IN Avon Submarket			ADT	2013	15,436
Indianapolis-Carmel-Anderson, IN Avon Submarket	Ronald Reagan Pkwy	Co Rd 200 N	ADT	2011	8,965
Indianapolis-Carmel-Anderson, IN Avon Submarket	E Co Rd 100 N	N Co Rd 450 E	ADT	2014	3,449
Indianapolis-Carmel-Anderson, IN Avon Submarket	Ronald Reagan Pkwy	Columbia Rd	ADT	2013	17,689
Indianapolis-Carmel-Anderson, IN Avon Submarket	N Co Rd 500 E	E Co Rd 200 N	ADT	2012	990
Indianapolis-Carmel-Anderson, IN Avon Submarket	E Co Rd 200 S	S Co Rd 450 E	ADT	2012	941
Indianapolis-Carmel-Anderson, IN Avon Submarket	E Main St	Earlham Ln	AADT	2014	29,301
Indianapolis-Carmel-Anderson, IN Avon Submarket	E Co Rd 200 S	Gibbs Rd	ADT	2012	821
Indianapolis-Carmel-Anderson, IN Avon Submarket	Liberty Meadows Rd	Gibbs Rd	ADT	2014	301
Indianapolis-Carmel-Anderson, IN Avon Submarket	E Main St	Old National Rd	AADT	2016	30,943
Indianapolis-Carmel-Anderson, IN Avon Submarket	N Raceway Rd	Whitecliff Way	AADT	2014	11,920

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PulteGroup Consumer Portrait Report for Indianapolis-Carmel-Anderson, IN|Avon Submarket

Buyer Group	Households	Population	Owner / Renter	HH Net Worth	Adults in HH	Children in HH	Dwelling Type	Length of Residence	Purchase Price	Mosaic Cluster 1	% of Buyer Group	Mosaic Cluster 2	% of Buyer Group	Mosaic Cluster 3	% of Buyer Group
Millennial/Low Income	803	1,510	Homeowner	\$120,947	1.4	1.5	Single Family	5.7	\$210,222	Fast Track Couples	21.2%	Digital Dependents	8.3%	Family Troopers	5.8%
Millennial/Middle Income	1,339	2,719	Homeowner	\$133,021	1.6	1.5	Single Family	5.7	\$166,976	Fast Track Couples	26.1%	Digital Dependents	8.7%	Families Matter Most	3.4%
Millennial/Upper Middle Income	1,385	4,109	Homeowner	\$137,209	1.7	1.6	Single Family	6.8	\$215,975	Fast Track Couples	19.8%	Digital Dependents	3.1%	Families Matter Most	2.2%
Millennial/High Income	961	2,354	Homeowner	\$141,377	1.4	1.4	Single Family	4.5	\$250,879	Fast Track Couples	23.7%	Digital Dependents	4.2%	Family Troopers	1.8%
Millennial/Ultra High Income	138	274	Homeowner	\$138,815	1.4	1.2	Single Family	4.6	\$221,893	Fast Track Couples	28.1%	Digital Dependents	6.6%	Family Troopers	4.4%
Gen X/Low Income	769	1,266	Homeowner	\$139,158	2.0	1.9	Single Family	8.8	\$211,151	Cul de Sac Diversity	6.7%	Boomers and Boomerangs	6.2%	Babies and Bliss	4.8%
Gen X/Middle Income	1,497	2,552	Homeowner	\$141,729	2.0	2.0	Single Family	9.3	\$167,532	Cul de Sac Diversity	7.6%	Babies and Bliss	6.5%	Boomers and Boomerangs	6.0%
Gen X/Upper Middle Income	2,719	5,265	Homeowner	\$169,710	2.4	2.2	Single Family	10.7	\$211,785	Babies and Bliss	12.7%	Boomers and Boomerangs	5.4%	Cul de Sac Diversity	4.3%
Gen X/High Income	1,378	2,430	Homeowner	\$202,819	2.2	2.2	Single Family	8.8	\$271,969	Babies and Bliss	7.0%	Picture Perfect Families	6.4%	Couples with Clout	6.3%
Gen X/Ultra High Income	148	236	Homeowner	\$285,938	2.0	2.2	Single Family	7.6	\$337,000	Kids and Cabernet	11.4%	Generational Soup	7.6%	Babies and Bliss	5.5%
Boomer and Silent/Low Income	1,105	1,757	Homeowner	\$171,490	2.0	1.6	Single Family	11.7	\$181,108	Reaping Rewards	14.5%	Aging in Place	6.8%	Aging of Aquarius	6.3%
Boomer and Silent/Middle Income	2,166	3,815	Homeowner	\$179,463	2.2	1.4	Single Family	15.6	\$147,634	Aging in Place	11.4%	Reaping Rewards	10.7%	Aging of Aquarius	7.1%
Boomer and Silent/Upper Middle Income	1,857	3,775	Homeowner	\$198,555	2.8	1.5	Single Family	15.3	\$184,414	Aging of Aquarius	14.7%	Boomers and Boomerangs	10.2%	Aging in Place	4.6%
Boomer and Silent/High Income	1,081	1,899	Homeowner	\$228,352	2.5	1.4	Single Family	13.0	\$234,164	Aging of Aquarius	15.2%	Boomers and Boomerangs	7.3%	Platinum Prosperity	5.7%
Boomer and Silent/Ultra High Income	141	241	Homeowner	\$324,302	2.1	1.4	Single Family	10.6	\$252,113	Platinum Prosperity	10.8%	Reaping Rewards	9.1%	Aging of Aquarius	6.6%

Buyer Groups

Age Ranges	Income Ranges
Millennial (15-34)	Low Income (\$0k-\$35k)
Gen X (35-54)	Middle Income (\$35k-\$75k)
Boomer and Silent (55+)	Upper Middle Income (\$75k-\$125k)
	High Income (\$125k-\$250k)
	Ultra High Income (\$250k+)

PulteGroup Land Triage Report - Resale Transactions

Indianapolis-Carmel-Anderson, IN|Avon Submarket

Pulte Submarket	Sale Date	Address	City	State	ZIP	Sale Price	SF	Age Head of HH	Income	NetMosaic Worth	Cluster	Property Type	Beds	Baths	Lat	Lon	Type	YearBuilt
AVON	2019-02-13	2147 Cinnamon Ct	Plainfield	IN	46168	2411432	878	54	\$150,000 - \$174,999	\$189,000	Generational Soup	Detached	4	3	39.731425999999999	-86.401285999999999	- Regular Resale	2001
AVON	2019-02-14	1825 Ballyganner Dr	Avon	IN	46123	3230003	865	35	\$150,000 - \$174,999	\$221,000	Kids and Cabernet	Detached	3	4	39.789963	-86.377998000000005	- Regular Resale	2006
AVON	2019-02-14	104 Davis Ct	Avon	IN	46123	1880641	1,844	39	\$50,000 - \$74,999	\$186,000	Sports Utility Families	Detached	3	2	39.763565	-86.436546000000007	- Regular Resale	1996
AVON	2019-02-15	1409 Castleford Ln	Indianapolis	IN	46234	1856251	1,816	36	\$100,000 - \$124,999	\$122,000	Babies and Bliss	Detached	3	3	39.784379000000001	-86.339349999999996	- Regular Resale	2002
AVON	2019-02-15	1639 Salina Dr	Avon	IN	46123	2082572	890	53	\$25,000 - \$34,999	\$258,000	Boomers and Boomerangs	Detached	4	3	39.738841000000001	-86.395191999999994	- Regular Resale	2003
AVON	2019-02-15	2361 Amberleigh Dr	Plainfield	IN	46168	1453121	1,465	42	\$35,000 - \$49,999	\$137,000	Cul de Sac Diversity	Detached	3	3	39.728541	-86.355130000000003	- Regular Resale	2001
AVON	2019-02-15	1246 Valley Forge Dr	Indianapolis	IN	46234	1603131	1,110	43	\$35,000 - \$49,999	\$95,000	Fast Track Couples	Detached	3	2	39.782176999999997	-86.328379999999996	- Regular Resale	1999
AVON	2019-02-15	7367 Woodside Dr	Avon	IN	46123	1465561	1,110		Unknown		Unclassified	Detached	3	2	39.768681000000001	-86.392887000000002	- Regular Resale	1997
AVON	2019-02-19	6908 Maywood Cir	Avon	IN	46123	1715642	2,660	34	\$100,000 - \$124,999	\$172,000	Couples with Clout	Detached	3	3	39.753028	-86.401330999999999	- Regular Resale	2003
AVON	2019-02-20	2560 Auburn Ct	Plainfield	IN	46168	1920001	1,690	70	\$50,000 - \$74,999	\$255,000	Generational Soup	Detached	3	2	39.725991	-86.403272999999999	- Regular Resale	2009
AVON	2019-02-20	844 Flying Sun Dr	Avon	IN	46123	2373753	1,186		Unknown		Unclassified	Detached	4	3	39.751213	-86.345291000000003	- Regular Resale	2005
AVON	2019-02-21	4039 Dovetree Dr	Danville	IN	46122	2671452	840	35	\$75,000 - \$99,999	\$207,000	Families Matter Most	Detached		3	39.764316999999998	-86.455894000000001	- Regular Resale	2015
AVON	2019-02-22	1131 Blue Bird Dr	Indianapolis	IN	46231	2636253	348	24	\$35,000 - \$49,999	\$23,000	Fast Track Couples	Detached	2	3	39.745258999999997	-86.327192999999994	- Regular Resale	2003
AVON	2019-02-25	1119 Halifax Ct	Indianapolis	IN	46231	1420001	1,598	48	\$75,000 - \$99,999	\$119,000	Sports Utility Families	Detached	3	2	39.745956999999997	-86.331980000000001	- Regular Resale	2001
AVON	2019-02-25	4107 Cairo Way	Avon	IN	46123	2567502	2,452	64	\$50,000 - \$74,999	\$8,000	Booming and Consuming	Attached	2	2	39.754821999999997	-86.455820000000003	- Regular Resale	2013
AVON	2019-02-26	1454 Locke Bnd	Avon	IN	46123	2182502	1,188	33	\$35,000 - \$49,999	\$120,000	Fast Track Couples	Detached	4	3	39.784734999999998	-86.375311999999994	- Regular Resale	2004
AVON	2019-02-26	4214 Galena Dr	Avon	IN	46123	117750	0	75	\$100,000 - \$124,999	\$122,000	Birkenstocks and Beemers	Detached			39.756225000000001	-86.452414000000005	- Regular Resale	
AVON	2019-02-28	2005 Aspen Dr	Avon	IN	46123	4020003	284	53	\$125,000 - \$149,999	\$181,000	Platinum Prosperity	Detached	3	3	39.733046999999999	-86.422076000000004	- Regular Resale	1998
AVON	2019-02-28	6891 Woodland Heights Dr	Avon	IN	46123	2897503	584	33	\$100,000 - \$124,999	\$171,000	Picture Perfect Families	Detached	5	3	39.751873000000003	-86.401535999999993	- Regular Resale	2003
AVON	2019-02-28	10633 Cyrus Dr	Indianapolis	IN	46231	1644282	2,626	30	\$75,000 - \$99,999	\$129,000	Families Matter Most	Detached	4	3	39.736942999999997	-86.333562000000001	- Regular Resale	2004
AVON	2019-02-28	813 Aerostar Ct	Avon	IN	46123	1770002	1,100	42	\$15,000 - \$24,999	\$111,000	Everyday Moderates	Detached	4	3	39.751603000000003	-86.339212000000003	- Regular Resale	2009
AVON	2019-02-28	7924 Cedar Dr	Avon	IN	46123	1487501	1,454	72	\$50,000 - \$74,999	\$229,000	Reaping Rewards	Detached		2	39.787739999999999	-86.382779999999997	- Regular Resale	1977
AVON	2019-02-28	450 Angelina Way	Avon	IN	46123	2196871	1,690		Unknown		Unclassified	Attached	3	3	39.769908999999998	-86.360519999999994	- Regular Resale	2011
AVON	2019-03-01	6927 Timber Grove Ln	Avon	IN	46123	4500002	2,738	58	\$125,000 - \$149,999	\$247,000	Aging of Aquarius	Detached	3	3	39.773533	-86.401675999999995	- Regular Resale	1994
AVON	2019-03-01	10306 Bradford Rd	Avon	IN	46123	2520001	1,649	39	\$200,000 - \$249,999	\$66,000	Sports Utility Families	Detached		2	39.734217999999998	-86.338279	- Regular Resale	1962
AVON	2019-03-01	6840 Woodland Heights Dr	Avon	IN	46123	1639382	2,688	30	\$100,000 - \$124,999	\$260,000	No Place Like Home	Detached	4	3	39.752315000000003	-86.402653000000001	- Regular Resale	2003
AVON	2019-03-01	10480 Serviceberry Dr	Indianapolis	IN	46234	2159381	1,692	34	\$35,000 - \$49,999	\$10,000	Fast Track Couples	Detached	3	2	39.788544999999999	-86.337179000000006	- Regular Resale	2016
AVON	2019-03-03	10544 Day Star Dr	Indianapolis	IN	46234	1312481	1,440	60	\$50,000 - \$74,999	\$148,000	Boomers and Boomerangs	Detached	3	2	39.796858	-86.335255000000004	- Regular Resale	1999
AVON	2019-03-04	1302 Richwood Dr	Avon	IN	46123	1760001	1,580		\$25,000 - \$34,999	\$251,000	Reaping Rewards	Detached	3	2	39.780234	-86.408000000000001	- Regular Resale	1993
AVON	2019-03-05	1858 Trillium Ct	Avon	IN	46123	2430403	1,157				Unclassified	Detached	4	3	39.789650999999999	-86.387765000000002	- Regular Resale	2002
AVON	2019-03-05	6995 Park Square Dr	Avon	IN	46123	1017501	1,488				Unclassified	Attached	2	2	39.780279	-86.400745999999998	- Regular Resale	1999
AVON	2019-03-05	493 N County Road 625 E	Avon	IN	46123	2815051	1,711	61	\$100,000 - \$124,999	\$159,000	Boomers and Boomerangs	Detached	3	3	39.769461999999997	-86.413627000000005	- Regular Resale	1981
AVON	2019-03-05	5040 Beechwood Cir	Avon	IN	46123	1780001	1,600	36	\$25,000 - \$34,999	\$115,000	Status Seeking Singles	Detached	2	2	39.754282000000003	-86.437704999999994	- Regular Resale	1978

Pulte Submarket	Sale Date	Address	City	State	ZIP	Sale Price	SF	Age Head of HH	Income	NetMosaic WorthCluster	Property Type	Beds	Baths	Lat	Lon	Type	YearBuilt
AVON	2019-03-05	10681 Newgate Ln	Indianapolis	IN	46231	1811932,091	25		\$75,000 - \$99,999	\$121,000Digital Dependents	Detached	3	3	39.746626999999997	-86.332051000000007	- Regular Resale	2001
AVON	2019-03-06	10558 Wintergreen Way	Indianapolis	IN	46234	1536131,320			Unknown	Unclassified	Detached	3	2	39.797521000000003	-86.335031999999998	- Regular Resale	1999
AVON	2019-03-07	1790 Spring Beauty Dr	Avon	IN	46123	2191661,692	33		\$35,000 - \$49,999	\$335,000Fast Track Couples	Detached	3	2	39.788724000000002	-86.388265000000004	- Regular Resale	2004
AVON	2019-03-07	9105 Amberleigh Dr	Plainfield	IN	46168	1500002,300	31		\$100,000 - \$124,999	\$72,000Family Troopers	Detached	3	3	39.727136999999999	-86.359855999999994	- Regular Resale	2001
AVON	2019-03-08	5156 Braemar St	Avon	IN	46123	2802502,670				Unclassified	Detached	3	2	39.764555999999999	-86.435755999999998	- Regular Resale	1997
AVON	2019-03-08	2319 Wisdoms Ct	Avon	IN	46123	2379092,760	40		\$150,000 - \$174,999	\$147,000Babies and Bliss	Detached	2	3	39.797353000000001	-86.370142999999999	- Regular Resale	2007
AVON	2019-03-08	4262 Galena Dr	Avon	IN	46123	1707001,658	80		\$75,000 - \$99,999	\$174,000Aging in Place	Attached	2	2	39.755952000000001	-86.451813999999999	- Regular Resale	2008
AVON	2019-03-09	8450 Falkirk Dr	Avon	IN	46123	2163521,848			Unknown	Unclassified	Detached	4	3	39.783152999999999	-86.372642999999997	- Regular Resale	2000
AVON	2019-03-11	8715 Redditch Dr	Avon	IN	46123	3033433,193	45		\$150,000 - \$174,999	\$268,000Babies and Bliss	Detached	4	4	39.786541	-86.367452	Regular Resale	2006
AVON	2019-03-11	2198 N County Road 425 E	Avon	IN	46123	1635311,120	27		\$50,000 - \$74,999	\$174,000Fast Track Couples	Detached	3	2	39.793937999999997	-86.453156000000007	- Regular Resale	1966
AVON	2019-03-13	6940 Merritt Ridge Way	Avon	IN	46123	1885002,035				Unclassified	Detached	3	3	39.752495000000003	-86.400436999999997	- Regular Resale	2001
AVON	2019-03-14	8191 Kilborn Way	Avon	IN	46123	2487502,156			Unknown	Unclassified	Detached		2	39.785457999999998	-86.379608000000005	- Regular Resale	2016
AVON	2019-03-15	856 Flying Sun Dr	Avon	IN	46123	2066251,718	49		\$75,000 - \$99,999	\$133,000Suburban Attainment	Detached	3	2	39.751047999999997	-86.345292999999998	- Regular Resale	2004
AVON	2019-03-15	1452 Normandie Dr	Avon	IN	46123	2127461,768			Unknown	Unclassified	Detached	4	3	39.783816999999999	-86.399732	Regular Resale	1979
AVON	2019-03-18	429 Creekwood Dr	Avon	IN	46123	928121,097				Unclassified	Attached	1	1	39.770038	-86.354545999999999	- Regular Resale	2003
AVON	2019-03-18	1182 Baltustrol Run	Avon	IN	46123	1700001,561				Unclassified	Attached	2	2	39.744988999999997	-86.436937	Regular Resale	2005
AVON	2019-03-19	220 Park Place Ct	Avon	IN	46123	2000621,430	32		\$200,000 - \$249,999	\$125,000Fast Track Couples	Detached	3	2	39.765836999999998	-86.394700999999998	- Regular Resale	1994
Average						2091062,119	44		\$92,635	\$158,378		3	2.6				

PulteGroup Land Triage Report - New Transactions

Indianapolis-Carmel-Anderson, IN|Avon Submarket

Pulte Submarket	Sale Date	Address	City	State	ZIP	Sale Price	SF	Age Head of HH	Income	NetMosaic WorthCluster	PropertyType	Beds	Baths	Builder	Community	Lat	Lon
AVON	2018-11-21	4106 Basswood Dr	Danville	IN	46122	249631	0			Unclassified	Detached			Cal Atlantic Hms Of Indianan	FOUR OAKS SEC 4	39.767932000000002	-86.389754999999994
AVON	2018-11-21	4031 Basswood Dr	Danville	IN	46122	226125	0			Unclassified	Detached			Calatlantic Hms Of Indiana Inc	FOUR OAKS SEC 4	39.767932000000002	-86.389754999999994
AVON	2018-11-27	4032 Basswood Dr	Danville	IN	46122	308914	0			Unclassified	Detached			Calatlantic Hms Of Indiana Inc	FOUR OAKS SEC 4	39.767932000000002	-86.389754999999994
AVON	2018-11-28	1330 Cartwell Ct	Danville	IN	46122	350000	0		Unknown	Unclassified	Detached			Larry Good Homes Inc	WELLINGTON/ WEXFORD SEC 1	39.76543	-86.45674
AVON	2018-11-29	7897 Villa Cir	Avon	IN	46123	408099	0			Unclassified	Detached			Drees Homes	WOODCREEK XING SEC 10	39.756843000000003	86.431724000000003
AVON	2018-11-30	8659 Thatcher Ln	Avon	IN	46123	379253	0			Unclassified	Detached			Dr Horton Inc	DEVONSHIRE SEC 1	39.734651999999997	-86.368244000000004
AVON	2018-11-30	4162 Basswood Dr	Danville	IN	46122	302813	0			Unclassified	Detached			Calatlantic Hms Of Indiana Inc	FOUR OAKS SEC 4	39.767932000000002	-86.389754999999994
AVON	2018-11-30	4036 Galena Dr	Avon	IN	46123	215983	0		Unknown	Unclassified	Detached			Dr Horton Inc	GRANT PK	39.756042	-86.45663
AVON	2018-12-07	1193 Bedford Dr	Avon	IN	46123	361427	0			Unclassified	Detached			Pulte Homes Of Indiana Llc	BROWNSTONE SEC 1	39.781837000000003	-86.400015999999994
AVON	2018-12-07	2452 Verbena Dr	Plainfield	IN	46168	256000	0			Unclassified	Detached			Fischer Homes Indianapolis Llc	BLUEWOOD SEC 5A	39.728510999999997	-86.375572000000005
AVON	2018-12-07	351 Dylan Dr	Avon	IN	46123	141093	0			Unclassified	Detached			Dr Horton-indiana Llc	EDEN GATE SEC TWO	39.770105999999998	-86.359121000000002
AVON	2018-12-07	341 Dylan Dr	Avon	IN	46123	62500	0		Unknown	Unclassified	Detached			Dr Horton-indiana Llc	EDEN GATE SEC TWO	39.76312	-86.37619
AVON	2018-12-10	9421 Foudray Cir N	Avon	IN	46123	322015	0			Unclassified	Detached			Dr Horton-indiana Llc	REGENCY ESTS SEC 1	39.790519000000003	-86.355521999999993
AVON	2018-12-12	4022 Galena Dr	Avon	IN	46123	251750	0		Unknown	Unclassified	Detached			Dr Horton-indiana Llc	GRANT PK	39.7558591	-86.456782
AVON	2018-12-14	1055 Park Ct	Avon	IN	46123	351091	0			Unclassified	Detached			Pulte Homes Of Indiana Llc	BROWNSTONE SEC 1	39.766151000000001	-86.394431999999995
AVON	2018-12-14	1081 Park Ct	Avon	IN	46123	303203	0			Unclassified	Detached			Pulte Homes Of Indiana Llc	BROWNSTONE SEC 1	39.766151000000001	-86.394431999999995
AVON	2018-12-14	1044 Sunset Blvd	Avon	IN	46123	241255	0			Unclassified	Detached			Pulte Homes Of Indiana Llc	BROWNSTONE SEC 1	39.779170000000001	-86.357696000000004
AVON	2018-12-17	4001 Basswood Dr	Danville	IN	46122	387718	0			Unclassified	Detached			Calatlantic Hms Of Indiana Inc	FOUR OAKS SEC 4	39.767932000000002	-86.389754999999994
AVON	2018-12-19	1065 Park Ct	Avon	IN	46123	154905	0			Unclassified	Detached			Pulte Homes Of Indiana Llc	BROWNSTONE SEC 1	39.766151000000001	-86.394431999999995
AVON	2018-12-26	2104 Buttonbush Dr	Plainfield	IN	46168	300000	0			Unclassified	Detached			Fischer Homes Indianapolis Llc	ARAILIA SEC 4	39.731088	-86.366517999999999
AVON	2018-12-26	4087 Galena Dr	Avon	IN	46123	56250	0		Unknown	Unclassified	Detached			D R Horton Llc	GRANT PK	39.755709000000003	-86.455222000000006
AVON	2019-01-04	9348 Foudray Cir N	Avon	IN	46123	196812	0			Unclassified	Detached			D R Horton Indiana Llc	REGENCY ESTS SEC 1	39.790519000000003	-86.355521999999993
AVON	2019-01-14	1602 Devonshire Ave	Avon	IN	46123	233004	0			Unclassified	Detached			Dr Horton-indiana Llc	DEVONSHIRE SEC 4	39.739714999999997	-86.370590000000007
AVON	2019-01-17	2446 Lingerman Way	Avon	IN	46123	410887	0			Unclassified	Detached			Fisher Hms Indianapolis Llc	HEATHERMOR SEC 6	39.797488999999999	-86.374198000000007
AVON	2019-01-17	2194 Buttonbush Dr	Plainfield	IN	46168	360163	0			Unclassified	Detached			Fischer Hms Indianapolis Llc	ARAILIA SEC 4	39.730970999999997	-86.366517999999999
AVON	2019-01-17	1132 Sunset Blvd	Avon	IN	46123	212500	0			Unclassified	Detached			Pulte Homes Of Indiana Llc	BROWNSTONE SEC 1	39.779860999999997	-86.357878999999997
AVON	2019-01-17	9394 Foudray Cir N	Avon	IN	46123	168750	0			Unclassified	Detached			Dr Horton-indiana Llc	REGENCY ESTS SEC 1	39.790519000000003	-86.355521999999993
AVON	2019-01-22	7868 Villa Cir	Avon	IN	46123	387500	0			Unclassified	Detached			Drees Premier Homes Inc	WOODCROSSING SEC 10	39.756843000000003	-86.431715999999994
AVON	2019-01-22	1835 Wedgewood Pl	Avon	IN	46123	330613	0			Unclassified	Detached			Dr Horton Inc	DEVONSHIRE SEC 2	39.738056999999998	-86.366702000000004
AVON	2019-01-23	1208 Sunset Blvd	Avon	IN	46123	308322	0			Unclassified	Detached			Pulte Homes Of Indiana Llc	BROWNSTONE SEC 1	39.779860999999997	-86.357878999999997
AVON	2019-01-28	9242 Foudray Cir N	Avon	IN	46123	334464	0			Unclassified	Detached			D R Horton Indiana Llc	REGENCY ESTS SEC 1	39.790519000000003	-86.355521999999993
AVON	2019-01-30	1124 Bedford Dr	Avon	IN	46123	398976	0			Unclassified	Detached			Pulte Homes Of Indiana Llc	BROWNSTONE SEC 1	39.781039999999997	-86.356452000000004
AVON	2019-01-30	1179 Bedford Dr	Avon	IN	46123	339028	0			Unclassified	Detached			Pulte Homes Of Indiana Llc	BROWNSTONE SEC 1	39.781039999999997	-86.356452000000004
AVON	2019-01-31	7867 Villa Cir	Avon	IN	46123	534665	0			Unclassified	Detached			Drees Homes	WOODCREEK XING SEC 10	39.756843000000003	-86.431724000000003
AVON	2019-01-31	8286 Ballylander Dr	Avon	IN	46123	396625	0			Unclassified	Detached			Pulte Homes Of Indiana Llc	SECONDARY PLAT GRAND HAVEN/WYN	39.792921999999997	-86.374831999999998
AVON	2019-02-07	2477 Silver Rose Dr	Avon	IN	46123	465485	0			Unclassified	Detached			Fischer Hms Indianapolis Llc	HEATHERMOR SEC 6	39.799391999999997	-86.371725999999995
AVON	2019-02-08	1213 Bedford Dr	Avon	IN	46123	330015	0			Unclassified	Detached			Pulte Homes Of Indiana Llc	BRWONSTONE SEC 1	39.781039999999997	-86.356452000000004
AVON	2019-02-19	1054 Park Ct	Avon	IN	46123	346800	0			Unclassified	Detached			Pulte Homes Of Indiana Llc	BROWNSTONE SEC 1	39.779353999999998	-86.355948999999995
AVON	2019-02-20	8193 Cagles Mill Trce	Avon	IN	46123	246934	0			Unclassified	Detached			Arbor Homes	PARKS/WYNNE FARMS SEC 1	39.795822000000001	-86.385283999999999
AVON	2019-02-21	7864 Villa Cir	Avon	IN	46123	457375	0			Unclassified	Detached			Drees Homes	WOODCREEK XING SEC 10	39.756843000000003	-86.431715999999994
AVON	2019-02-22	1080 Sunset Blvd	Avon	IN	46123	332500	0			Unclassified	Detached			Pulte Homes Of Indiana Llc	BROWNSTONE SEC 1	39.779860999999997	-86.357878999999997

Pulte Submarket	Sale Date	Address	City	State	ZIP	Sale Price	SF	Age Head of HH	Income	NetMosaic Worth	Mosaic Cluster	PropertyType	Beds	Baths	Builder	Community	Lat	Lon
AVON	2019-02-25	2261 Lingeran Ct	Avon	IN	46123	415625	0		Unknown	Unclassified		Detached			Fischer Hms Indianapolis Li LI	HEATHERMOR SEC 4	39.796413999999999	86.373427000000007
AVON	2019-02-27	4151 Basswood Dr	Danville	IN	46122	270535	0			Unclassified		Detached			Calatlantic Hms Of Indiana Inc	FOUR OAKS SEC 4	39.767932000000002	86.389754999999994
AVON	2019-02-28	7875 Villa Cir	Avon	IN	46123	499237	0			Unclassified		Detached			Drees Premier Homes Inc	WOODCREEK XING SEC 10	39.756843000000003	86.431724000000003
AVON	2019-02-28	7872 Villa Cir	Avon	IN	46123	445971	0			Unclassified		Detached			Drees Premier Homes Inc	WOODCREEK XING SEC 10	39.756843000000003	86.431715999999994
AVON	2019-02-28	4041 Basswood Dr	Danville	IN	46122	376158	0			Unclassified		Detached			Calatlantic Hms Of Indiana Inc	FOUR OAKS SEC 4	39.767932000000002	86.389754999999994
AVON	2019-02-28	9230 Thames Dr	Avon	IN	46123	333053	0			Unclassified		Detached			Dr Horton Indiana Llc	REGENCY ESTS SEC 1	39.791488000000001	86.357985999999997
AVON	2019-03-12	8740 Buttonbush Cir	Plainfield	IN	46168	351332	0			Unclassified		Detached			Fischer Hms Indianapolis Li LI	ARAILIA SEC 4	39.73301	86.367378000000002
AVON	2019-03-15	2134 Longford Ln	Avon	IN	46123	312750	0			Unclassified		Detached			Pulte Homes Of Indiana Llc	SECONDARY PLAT GRAND HAVEN/WYN	39.794291999999999	86.374992000000006
AVON	2019-03-19	7128 Verwood Ct	Plainfield	IN	46168	353365	0			Unclassified		Detached			Nvr Inc	WHITMORE PLACE SEC 2	39.725166000000002	86.396384999999995
Average						315589			\$									

