CARMEL FIRE DEPARTMENT
STANDARD OF COVER

2024
Through
2028

Rev. 3/4/2025

Page intentionally left blank

Carmel Fire Department

Carmel, Indiana

Standard of Cover

Developed and Created by: David G. Haboush, Fire Chief in 2023 and updated by Joel M. Thacker, Fire Chief in 2025.

The Dedicated Members of the Carmel Fire Department

Adopted by the Carmel City Council

The following document serves as the Carmel Fire Department's Community Risk Assessment: Standard of Cover. It is the culmination of extensive research and analysis into all aspects of the organization and the community that it serves.

To ensure that a thorough assessment took place the department utilized the guidelines found in the Center for Public Safety Excellence Quality Improvement for the Fire and Emergency Services accreditation model. The assessment has been an ongoing project for the last five years even though over those years many changes have occurred both internally and externally.

The stated goal of the organization is to provide the highest quality customer service of any fire department in the State of Indiana. Therefore, the organization not only needs to examine how it goes about the business of caring for its customers but also must examine what local, regional, and national best practices are currently in use. By comparing the department's current practices with the best practices, a kind of "map" was established that illustrated how the Carmel Fire Department compares to other great organizations. Furthermore, by comparing the current "map" to the best practices a "route" was established to illustrate the changes that are necessary to undertake in order to fulfill the vision of providing the highest quality customer service.

The Carmel Fire Department would like to thank the elected officials, the members of other departments within the City of Carmel, the citizens of Carmel who contributed to the development of the plan, and the members of the Carmel Fire Department who work diligently every day to provide great service to our customers.

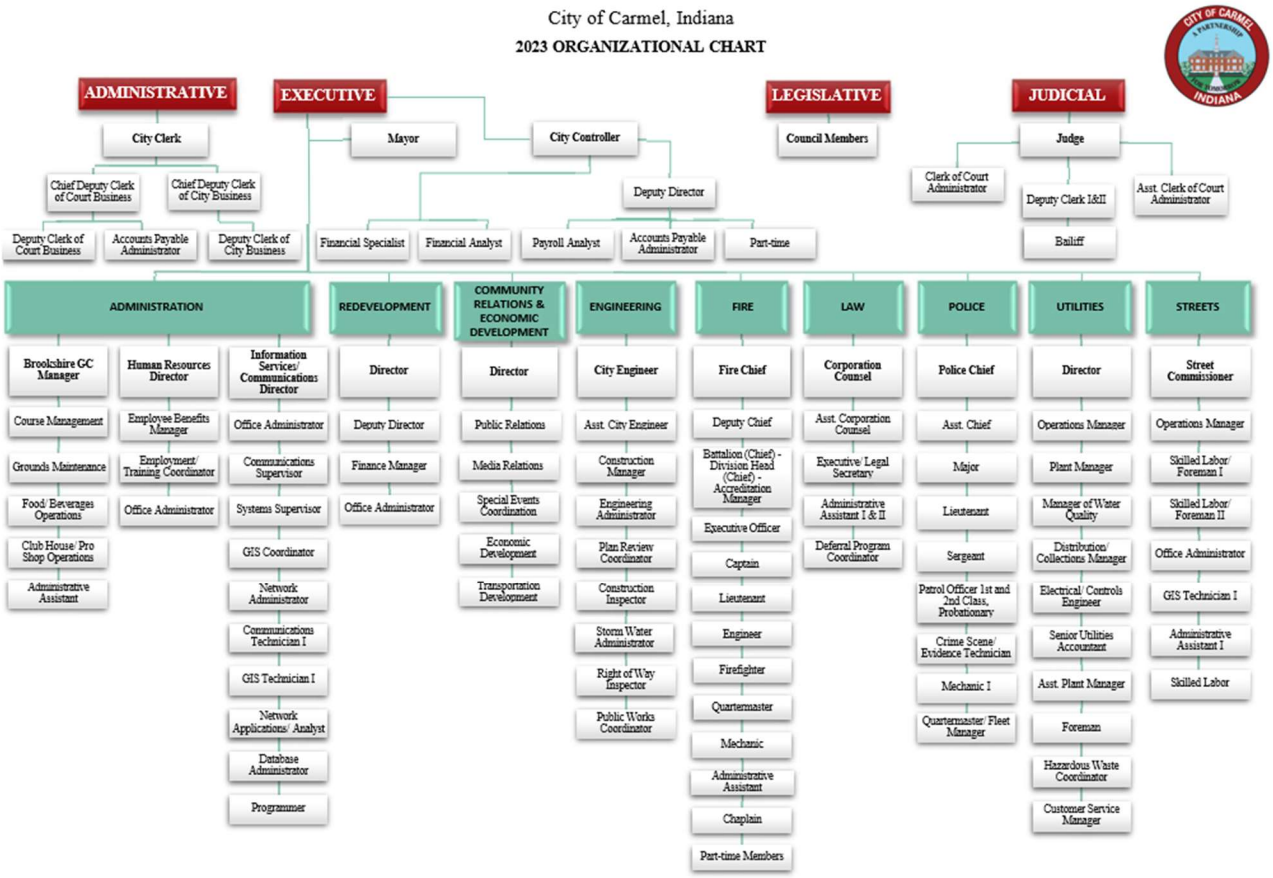
Contents

Executive Summary

The Carmel Fire Department is committed to providing the highest quality of service to the public as possible. To assess this goal, the Carmel Fire Department has employed a comprehensive approach to analyzing the department and the community it serves. In such a comprehensive approach, the Carmel Fire Department has assessed the level of risk within the community and weighed that risk with current response capabilities. The elements studied are the community expectations and performance goals, a community riskassessment, and performance objectives and measures.

Documentation of Area Characteristics

On April 13, 1837, John Felps, Alexander Mills, Seth Green, and Daniel Warren laid out the Town of Bethlehem, Indiana, which consisted of 14 plots of land, and was inhabited by Delaware Indians and Quakers. That same year, the first general store was constructed, with the first schoolhouse being constructed in 1845. One year later the post office was established; however, the residents were soon notified that there was already another town registered with the name of "Bethlehem" in Indiana. Consequently in 1874, by a referendum vote 33 to 12, the town was officially incorporated and adopted the name of "Carmel". Carmel existed as a town until 1976 when it was reorganized to operate as a third-class city under Indiana State statute. The elected body is comprised of the mayor, seven city councilors, clerk treasurer, and a city court judge. These members preside over the four branches of government: The Executive Branch (I.C., 36-4-5), the Legislative Branch (I.C. 36-4-6), the Fiscal Branch (I.C. 36-4-10), and the Judicial Branch (I.C. 33-35-1) (Ord. D-362, § I, 3-22-83). Prior to January of 2016, the city was a third-class city and had been incorporated as such since 1976. In January of 2016, the common council voted to upgrade the City of Carmel to a Class 2 City. However, not all changes took effect immediately. In 2019, voters elected a city clerk and two additional council members. Additionally, the clerk treasurer's position was eliminated, and the mayor appointed a city controller. The City of Carmel operates on a Council-Mayor form of local government.



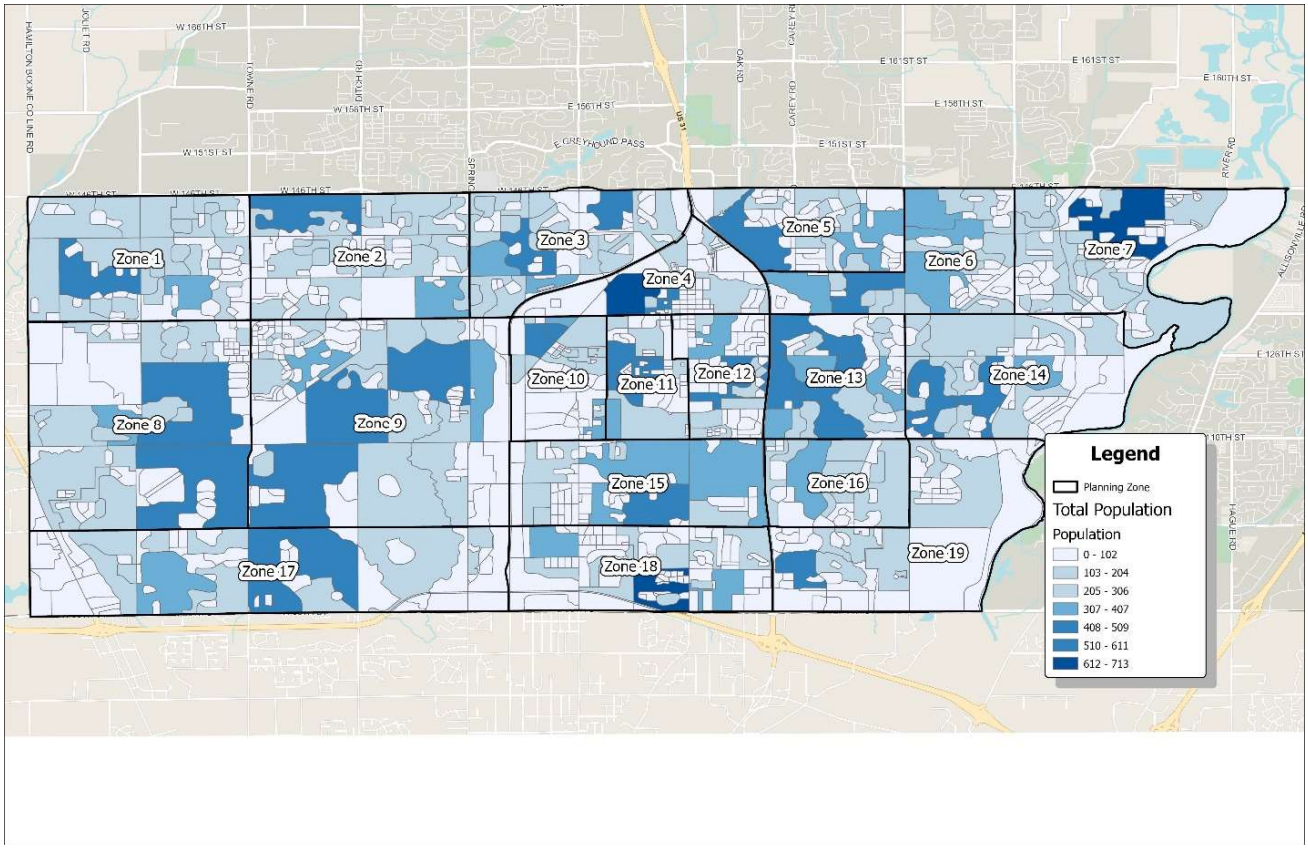
Developments within the Service Area

The City of Carmel is home to many varieties of business, medical facilities, and apartment complexes. There are 1,626 total buildings that are pre-planned. This figure does not include residential homes. There are 528 apartment buildings throughout the city. The remaining 1,103 include: 3 hospitals, 20 extended care facilities, 45 schools, 20 healthcare facilities, 17 hotels, 31 government owned buildings, and 110 strip malls. Lastly, according to the US Census Bureau there are 39,158 residential homes throughout the city of Carmel. More information can be found on the above in the All-Hazard Risk Assessment, specifically the Building Hazard Risk Analysis Scores.

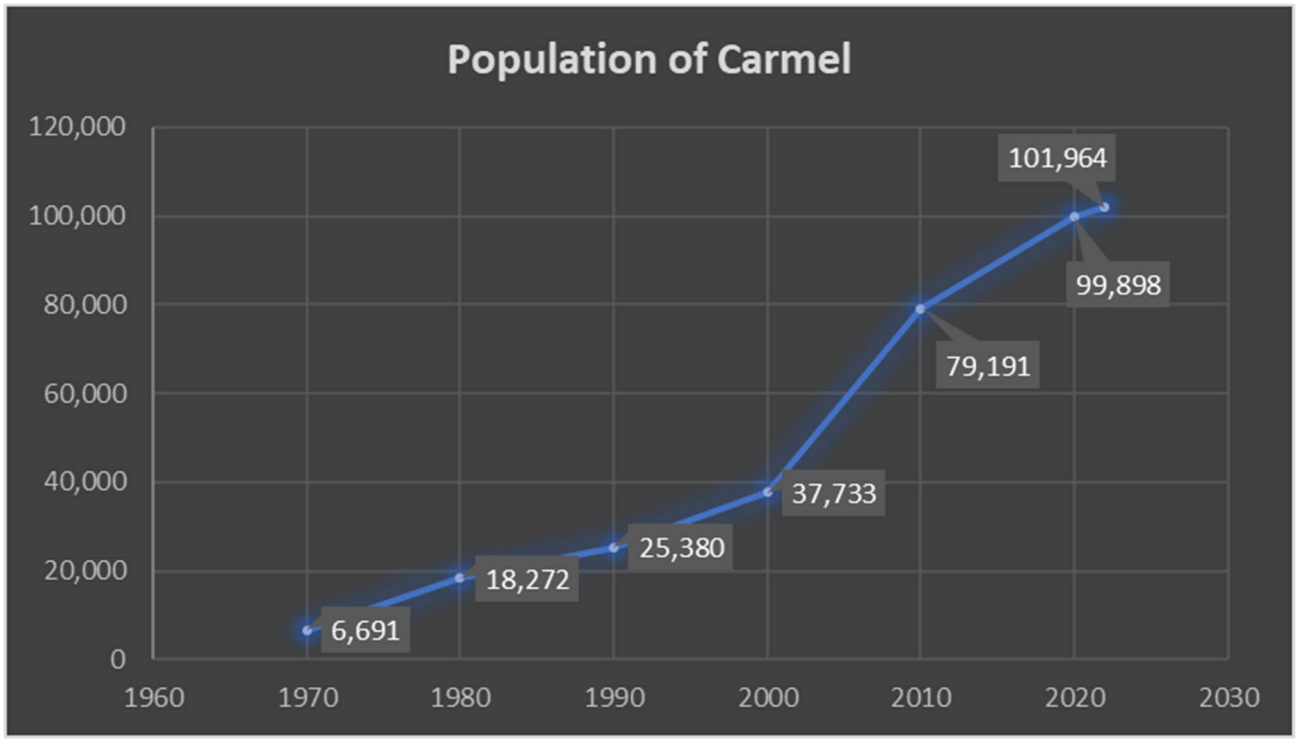
Population/Demographics

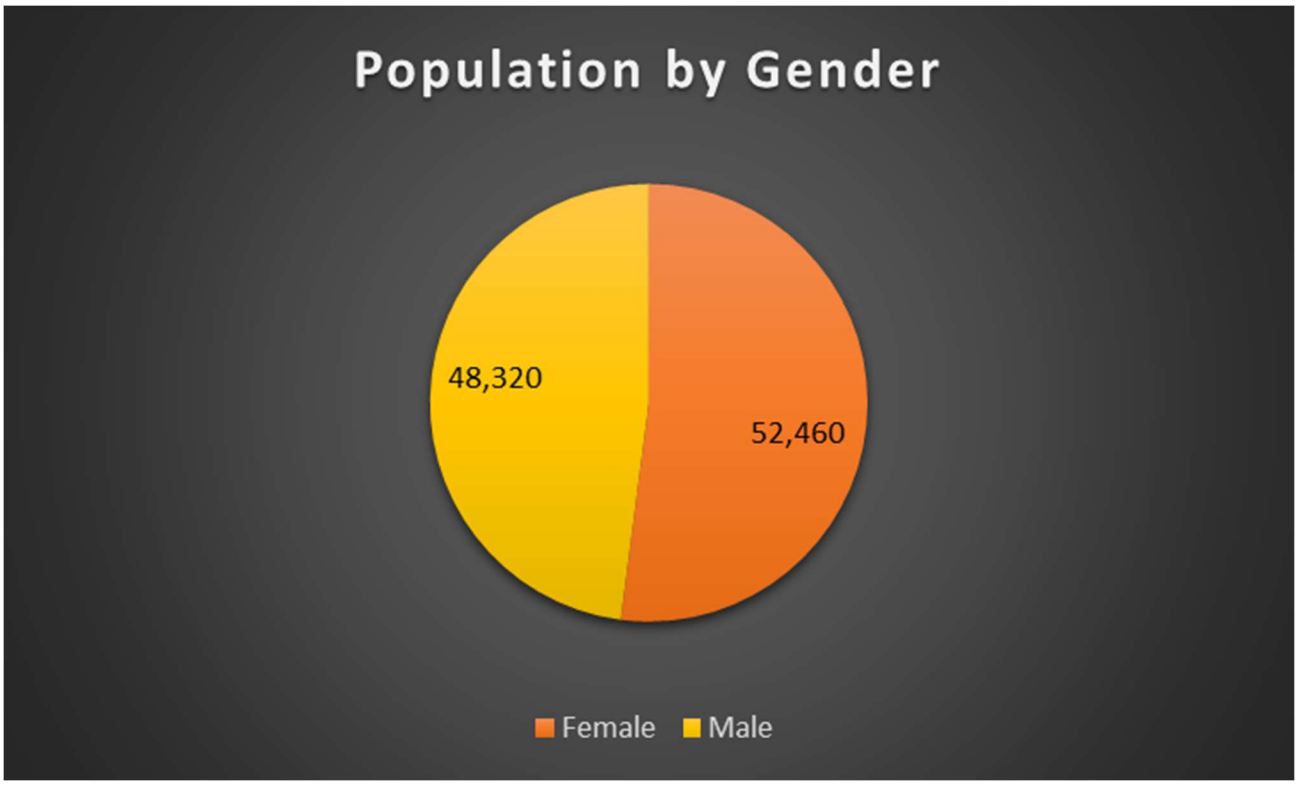
In 1900 the population of Carmel/Clay Township was approximately 550 people. By 2000 the population had swelled to 37,733. The latest US Census Estimated Resident Population for Carmel, Indiana is 101,964 as of July 2022. The department assesses the community by planning zones annually and takes into consideration the population density and has developed the total response time standards while considering National Fire Protection Association (NFPA) 1710. The department has been able to use population density forecasting to

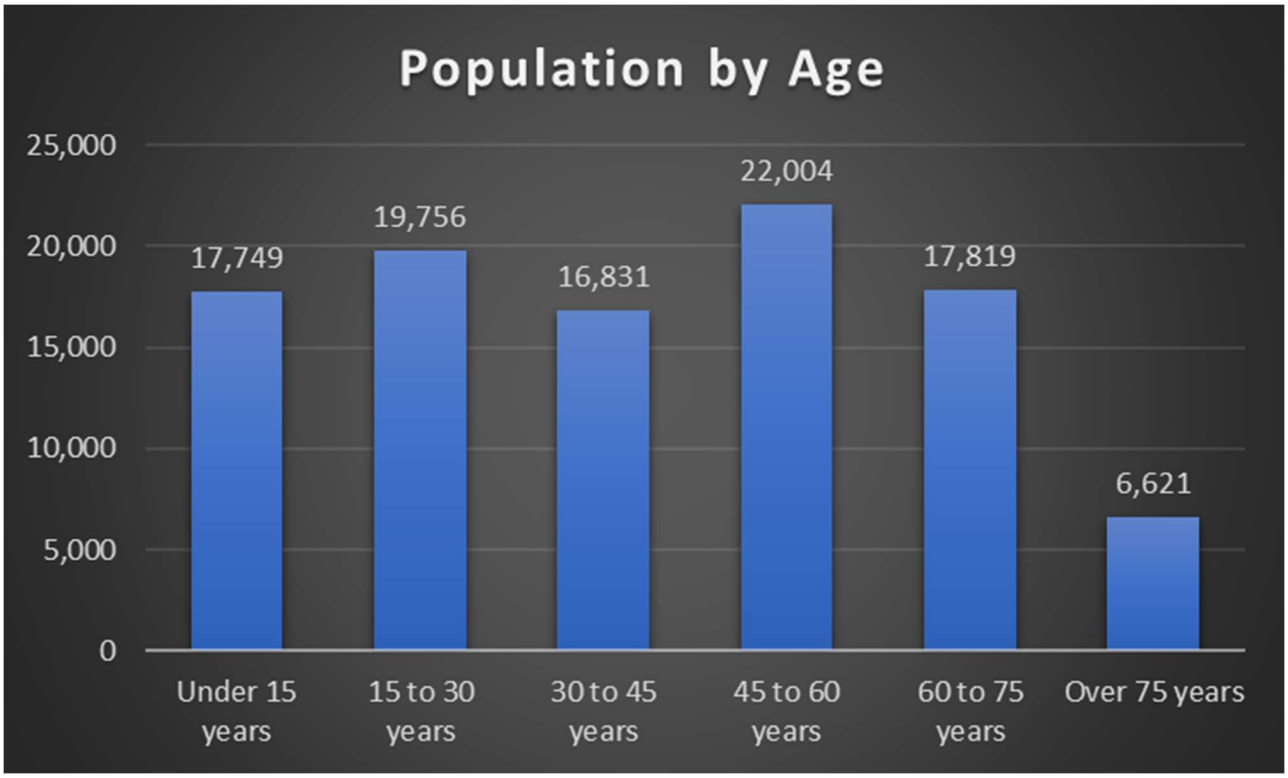
anticipate increased run load in certain areas. For example, the construction of several new extended care facilities prompted a change in primary medic response areas. This area ended up transferring to another station's district all together after the completion of a new bridge. The changes allowed the department to better distribute run load between apparatus that were essentially the same drive time from the affected area. The department recently met with the redevelopment commission to review forecasted large-scale developments. The meeting proved to be beneficial and will continue annually at a minimum. The planning zones are reviewed annually at a minimum per policy. The geographical information systems (GIS) department has assisted in creating population density maps within the planning zone borders to assist in developing the planning zones.

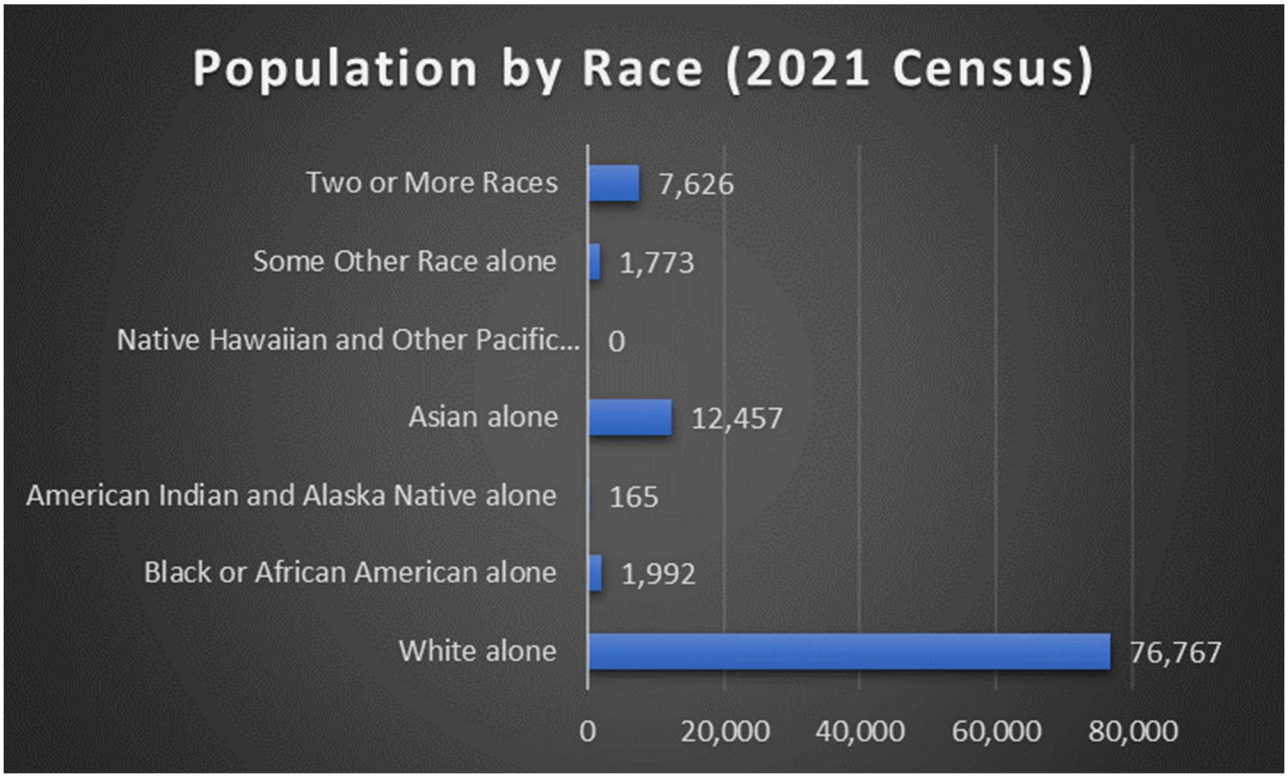


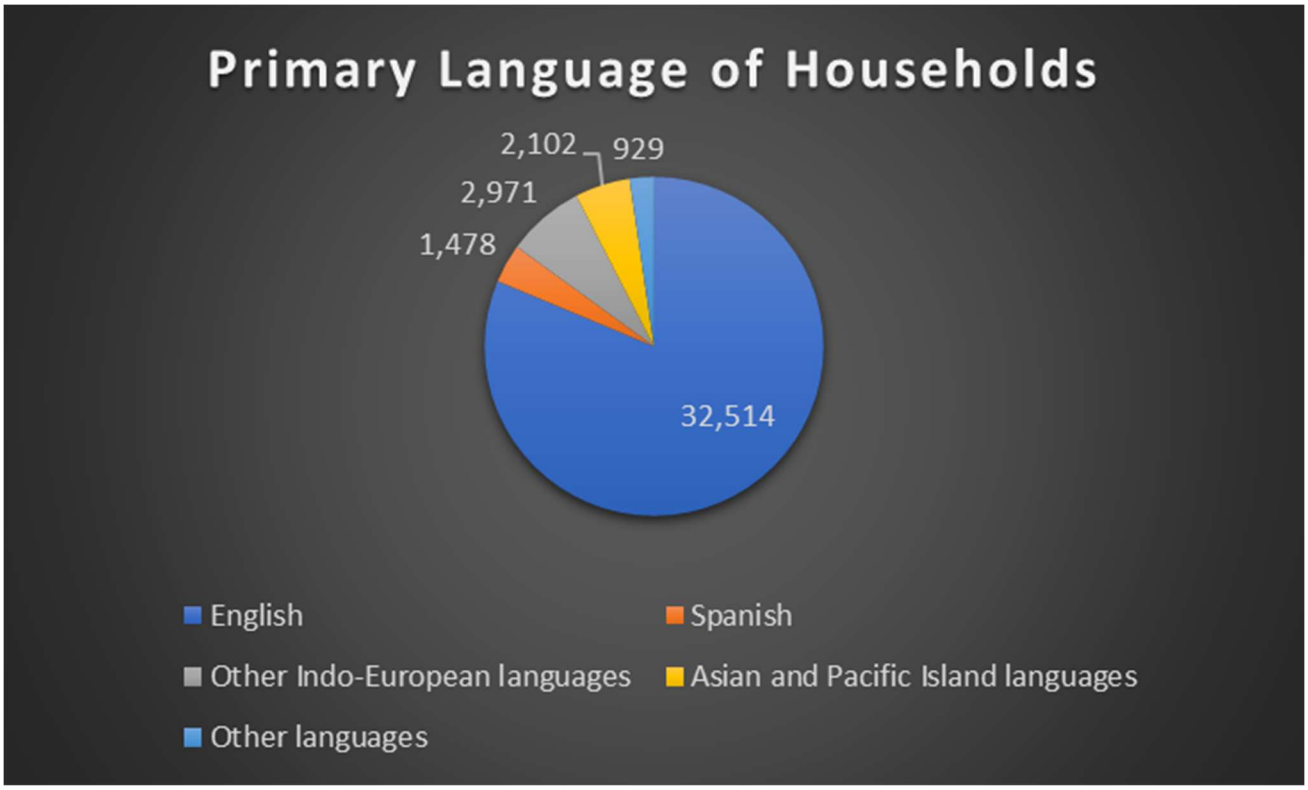
The charts below are based on data from the United States Census Bureau



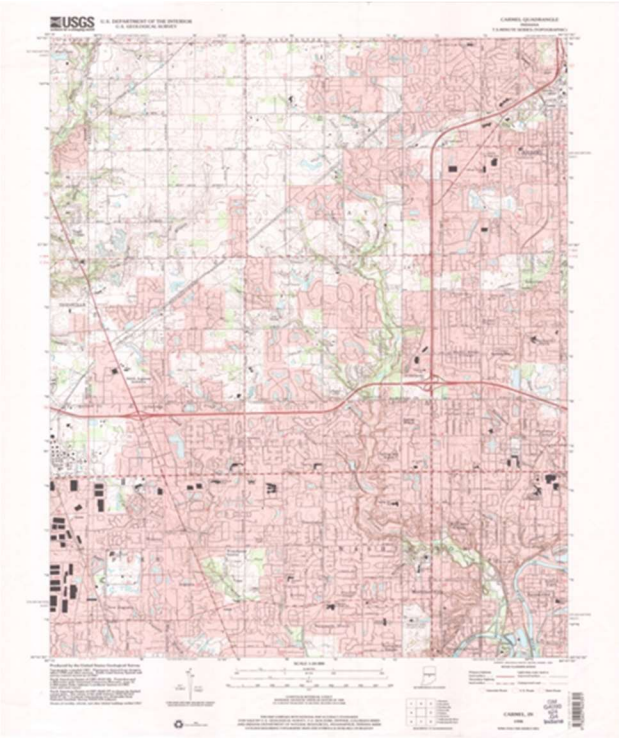



Population by Age
25,000
20,000
15,000
10,000
5,000
0
17,749
19,756
16,831
22,004
17,819
6,621
Under 15 years
15 to 30 years
30 to 45 years
45 to 60 years
60 to 75 years
Over 75 years


Population by Race (2021 Census)
Two or More Races
7,626
Some Other Race alone
1,773
Native Hawaiian and Other Pacific...
0
Asian alone
12,457
American Indian and Alaska Native alone
165
Black or African American alone
1,992
White alone
76,767
0
20,000
40,000
60,000
80,000



Topography



Carmel is situated within Hamilton County in central Indiana. The land in central Indiana is characterized primarily by low, gently rolling hills and shallow valleys. Indiana has a humid continental climate, with cool winters and warm summers. Carmel is in USDA Planting Zone 5.

Due to recent annexations, Carmel encompasses all of Clay Township, which is geographically located in the southwest corner of Hamilton County. Its boundaries include Boone County line (Zionsville) on the west, white river on the east, 96th street (Marion County/Indianapolis) on the south, and 146th street on the north. The total land area is approximately 50 square miles, and the July 2022 population was 101,964 residents, although its daytime population adds an additional 10,000 people to the jurisdiction.

Climate

Carmel is located in the Midwest and is fortunate to experience all four seasons. The last few years, the

weather has affected Carmel in many ways, from the remnants of various hurricanes, ice storms, and severe drought.

Monthly Averages & Records

Month	Average High	Average Low	Record High	Record Low	Average Rainfall	Average Snowfall
January	36°F	22°F	71°F (1950)	-24°F (1994)	1.7″	3.7″
February	40°F	25°F	77°F (2018)	-21°F (1982)	1.6″	3.9″
March	51°F	34°F	85°F (1981)	-7°F (1980)	2.6″	1.8″
April	63°F	44°F	90°F (1942)	18°F (1997)	3.7″	0.2″
May	73°F	54°F	96°F (1911)	27°F (2020)	4.0″	0.0″
June	81°F	63°F	104°F (2012)	37°F (1992)	4.1″	0.0″
July	84°F	66°F	106°F (1936)	46°F (1947)	3.5″	0.0″
August	82°F	63°F	103°F (1918)	41°F (1965)	3.0″	0.0″
September	76°F	56°F	100°F (2011)	30°F (1899)	2.9″	0.0″
October	64°F	45°F	92°F (2019)	20°F (1981)	2.8″	0.0″
November	51°F	36°F	81°F (1950)	-5°F (1880)	2.9″	0.4″
December	40°F	27°F	74°F (1982)	-23°F (1989)	2.4″	2.9″

Department History and Milestones

The Carmel Fire Department was established in 1900 as a volunteer department. In 1913, after a major fire, the town purchased a two-wheeled soda/acid chemical tank and then placed Pyrene® pump fire extinguishers on several porches around town. In 1921, the town purchased Carmel's first motorized Model T fire truck with 3 chemical tanks and hose.

In 1927, the State legislature passed a law empowering the township trustees to purchase and maintain a fire truck. Under the leadership of R.J. Follett, a meeting of the town board of Carmel, trustees of Clay and Delaware townships, and representatives from two leading insurance companies met and purchased the first joint town-township owned fire truck (without a pump) in the state of Indiana. The volunteer fire department of Carmel/Clay was housed within a garage located on west Main Street. The building was transformed into a firehouse, open 24 hours a day, and became the first fire station in the area. Rue Hinshaw was the first volunteer fire chief for the Town.

In 1945, Donald Swails Jr. was appointed as the volunteer fire chief, at which time the town acquired its first pumper fire truck. In 1950, Carmel firefighters constructed a new fire station located at 210 1st Avenue S.W., which was located two blocks south of the downtown district. The construction was completed with many hours donated by firefighters and a large portion of the building materials were also donated. Firefighters received $2.00 for responding on each run and to help defray the cost of the construction, many of them gave the money back to the fire department.

In 1956, the Town Board appointed volunteer Chief Donald Swails Jr. as the first full-time "paid" member with its first annual budget of $11,500.00. Chief Swails was promoted to chief after serving eleven years with the all-volunteer department.

In 1963, James Martin Sr.'s Garage (auto repair) at 102nd and U.S. 421 on the far west side became Carmel's second fire station known as Station 42. It remained in service for over 7 years, until the town built its own building. In 1965, the beginning of EMS was formed for the town/township with the conversion of a 1965 Dodge Van for its first ambulance. Five years later, four firefighters became the first state of Indiana certified Emergency Medical Technicians (EMT's) for the department.

In 1971, a new Station 42 was constructed to protect the western portion of the township at 2410 W. 116th Street. In 1975, Station 43 was built and dedicated at 3242 East 106th Street. John Hensel, who owned several farming acres in the area, donated the property to the city. 1979 saw the beginning of a more advanced EMS program under the combined leadership of Chief Swails and Clay Township Trustee John Hensel.

In 1981, the transition from a volunteer department to a paid career department became a reality. At that time, the department employed 42 members. Along with this achievement, Station 44 was constructed and opened at 5032 East Main Street. On June 23, 1982, Chief Donald Swails Jr. died. On August 2, 1982, Assistant Chief Steven A. Couts was named Carmel's new fire chief by Mayor Jane Reiman. In 1987, the new fire headquarters and Station 41 was constructed on South Rangeline Road at 2 Civic Square. This building was built to replace the undersized station that was located in the downtown area. Constructed by the city of Carmel; new station 41 houses the departments' administrative offices as well as on duty personnel. This was the first of three buildings to be constructed in the area that is now known as Civic Square, which also includes Carmel City Hall and the Carmel Police Department. The department's annual operating budget for 1987 was $2,055,394.00.

In 1995, the focus of the department broadened to provide additional services to the community. With that (8) FF/Paramedics were hired which allowed the department to provide Advance Life Support (ALS) to the citizens of Carmel. The department currently employs 41 paramedics. September 3, 1995, after serving for over 30 years, Fire Chief Steven A. Couts retired from the Carmel Fire Department. January 1, 1996, Mayor James Brainard appointed Assistant Chief Douglas Callahan as the new fire chief. In 1997, the Clay Township Trustee opened and dedicated station 45 located at 10701 North College Avenue.

Station 42 was relocated once more in 2002, when the Clay Township Trustee built a new 15,000 square foot fire station at 106th and Shelborne Road. Additionally, the same year, the Township funded the construction of the sixth fire station located at 540 West 136th Street. On September 16, 2003, retired Fire Chief Steven A. Couts passed away. Subsequently fire headquarters was dedicated as the Steven A. Couts Fire Headquarters. January 1, 2007, Fire Chief Douglas Callahan retired after serving the city of Carmel for 34 years. Two days later, Mayor James Brainard appointed Keith D. Smith as the new fire chief. In June 2010, the Carmel Fire Department took delivery of its first tractor drawn aerial unit. This Tiller is housed at Station 41. On December 31, 2012, Fire Chief Keith D. Smith officially retired from the Carmel Fire Department and on January 1, 2013, the Mayor appointed Matthew D. Hoffman as Carmel's Fire Chief.

In March of 2015, Fire Chief Matthew Hoffman resigned from his position and returned to the crews and Mayor Brainard appointed Captain David G. Haboush as the new Fire Chief. Beginning in July of 2015, Station 44, located at 5032 E. Main Street was demolished and a new, larger station was built by the Township. The station was opened in August of 2016. Groundbreaking began on the new training and maintenance facility at the end of 2015 and the new facility was opened in July of 2016.

2024 CARMEL FIREFIGHTER SHIFT CALENDAR

A-SHIFT B-SHIFT C-SHIFT

January						
Su	Mo	Tu	We	Th	Fr	Sa
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

February						
Su	Mo	Tu	We	Th	Fr	Sa
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29		

March						
Su	Mo	Tu	We	Th	Fr	Sa
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

April						
Su	Mo	Tu	We	Th	Fr	Sa
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30				

May						
Su	Mo	Tu	We	Th	Fr	Sa
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

June						
Su	Mo	Tu	We	Th	Fr	Sa
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30						

July						
Su	Mo	Tu	We	Th	Fr	Sa
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

August						
Su	Mo	Tu	We	Th	Fr	Sa
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

September						
Su	Mo	Tu	We	Th	Fr	Sa
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

October						
Su	Mo	Tu	We	Th	Fr	Sa
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

November						
Su	Mo	Tu	We	Th	Fr	Sa
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

December						
Su	Mo	Tu	We	Th	Fr	Sa
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

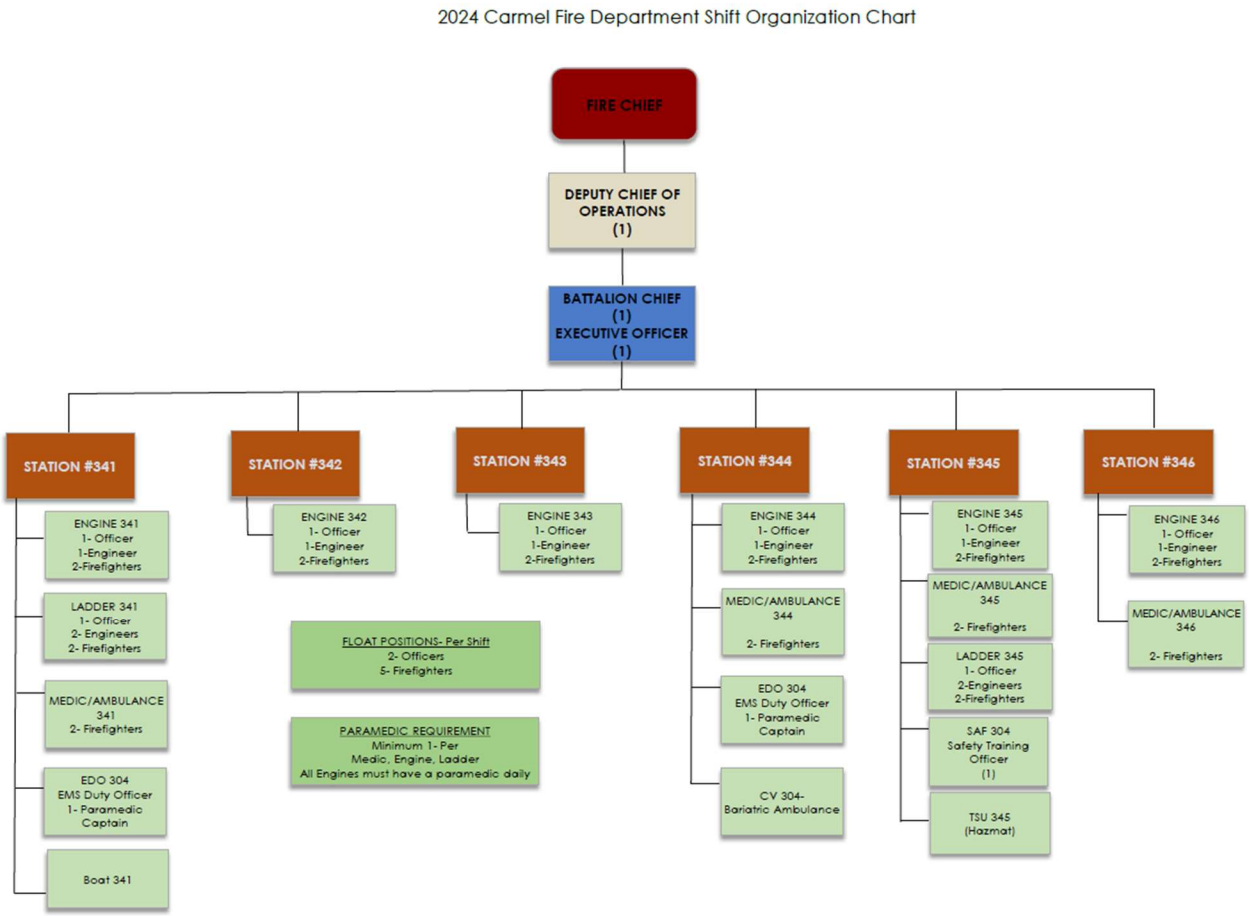
In March of 2021, the CFD administrative personnel moved out of the Fire Headquarters building while the headquarters is undergoing a major renovation. Upon completion of the renovation the headquarters building will house only firefighters. A new administration building is under construction with an anticipated completion date of spring of 2023. As of December 2022, the Carmel Fire Department employs 164 sworn firefighting personnel, 13 civilian personnel and has 6 fire stations serving a population of approximately 101,964 citizens. December 31, 2022, found the administrative staff still housed in its temporary facilities as the new administrative building is still under construction. All construction projects at the fire stations are completed.

In April of 2023 the administration moved into its new headquarters located in the heart of midtown Carmel.

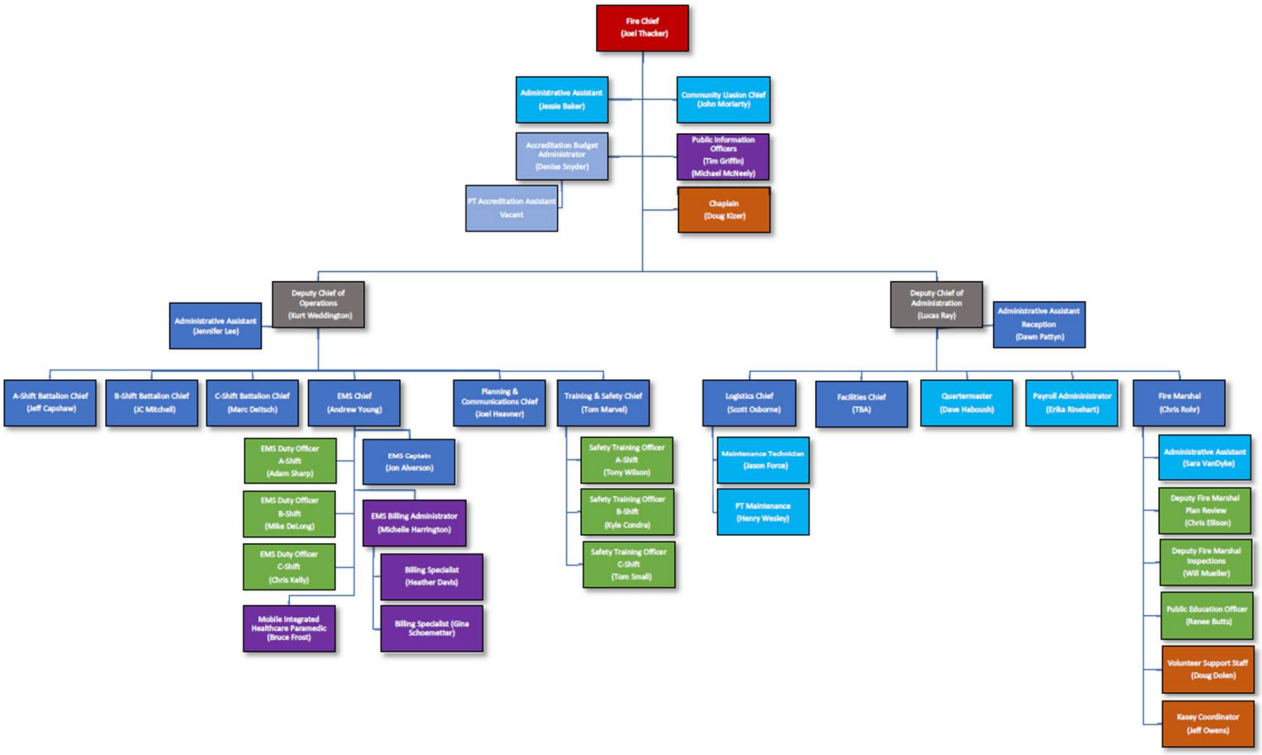
210 Veterans Way now serves as not only the new headquarters but also a link to the past as this was the location of the original Carmel Fire Headquarters built in 1950. The new location houses the fire department administration, a firefighting museum, and the Stay Alive Family Education (SAFE) house for fire and safety education. In May of 2024, Fire Chief David Haboush was removed from his position and began his transition to quartermaster. In August of 2024, Fire Chief Joel Thacker was announced as Carmel's newest Fire Chief. The museum and SAFE house are mostly completed and will become fully operational in 2025.

Staffing Resources

The Carmel Fire Department utilizes the Kelly work schedule. Meaning personnel are assigned to 1 of 3 shifts, either "A", "B", or "C". A particular shift works 24 hours on duty, off 24 hours, on duty 24 hours, off 24 hours, on duty 24 hours, on duty 24 hours and then off for 96 hours. The work schedule then repeats. The Carmel Fire Department division chiefs, administrative and civilian personnel work Monday through Friday, 8:00 – 4:30 pm.

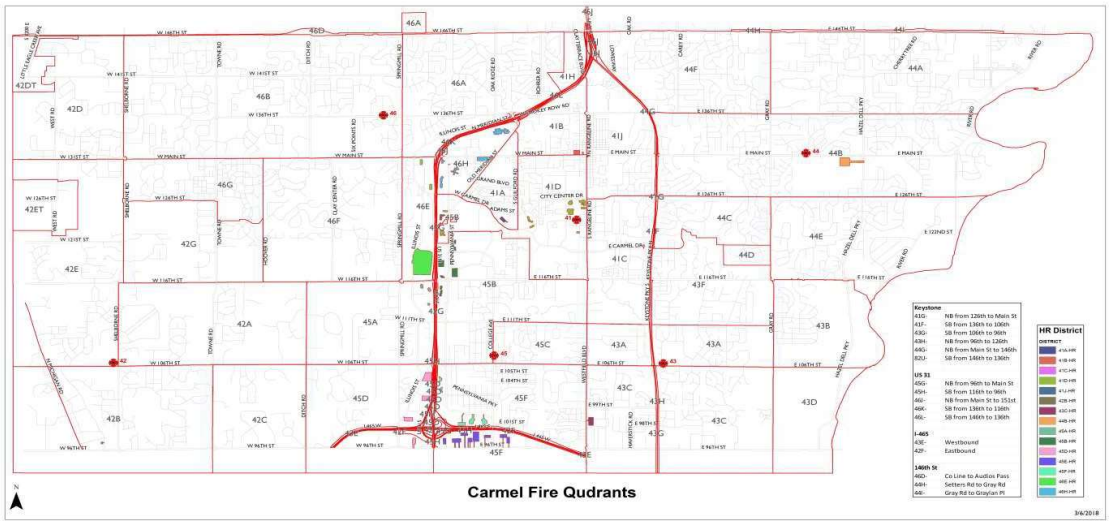


Carmel Fire Department
2024 Administrative Organization Chart



Area Boundaries

The city of Carmel is located in Clay Township of Hamilton County, Indiana, due north of the city of Indianapolis and southwest of the city of Westfield. Carmel is in the Eastern Time zone and utilizes daylight savings time. The current jurisdiction for the Carmel Fire Department follows 96th street to the south,146th street to the north, River Road to the east and U.S. 421/Michigan Road to the west and encompasses approximately 50 square miles. Traffic flow through Carmel is substantial with four major north and south roadways running through the city; US-421 on the western edge of the city, US-31 divides the city down the middle and Keystone Parkway (formerly US-431) further east. Hazel Dell Parkway on the far eastside also carries a great deal of north/south traffic, relieving congestion on Keystone Parkway. Keystone Parkway, US-31 and US-421 all interchange with I-465, which runs along Carmel's southern boundary.



Station Locations and Apparatus Assignments

The department maintains 6 strategically located fire stations, a maintenance, and training facility within its jurisdiction. Additionally, one of the fire stations holds the new Emergency Operations Center. Funding for these physical resources is accomplished through the annual budgetary process and is consistent with the department's strategic plan. All plans for improvement to physical resources are reflected in the department's annual budget and strategic plan.

The department involves the governing body, local township government, administrative staff, as well as line personnel in the planning process for physical facilities. Administrative staff and line personnel are involved in the planning, design, and construction phases of each capital project in an effort to develop a feeling of ownership of the facility. Administrative and staff members are involved in the project to ensure its costs are within budgetary allocations.

All 6 fire stations, the Emergency Operations Center (EOC) at Station 344, the maintenance and training facility, and the newly constructed administrative building provide adequate space and storage for the department's needs.

Carmel Fire Department Administrative Building

210 Veterans Way

Carmel, Indiana 46032

Steven A. Couts, Fire Headquarters, (Station 341)

2 Civic Square

Carmel, Indiana 46032

Apparatus	Percent of calls responded
Engine 341	29%
Ladder 341	15%
Battalion 304	14%
Medic 341	24%
Utility/Boat 341	0.04%
EDO 304	12%
Total Personnel	14

Station #341's response area covers approximately 4.4 square miles and responds to 71% of all calls for service. This area consists of residential, light commercial and redeveloped downtown district. Station #341 is staffed by five officers and nine firefighters/paramedics including: an engine company, a ladder company, an ambulance company, an EMS duty officer, a battalion chief, and an executive officer.

Station 342

3610 West 106th Street

Carmel, Indiana 46032

Apparatus	Percent of calls responded
Engine 342	10%
Reserve Medic/Ambulance	0.01%
Total Personnel	4

Station #342 response area is mostly residential covering approximately 12.1 square miles, responding to 24% of all calls. Station 342 houses an engine company with one officer and three firefighters/paramedics.

Station 343

3242 East 106th Street Carmel, Indiana 46033

Apparatus	Percent of calls responded
Engine 343	12%
Total Personnel	4

Station #343's response area is mostly residential, covering approximately 6.6 square miles and responds to 24% of all calls for service. The station is staffed with an officer and three firefighters/paramedics responding on a single engine company.

Station 344

5032 East Main Street Carmel, Indiana 46033

Apparatus	Percent of calls responded
Engine 344	17%
Medic 344	14%
Bariatric Ambulance	0.01%
Total Personnel	6

Station #344's response area is mostly residential, covers approximately 11.6 square miles and responds to 38% of all calls for service. Station #344 is staffed by an officer and five firefighters/paramedics, including an engine company and medic/ambulance.

The Command Vehicle was marked out of service in 2024 and is no longer responded on runs. This station also houses Bariatric Transport Ambulance 349.

Station 345 – Douglas Callahan Fire Station

10701 North College Avenue Carmel, Indiana 46280

Apparatus	Percent of calls responded
Engine 345	23%
Medic 345	23%
Ladder 345	12%
Safety 304	9%
TSU 345 (cross staffed)	0.22%
Total Personnel	12

Station #345's response area includes both residential and commercial structures, covers approximately 5.5 square miles and responds to 57% of all calls for service includes the southern portion of Carmel. Station 345 is staffed by three officers, and nine firefighter/paramedics, including an engine, ladder, medic/ambulance, safety officer, and cross manned tactical support unit.

Station 346

540 West 136th Street Carmel, Indiana 46032

Apparatus	Percent of calls responded
Engine 346	22%
Medic 346	18%
Total Personnel	6

Station #346's response area, which is mostly residential, covers approximately 10.4 square miles and responds to 67% of all calls for service including the northwestern portion of Carmel. One officer and five firefighters/paramedics staff station #346.

This station also houses the Rehab Support Unit, (RSU).

Maintenance and Training Facility

4925 East 106th Street Carmel, Indiana 46033

- Reserve Engine 340
- Reserve Engine 348
- Reserve Engine 349
- Reserve Ladder L340
- Ambulance 340
- Ambulance 348
- Air Cart
- 5 Reserve Staff Cars
- 5 Trailers
- 4 EMS Carts

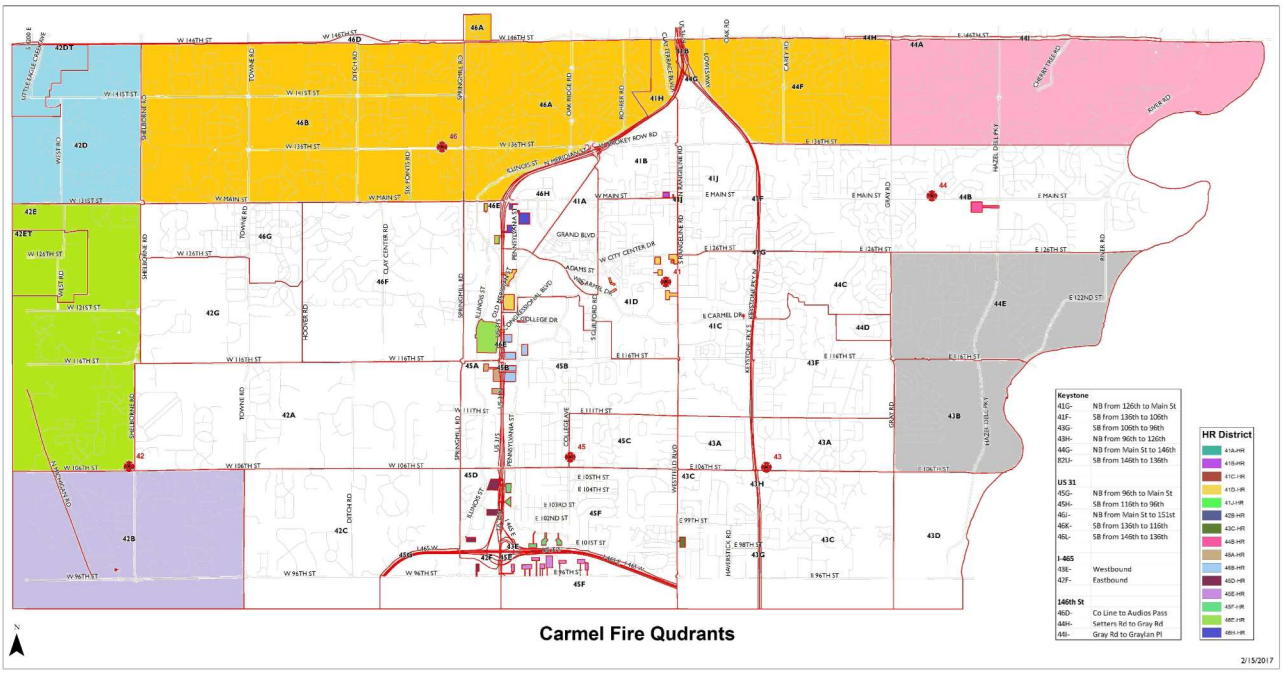
The maintenance and training facility was completed in 2016. This allows the department to perform any and all training including command school, recruit training, auto extrication training, fire training evolutions and EMS training evolutions. The facility also houses the extractor machines and drying racks for cleaning and drying contaminated turnout gear. The reserve apparatus is also stored at this facility.

Mutual and Automatic Aid Service Areas

The department develops and maintains both formal and informal relationships with outside agencies to support its mission. The department has mutual and automatic aid policies in place with Zionsville, Indianapolis, Pike Township, Hamilton County Emergency Management, Fishers, Noblesville, Sheridan, and Westfield. The automatic and mutual aid is pre-determined by specific incident run cards and in the event the agencies apparatus is unavailable or is requested by Incident Command. Additionally, the department has demonstrated the ability and willingness to provide reasonable aid to any agency that requests such aid. The formal automatic and mutual aid agreements are reviewed and updated annually. The department has developed many informal relationships that support its mission including those with the Carmel Police Department, local media outlets,local hospitals, and local civic organizations such as the Rotary Club. The department has established strong informal ties with local media outlets via a well-run and staffed Public Information Office. The local hospitalshave signed formal agreements with the department to partner in offering public health aid in the form of Mobile Integrated Health Paramedics. The informal arrangements are by nature more ephemeral and therefore not necessarily subjected to the annual review.

The department's command staff has the responsibility to manage, review, and revise agreements with assistance from the City of Carmel Department of Law.

The department tasks its Operations Chief or the designee with the responsibility of managing, reviewing, and revising the external agreements. The colored areas below on the map detail when automatic aid will be called upon.



The department has utilized geographical information systems (GIS) to identify and document each of the 64 reporting districts (quadrants) and 19 planning zones which are used to facilitate emergency responses. Each zone is analyzed for risk factors, considering the size of the area, target hazards, population, and incident history. Through analysis, the department has solicited the assistance of the city's GIS department in identifying parcels that are located in excess of 2,000 feet from the nearest fire hydrant. Very few parcels qualified, however, those that did were placed into two tanker quadrants. This allows the computer aided dispatch (CAD) system to send mutual aid and tanker trucks to those locations upon the initial dispatch.

Out of District Runs

6% of 2024 responses were out of district responses assisting mutual aid departments.

2% of Carmel's 2024 responses received mutual or automatic aid from our mutual aid partner departments.

The Carmel Fire Department is an active participant in the Hamilton County Mutual Aid system and with the Statewide Mutual Aid system in place; the Carmel Fire Department is ready to respond as needed to assist any agency throughout the state of Indiana.

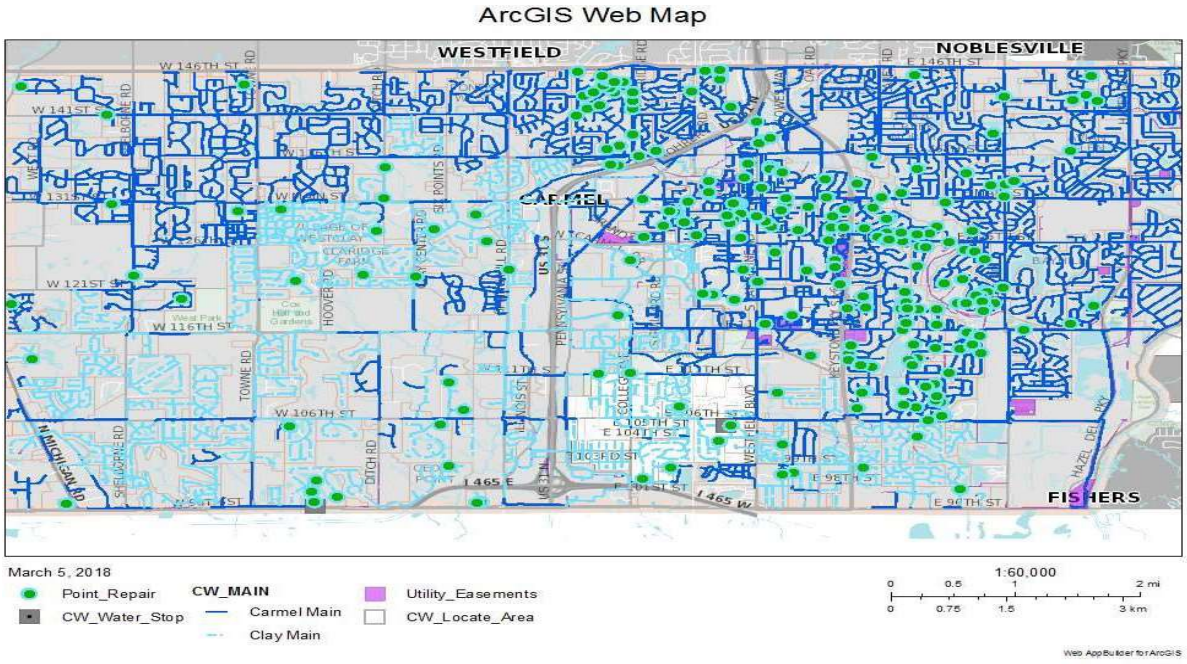
Water Supply

Most of the department's service area is protected by a domestic water supply that is provided and maintained by the City of Carmel Utilities Water Division (CCUWD). There are also a limited number of fire hydrants provided by Citizens Energy Group. The domestic water supply provided is more than adequate to meet the

projected fire flow requirements for structural firefighting. Areas outside the domestic supply system have been identified and fire suppression in these areas is augmented through automatic and mutual aid agreements with surrounding jurisdictions to supply static water sources. The department also has established tanker operations and water shuttle standard operating procedures are in place in the event an incident occurs in an area without hydrants.

The placement of hydrants within the jurisdiction meets the requirements of the adopted 2012 International Fire Code with 2014 amendments/Indiana Fire Code and Carmel City Code. Hydrant placement for all new development is evaluated by the prevention division through the plans review process. Standard hydrant spacing within the jurisdiction is a minimum of 1 hydrant every 500 feet.

There are more than 5,740 fire hydrants in service within the jurisdiction. There are at least an additional 280 hydrants that are privately maintained, and the sole responsibility of their service is the responsibility of the owners. The department nor the authority having jurisdiction has any authority for enforcing the testing of or servicing of any private hydrant.



Hamilton County Public Safety CommunicationCommunications Equipment

The Hamilton County Public Safety Communications Center in Noblesville, Indiana (HCPSC) is responsible for dispatching all fire and rescue calls for the department. The 9-1-1 telephone system is capable of handling fourteen 9-1-1 trunk lines, 8 administrative lines, two fire dispatch lines and one telecommunication device for the deaf (TDD) line. The radios operate on an 800 MHz band trunked radio system that utilizes fifteen (15) separate frequencies efficiently. All the radios are programmed with each of the public safety answering points (PSAP's) talk groups to allow interoperability with all county fire and emergency medical service agencies. Each radio has P25 capability which allows both Marion County radio system talk groups as well as the State's SAFE-T network to be programmed into the Motorola® radios. This allows for direct communications on their systems.

The Hamilton County Public Safety Communications (HCPSC) Radio System operates on a Motorola® Astro P25 800-megahertz system. Interoperability is achieved by utilizing console patching and simulcasting. HCPSC's radio system shares a core with Marion County Department of Public Safety. The link to the core is redundant, via leased fiber and via a direct microwave link. This allows both Counties seamless communications between all agencies. All Hamilton County radios have IDs for the State of Indiana's SAFE-T radio system for interoperable communications statewide. All the department's radios can communicate directly with all surrounding agencies without the use of a radio patch.

The HCPSC has 18 consoles that can answer 9-1-1 calls and administrative phone lines. All consoles are equipped with console radios with each console having a back-up radio. Each console is equipped with a computer that has CAD (computer-aided dispatch) software and Internet access. The CAD system was upgraded to the newest platform available from New World® Systems by Tyler Technologies in March of 2017. All telephone calls made and received to and from HCPSC and primary law, fire dispatch talk groups, and operations talk groups are recorded. The recorder software is called NICE. The CAD system has an electronic map which is maintained by the GIS/911 personnel and updated as necessary. Each console is also equipped with aerial photography that can be used in conjunction with the CAD map. Dispatch is lit with several fluorescent lights that point toward the ceiling for indirect lighting.

Dispatching Protocols

Hamilton County Public Safety Communications (HCPSC) utilizes Priority Dispatch's protocols for a formal and recognized Emergency Medical Dispatch (EMD) system, which allows for pre-arrival instructions and adequate triaging of medical calls for service. A flip-card file or tablet containing Priority Dispatch System (PDS) protocols for Emergency Dispatching is provided in HCPSC for International Academies of Emergency

Dispatch (IAED) ED certified users. A software program containing PDS protocols for Emergency Dispatching – ProQA – is loaded at each call-taking position. These protocols provide standardized interrogation questions, post-dispatch instructions, pre-arrival instructions, and priority determinant codes.

Communications Personnel

HCPSC employs 72 full-time communications officers, 4 part-time communications officers, 8 supervisors, 15 full-time administrative staff, 6 IT personnel and 2 radio personnel.

Description of Agency Programs and Services

The department provides many programs relating to the all hazards response model. Those services include:

- Community Risk Reduction
- Public Education
- Fire Inspection – Plan Review
- Fire Investigation, Origin and Cause
- Fire Suppression
- Emergency Medical Services (EMS)
- Technical Rescue
- Hazardous Materials
- Mobile Integrated Healthcare Program (MIHP).

Community Risk Reduction

The division consists of fire prevention, fire investigation, public education, and a community liaison officer. All members of the division are cross-trained, allowing all members to be able to perform all the duties. Duties of this division include: fire pre-plans, new and existing construction change plan review, code enforcement, fire inspections, fire investigations, and public education for all residents from school age children to senior citizens in the Carmel/Clay jurisdiction.

Formalized Public Education

The public education program has identified targeted audiences by analyzing department statistical data and by attending training outside the department. These audiences include: school aged youth, senior citizens, the deaf community, and residents of multi-family dwelling residents. The department has chosen to focus its in-school educational activities on pre-school (ages 3-4), kindergarten (age 5), second grade, and fourth grade. Indiana, like many other states, has significantly tightened its curriculum standards which inhibits the ability of the department to interact with grade school children on a more frequent basis. The public education division has a member who focuses exclusively on education initiatives for the aging population in the community.

Recently, the department has begun to reach out to the deaf community by providing hearing impaired smoke detectors. The department also performs annual fire drills for businesses, schools, etc. within the jurisdiction.

The department's Public Education Division provides children and adults of Carmel and surrounding areas quality educational programming and information designed to reduce and prevent the loss of life, injury, and property damage resulting from fires, accidents, and natural disasters.

Fire and Life Safety Education continues to be a very active part of the department's annual activities and is increasing each year.

Informal Public Education

The department has two popular programs that provide fire and safety education that span all age groups. The "Carmel Firefighter for a Day Camp" provides additional educational opportunities for school aged children. Over a three-day period, different groups of children learn about fire safety and what firefighters do in a fun setting. The second event is the "Carmel Public Safety Day". This one-day event invites community members of all ages to learn more about fire safety. As an added benefit the department has invited in other outside agencies such as the Carmel Police Department, Indiana State Police, Hamilton County Emergency Management Agency, and others to provide additional learning opportunities for attendees. In 2019, we were fortunate to have the Kasey Fire & Life Education Program join CFD, which enhances the departments Education Outreach Program nationwide.

Community Outreach Programs

An ongoing smoke detector and carbon monoxide detector program is in place for families that are without the means to provide for themselves. The prevention division targets low-income housing areas with a smoke detector blitz. A program called Community Assistance Program has been hosted for over 20 years where children in need, as determined by school resource personnel are provided with assistance. This list is used to make follow-up calls and determine the need for smoke and carbon monoxide detectors. In some cases, rental properties where insufficient smoke detectors are found; education is provided to the property owner. The department utilizes the city's police department as a resource for bicycle safety, child restraint seat education, and child restraint seats/installation for families without means to provide for themselves. Mobile Integrated

Healthcare Program

In 2015, the department created the mobile integrated healthcare program (MIHP) which brings back home doctors' visits using department paramedics. The program paramedics receive referrals from the emergency room physicians and provide the patients with a detailed assessment, home safety inspections, medication understanding, blood pressure monitoring, nutritional support, and social interaction to avoid hospital re-admittance incidents. This program is a follow-up response after discharge from hospital.

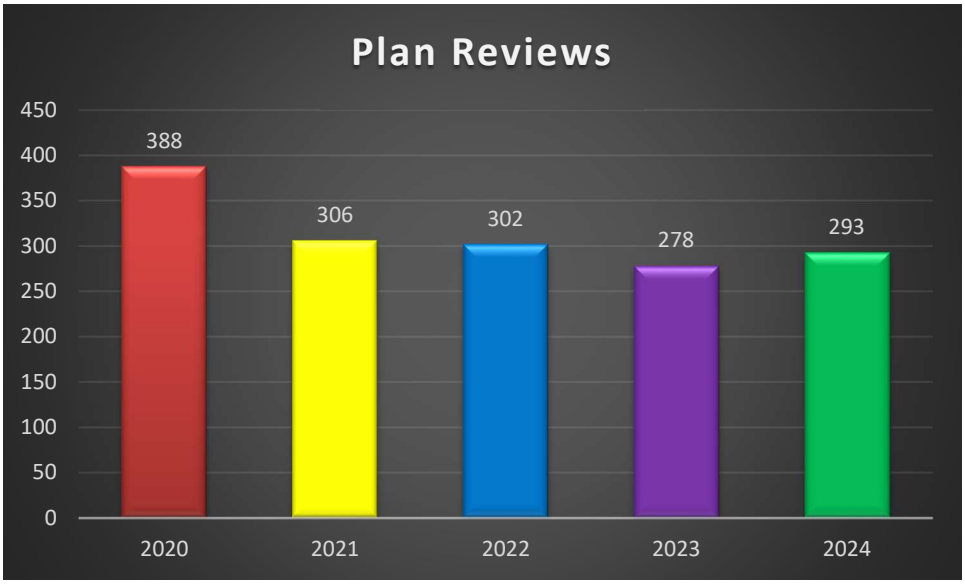
The department utilizes a paramedic to run the mobile integrated healthcare program (MIHP) program. This is where Medicare/Medicaid patients are visited post hospital to see if the return visits can be mitigated. During this time, the MIHP officer does a brief safety survey to determine if there are other issues that need to be corrected to prevent injuries within the home. They will communicate with the fire prevention division in the event prevention services are needed.

During the COVID-19 pandemic, the department began the COVID Information Booths to disseminate educational information and hand sanitizer and masks to the public. These events were held at local stores. The popularity of these booths has since morphed into the CFD Information Booth, and this booth is at many city-sponsored events throughout the year.

Public Information Office

The department has an active public information office that provides current and relevant public education through multiple social media platforms including Twitter™, Facebook™, Instagram™, and YouTube™. Additionally, the public information officers actively interact with local media outlets to ensure that public safety and fire safety initiatives are kept on the forefront of the viewer's minds.

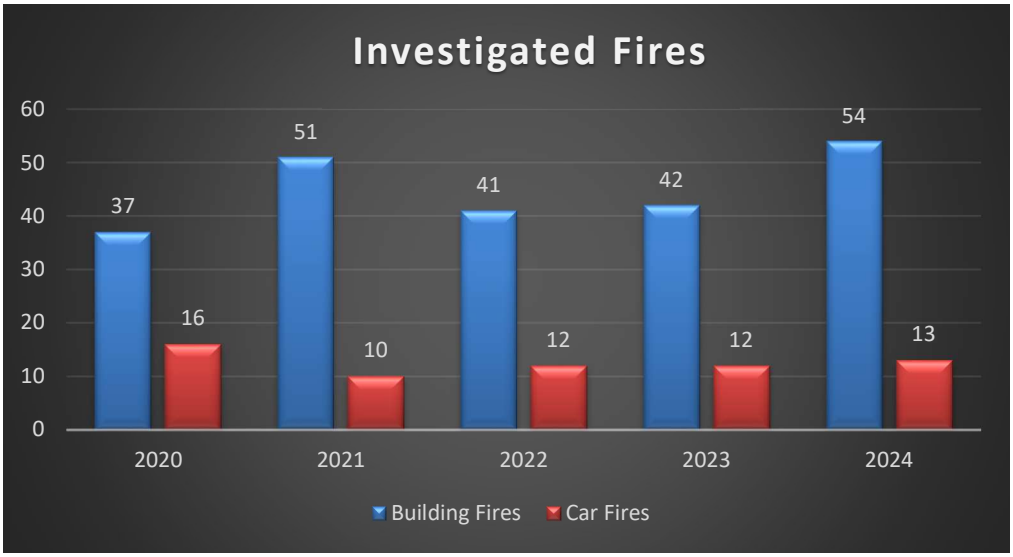
Plan Review - Inspections



The department has adopted the 2012 International Fire and Building code with the Indiana Amendments, known as the 2014 Indiana Building and Fire Code. The department ensures fire protection compliance by conducting inspections and pre-plan reviews on all businesses, educational facilities, and churches within its jurisdiction; these buildings are inspected annually. The plan review process along with the relationship the department has with the Department of Community Services ensures that all new and remodeled construction meets the current codes.

Fire Investigations, Origin and Cause

The department's investigation program operates under the State of Indiana code IC 36-8-17-5 section 5 which states, (a) The fire chief and the designees of the fire chief in every fire department are assistants to the state fire marshal. Indiana law requires every fire to be investigated as arson. However, this alone is not the only concern for investigating fire. In order to achieve this, the investigation division is staffed by 3 full-time employees and 17 shift investigators. The department investigators determine origin, cause, and preliminary loss assessment. The demographics that make up the vast majority of Carmel do not tend to produce the arson fires that other similar populated cities produce. The department employs the scientific method as outlined in



National Fire Protection Association 921, 2017 Edition Guide for Fire and Explosion Investigations and National Fire Protection Association (NFPA) 1033, Standard for Professional Qualifications for Fire Investigator, 2014 Edition.

Fire Suppression

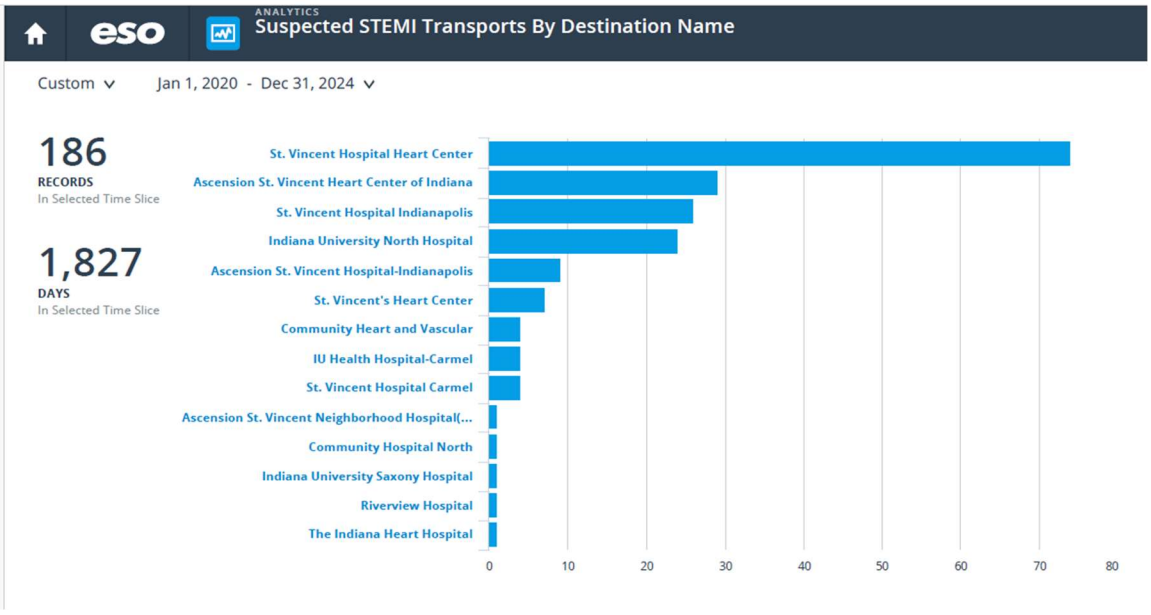
Through the analysis of staffing, response times, and pumping capacity, the department meets its stated objectives for fire suppression for each type and magnitude of fire suppression emergency incidents identified. The operations division of the department maintains an accepted daily minimum staffing level of 44 on-duty personnel in order to provide the continuous delivery of core services throughout the jurisdiction. The current deployment is as follows: 6 engine companies, 2 tractor-drawn aerial companies, 4 ambulances, 1 battalion vehicle, 1 hazardous materials unit, 1 water rescue unit, 1 mobile command vehicle**,** 1 EMS duty officer vehicle, 1 mobile healthcare paramedic, 2 rescue boats, a rehab support unit and 7 reserve apparatus along with numerous miscellaneous and administrative staff vehicles.

Emergency Medical Services

The Carmel Fire Department provides both Basic Life Support (BLS) and Advance Life Support (ALS) to the citizens of Carmel. With the department run average above 66% being of the medical nature, the department saw the importance of maintaining the service for the community. All members of the department are required to become State of Indiana Emergency Medical Technician (EMT-B) and shall maintain the classification throughout their career. Any members wishing to advance their career have the opportunity to receive additional education to become a State of Indiana licensed

paramedic. Daily minimum staffing requirements are that all six engine companies are ALS staffed. On any given day it is possible that all four of the ambulances may also be ALS staffed. The department's ambulances have been strategically located at Station 341 located in the center of Carmel, Station 344 (to the northeast), Station 345 (south central), and Station 346 (to the northwest). Other support may come from any staff member who may be certified as a paramedic. Each of the assigned paramedic staff vehicles has been certified by the State of Indiana EMS Commission to carry ALS equipment. The minimum apparatus response for EMS incidents consists of an (ALS) engine with a minimum staff of four, three firefighters and one EMT-P, and an ambulance with a minimum of two (EMT-B's) but can have EMT-P's when staffing allows. The EMS Duty Officer is included on critical or high-risk responses such as stroke, cardiac arrest, chest pain, etc. If necessary, the EMS division chief, and the EMS Captain can respond as an additional non-transporting ALS unit if needed.

The department has a cardiopulmonary resuscitation program in place. The department has contracted with the former EMS director to continue this program. The department has continued to provide widespread access to automated external defibrillators (AED's), particularly in public locations where sudden cardiac arrest is likely including several locations along the Monon Trail in midtown Carmel and in parks. There have been 9 AED Stations installed to date. This is achieved by the collaborative efforts of the City of Carmel, CFD, various other city departments and donations through not-for-profit organizations. Additionally, we encourage public facilities with a high likelihood of cardiac arrest to incorporate AED programs into more comprehensive emergency response plans that are linked with Carmel Fire Departments Emergency Medical Services (EMS) system. The department also tracks the outcomes of patients relating to STEMI, Stroke, Return of Spontaneous Circulation, and trauma calls. See charts below.

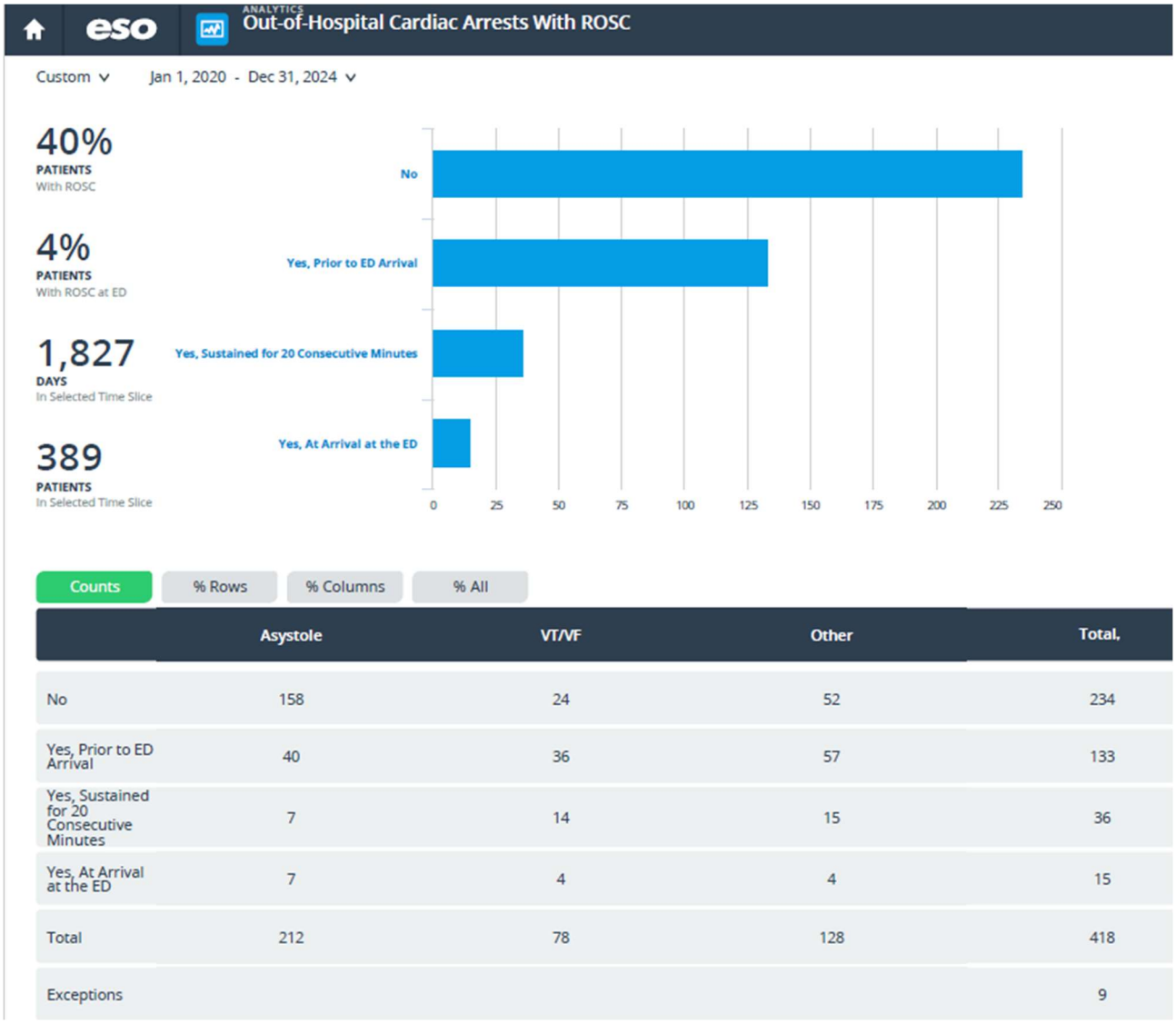


STEMI Hospital Locations

	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	Total
Ascension St. Vincent Heart Center of Indiana				6	23									29
Ascension St. Vincent Hospital-Indianapolis				2	7									9
Ascension St. Vincent Neighborhood Hospital(North.. Indianapolis					1									1
Community Heart and Vascular			3		1									4
Community Hospital North			1											1
IU Health Hospital-Carmel					4									4
Indiana University North Hospital	7	5	7	5										24
Indiana University Saxony Hospital	1													1
Riverview Hospital	1													1
St. Vincent Hospital Carmel	2	2												4
St. Vincent Hospital Heart Center	12	24	21	17										74
St. Vincent Hospital Indianapolis	8	9	3	6										26
St. Vincent's Heart Center	1	6												7
The Indiana Heart Hospital	1													1
Total	33	46	35	36	36									186

Injury by Mechanism

Primary Injury Breakdown by Year					
Injury Primary	**2020**	**2021**	**2022**	**2023**	**2024**
Falls	877	1174	1279	1308	1284
Motorized Vehicle Accident	242	325	339	343	324
Assault	49	31	45	34	27
General			72	75	73
Non-Motorized Vehicle Accident	31	15	24	23	19
Struck by Object	22	18	26	22	31
Physical Exertion	31	26	27	28	17
Sharp Objects	29	46	30	29	27
Intentional Self Harm	17	22	28	36	26
Poisoning	2	4	4	4	2
Explosives			1	0	0
Electrocution/Radiation	0	1	1	1	0
Animal/Plant Contact	3	8	12	12	13
Pedestrian - Vehicle Accident	12	20	15	21	23
Fire and Smoke	1	1	3	0	0
Burns	5	10	5	6	8
Firearms	7	6	6	2	8
Abuse	3	3	5	2	10
Environmental	3	4	2	3	0
Machinery Accidents	9	9	6	7	8
Suffocation/Asphyxiation			0	2	2
Drowning			0	0	1



Counts | % Rows | % Columns | % All

	Asystole	VT/VF	Other	Total,
No	158	24	52	234
Yes, Prior to ED Arrival	40	36	57	133
Yes, Sustained for 20 Consecutive Minutes	7	14	15	36
Yes, At Arrival at the ED	7	4	4	15
Total	212	78	128	418
Exceptions				9

Technical Rescue

The department provides for vehicle/machinery rescue, extrication as well as surface level water rescue capabilities through continuous staffing of apparatus that are distributed across the jurisdiction. Provisions for rope rescue, confined space rescue, trench rescue, and structural collapse rescue are through existing mutual aid agreements with surrounding departments that have technical rescue teams.

The department currently requires everyone to be trained to awareness level in all technical rescue disciplines. This training helps to ensure rescuer safety. Training is provided to all members to be consistent and to utilize the training platform that is consistent with the requirements of National Fire Protection Association (NFPA) 1670 (2009 Ed.) Chapter 8 as it pertains to Vehicle Search and Rescue Training, as well as NFPA 1006 (2009

Ed.) Chapter 10. The department follows NFPA 1670 (2009 Ed.) for Water Rescue Training standards found in Chapter 9, Sections 9.1, 9.2, 9.3.1-5, and 9.3.9 as it pertains to Surface and Swift Water Rescue Training as well as NFPA 1006 (2009 ed.) Chapter 11, Section 11.1-11.1.15.

Hazardous Materials

The Carmel Fire Department provides technician level hazardous materials response for the department's response area. 100% of the department members are trained to at least the operations response level.

Additionally, the department has 84 members of the shift personnel trained at the technician level. The technician level personnel can take offensive actions toward leak mitigation. The department provides hazmat personnel in two ways. All apparatus are staffed with operations level personnel at a minimum and many have technician level personnel as well.

Small incidents (natural gas calls, small fuel spills, etc.) are handled by engine and ladder companies. The Tactical Support Unit (TSU) responds from Station 345 and provides the required tools, personnel protective equipment (PPE), and supplies necessary for larger hazardous materials incident mitigation. The distribution of hazardous materials technicians to stations other than 345 has created a situation that does not easily allow for Computer Aided Dispatch (CAD) planning.

The department maintains a set of General Operating Guidelines (GOGs) specific to the hazmat response program, that exist to provide guidance for the most likely scenarios that may be encountered. These GOGs were established to seek compliance with the Occupational Safety and Health Administration (OSHA) Hazardous Waste Operations and Emergency Response standard 29CFR1910.120 specifically section q and appendices c and e.

All-Hazard Risk Assessment of the Community

This component is the overall hazard risks for the community in which CFD serves. CFD has evaluated its jurisdiction utilizing historical data in relation to incidents, injuries, services provided and the impact on the community. Data has been compiled from the Building and Other Hazards Risk Analysis along with data from the records management software (RMS), the National Risk Index, the US Census Administration, and input from the personnel serving on the street.

Community Expectations

The goal of the Carmel Fire Department is to provide the highest caliber of service possible to the customers (citizens) and to exceed all expectations they may have.

This level of service is made possible with highly trained fire service personnel, sufficient apparatus, and the best equipment available. These components are brought together allowing the Carmel Fire Department the opportunity to mitigate and diffuse any emergency safely and in a timely fashion to have the best chance for a positive outcome.

The Carmel Fire Department, through an extensive planning process, has strategically placed its fire stations, personnel, and equipment to enhance and deliver this service. The department may not have sought public input for these placements, but the process has achieved the established response goals.

The service area for the Carmel Fire Department is comprised mostly of a densely populated assortment of single and multi-family residences that is host to 101,964 plus customers.

Community Fire and Non-Fire Risk Assessment

The Carmel Fire Department conducts and analyzes the fire and non-fire risk assessment of the community. This encompasses a wide variety of potential incidents that have occurred and may have a potential of occurring within the response area. The City of Carmel is divided into reporting districts with each being assessed so that it receives the appropriate response level to accommodate the potential hazard risk. Response levels have been modified over the years due to the increased staffing levels and relocation of fire stations.

The department identifies calls by service type in each planning zone during annual statistical reporting. This is accomplished by utilizing reports in the fire records management system (FRMS) as well as Crystal Reports® software. The department utilizes many reports for monthly and year-end statistical data. This allows for planning review of increased or decreased run load in certain areas as well as identifying trends that can be used for forecasting. These reports are then plotted using geographical information systems (GIS) mapping for ease in identifying areas of concern, frequency of incidents, high frequency response areas, trends, and each type of response provided in each planning zone, (quadrant) within the jurisdiction. These statistics have sometimes resulted in a change of response plans.

All Hazard Risk Assessment

Fire Detection and Building Construction Impact on Deployment

The Carmel Fire Department uses the 2012 International Fire and Building Code, with 2014 Indiana Fire and Building Code Amendments. The Carmel Fire Department also has several local fire and life safety ordinances incorporated into the existing ordinances. The fire prevention division is very aggressive in reviewing plans of new construction and inspections of existing businesses within the response area to ensure life safety and property conservation.

Insurance Industry Impact on Deployment

Prior to the self-assessment and the accreditation process, there was only one method of rating a fire department's level of readiness and deployment capabilities. The Insurance Service Office (ISO) designed a rating system known as the fire suppression rating schedule or more commonly called the ISO Grading Schedule. For over a century, the insurance industry has been evaluating the fire defenses of cities throughout the United States. This evaluation process was an important element in establishing fire insurance rates for individual properties.

The basic objective of the Insurance Service Office was to provide a tool for the insurance industry to measure quantitatively the major elements of an entity's fire suppression system. Three basic elements are considered in the grading schedule: receiving and handling fire alarms (10%), fire department (40%), and water supply (50%). These elements placed a fire department/city in a Public Protection Class on a relative scale from 1 to 10, with 10 representing less than the minimum recognized protection. Following the ISO Public Protection Classification (PPC) survey of the department in 2007, the city of Carmel and Clay Township received a public protection class 3. The department requested a review by ISO and was awarded a rating of "2/2y" public protection class rating in 2017. ISO was out and reevaluated the department in spring of 2023 and the department received an updated rating of "2".

The Carmel Fire Departments current deployment standards were created using all of the above information. This standard of cover/risk hazard plan has utilized additional methods of exacting deployment standards that will evaluate and enhance current practices, some of which are internal criteria, National Fire Protection Association, and budget performance measures.

Deployment

The Carmel Fire Department's deployment practices require the move up of apparatus to vacated stations by using mutual-aid resources. This is based off incident type and available resources in the district.

The move up procedure does not only pertain to fires but is also used during medical emergencies and multiple

incidents (stacking) where the demand on existing resources reaches a minimum threshold, which is determined by the battalion chief (shift commander). The existing practice is to cover stations with mutual aid companies as deemed necessary by the battalion chief, while existing resources are committed to an incident or otherwise unavailable.

The department uses the adopted planning zone methodology to create and monitor established response area boundaries. The zones are reviewed on an annual basis at a minimum per department policy. Many factors are taken into consideration for response areas (planning zones), these include: population density, land use, statistical run load, occupancy type, access, hazards/risks, and service demands. The City of Carmel and Clay Township consists of a mixture of business, office, retail, restaurant, and recreational types of companies. The area also contains many different residential areas that range from small one family residences to very large residences including multi-family apartment/condo structures. The department does not utilize special responses based on socio-economic and demographic characteristics such as blighted areas and population earning statistics. Responses are based on occupancy type and location (in relation to automatic aid areas & water supply). High life hazard buildings receive an additional engine and ladder company on the initial response for any structure fires. The department has identified critical infrastructure within its planning zones that if destroyed would be a critical or essential economic loss to the community.

The city of Carmel is divided into 64 reporting districts and 19 planning zones. The reporting districts were created and are maintained after analyzing geographical location, risk factors, automatic aid areas, response recommendations, and historical incident data. Once the data is analyzed reporting districts are modified as needed with each being assessed so that it receives the appropriate response level to accommodate the potential hazard risk.

Response levels have been modified over the years due to the increased staffing levels and relocation of fire stations; this is also to accommodate the addition of another ambulance in the western portion of the response area.

The response area has no industrial manufacturing facilities or high levels of hazardous materials present. With the overall community being of modern construction, the department relies on automated fire alarms and sprinklers.

systems that are monitored by private agencies for early detection, notification and to lower the impact of the incident.

Fire station locations and staffing patterns must be prepared to respond to worst-case scenarios. Many factors make up risk:

- occupant mobility,
- construction features,
- fire protection,
- fire flow,
- nature of the occupancy or its contents,
- age of the building,
- severity of the medical emergency,

While risk factors all have some common thread, the rationale of placing occupancy within any risk assessment category is to assume the worst case based on historical incidents. The level of service provided should be based on the factors of a worst-case scenario.

The objective of the risk assessment is to reduce the probability of a truly serious loss occurring in a very unusual event. This involves keeping routine emergencies from becoming serious loss situations. Resources must arrive quickly with sufficient strength to stop the escalation of the emergency.

Given that risk is related to how a fire department responds, fire agencies over the years have attempted to match an appropriate response to risks. Prior to the accreditation process, there was no standardized method for identifying risk and appropriate response models.

Target hazards were known to the fire service and insurance industry to confront firefighters with extreme challenges, such as those found in lumberyards, woodworking shops, and businesses using combustible fuels or solvents. Additionally, the Insurance Service Office (ISO) used a "fire flow" calculation to determine how much firefighting water such a target hazard would need and from that calculated how many firefighters would be required, the size of the fire pumps, and the capabilities of the water main systems.

Building Hazard Risk Analysis Evaluation

The Carmel Fire Department fire marshal's office had developed a Building Hazard Risk Analysis Evaluation (BHRAE) form to assist in putting commercial structures into an identified risk category. If needed personnel and equipment arrive too late, the fire will grow beyond the ability of the initial assignment to stop the fire spread. The incident then grows to multiple alarms, draining down the community's resources. Therefore, the balancing act is to have a deployment plan that does not require frequent greater alarm fires.

For the BHRAE analysis, all personnel were introduced to the methodology and building information was collected. The information from the evaluation forms was entered into a spreadsheet that performed building fire risk scoring calculations automatically. The risk score produced for each commercial structure was placed into reporting districts, which were determined utilizing the Carmel fire reporting districts map with the help

from city of Carmel GIS department.

The BHRAE process calculates the following areas:

- building area,
- height,
- construction type,
- fire flow,
- access,
- exposure separation,
- hazards,
- fire load,
- fire protection systems,
- occupancy type,
- occupant load,
- occupant mobility
- economic impact

The hazard score is utilized to determine the values exposed to loss, the probability of an event occurring, and the consequence of such an event on the community.

The desired outcome of the BHRAE process is an accurate and current description of the values-at-risk (VAR) in the community. VAR is the inventory of a community's potential fire problems arrayed from the most valuable and vulnerable risk to the least valuable and vulnerable risk, which the fire department is deployed to protect. If used as proposed, BHRAE will enable users to identify and evaluate important factors of individual buildings, reporting districts and an overall community profile with respect to the need for fire and emergency service deployment.

The model begins with demographics, an assessment of the overall threat potential to the community. This includes but is not limited to most catastrophic events that could occur to a community. This determination is based on historical, climatic, geographic, or other conditions.

For an area to be classified as **high risk** it should be of substantial size and should contain a predominating concentration of properties presenting a high risk of life loss, loss of economic value to the community, or large loss damage to property in the event of fire, and a high fire flow area. Normally these structures lack built-in fire protection features and/or contain occupants not capable of self-preservation. The BHRAE score from such buildings is 46 or greater. The objective in these structures is to stop the escalation of a major fire.

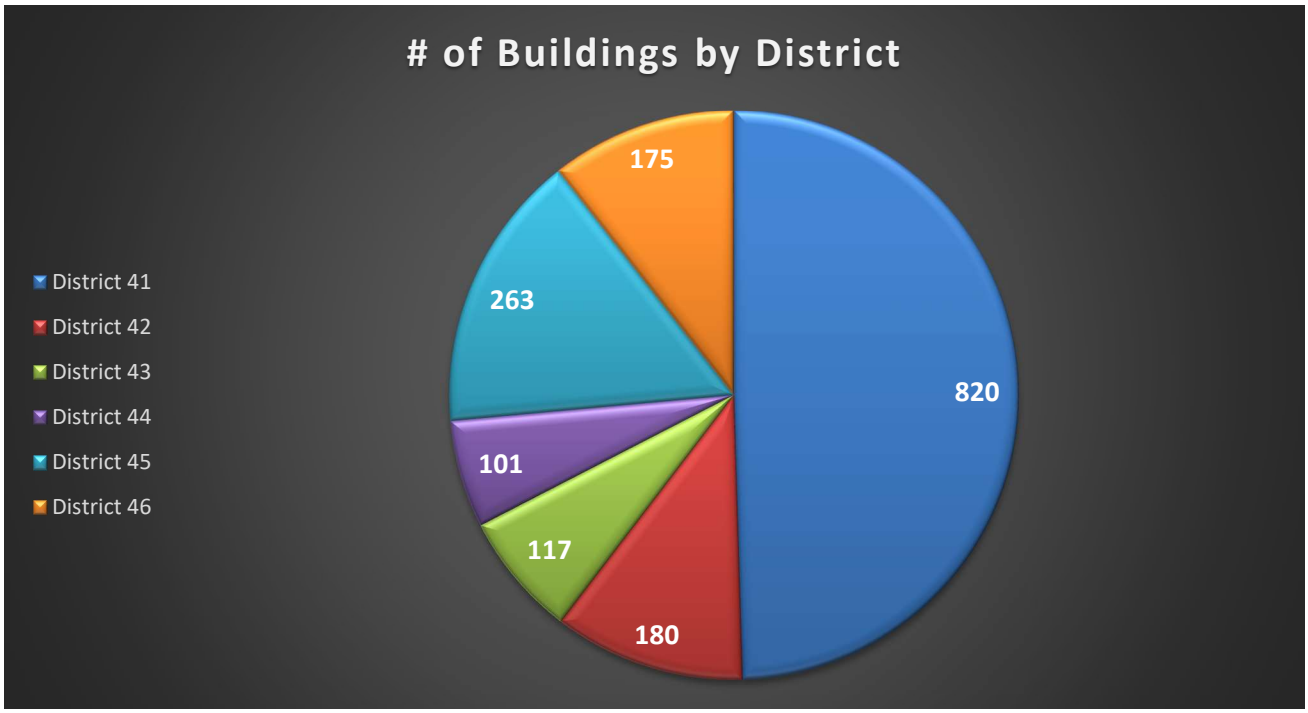
This would involve conducting search and rescue and confining the fire to the floor of origin with the rapid deployment of resources. Currently, there are 88 "high risk" commercial occupancies within the Carmel Fire Department districts.

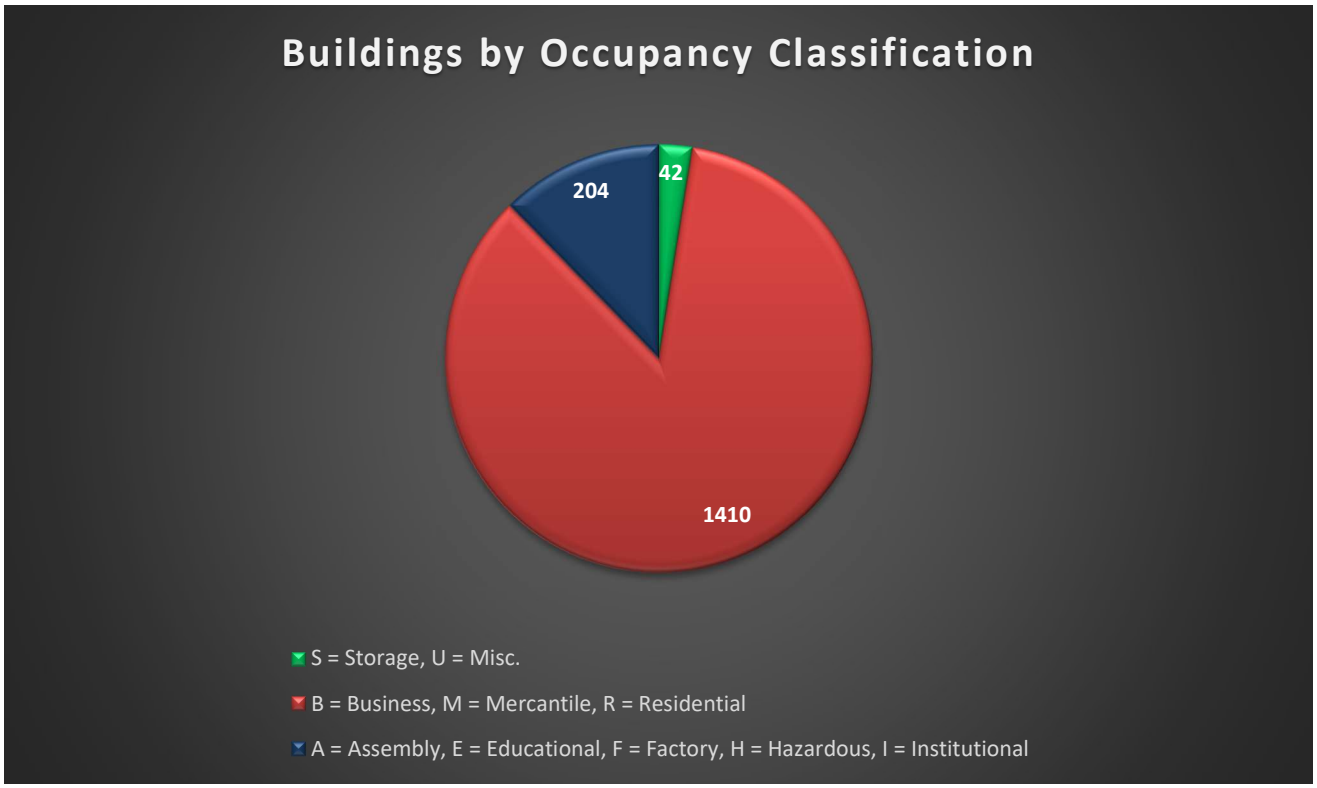
A **moderate risk** area contains average build-up and the risk of life loss or damage to property in the event of a fire (in a single occupancy) is usually limited to the occupants, although in certain areas, such as small apartment complexes the risk of death or injury may be relatively high. Concentrations of property may vary, but generally will be of limited extent. (This risk classification is often the greatest factor in the distribution of fire stations for assuring fair and equitable access to initial attack capability.) The BHRAE score for such a building is from 30-45. The objective is to stop the escalation of a minor fire. Typically, this means conducting search and rescue and confining the fire to the room of origin, plus limiting heat and smoke damage to near room of origin. Currently, the Carmel Fire Department response area contains 159 occupancies determined to be a "moderate risk".

In an area classified as **low risk**, the likelihood of life loss is remote and property damage limited, with little or no possibility of the fire spreading beyond the area of origin. Buildings of this type have BHRAE scores of 13-29. There are 1409 "low risk" occupancies within Carmel Fire Department response area.

Building Hazard Risk Analysis Scores

BHRAE scoring was completed on all commercial occupancies in each of the department's 64 reporting districts. The BHRAE scores are pertinent to assessing the community risk. For a complete listing of BHRAE scores for all reporting districts refer to the appendix referencing the BHRAE information. The table below represents the apartment buildings also.





Fire protection and detection systems are documented on all commercial buildings and businesses in the City of Carmel. The department conducts a pre-plan fire inspection once per year on all commercial buildings,

businesses, and apartment complexes. Fire protection and detection systems are noted on all pre-plans in Tyler® Fire Records. The pre-plans are made available by the mobile data computers (MDC) in every front-line apparatus. The type of suppression and detection is recorded along with the location of any fire department connections on the structure. Noting the presence, type, and location of fire suppression and detection systems in structures can assist with quickly supplementing the system to gain control of a fire. The process also identifies structures that might require a special response due to the lack of these systems.

Civilian Fire Related Injuries and Deaths

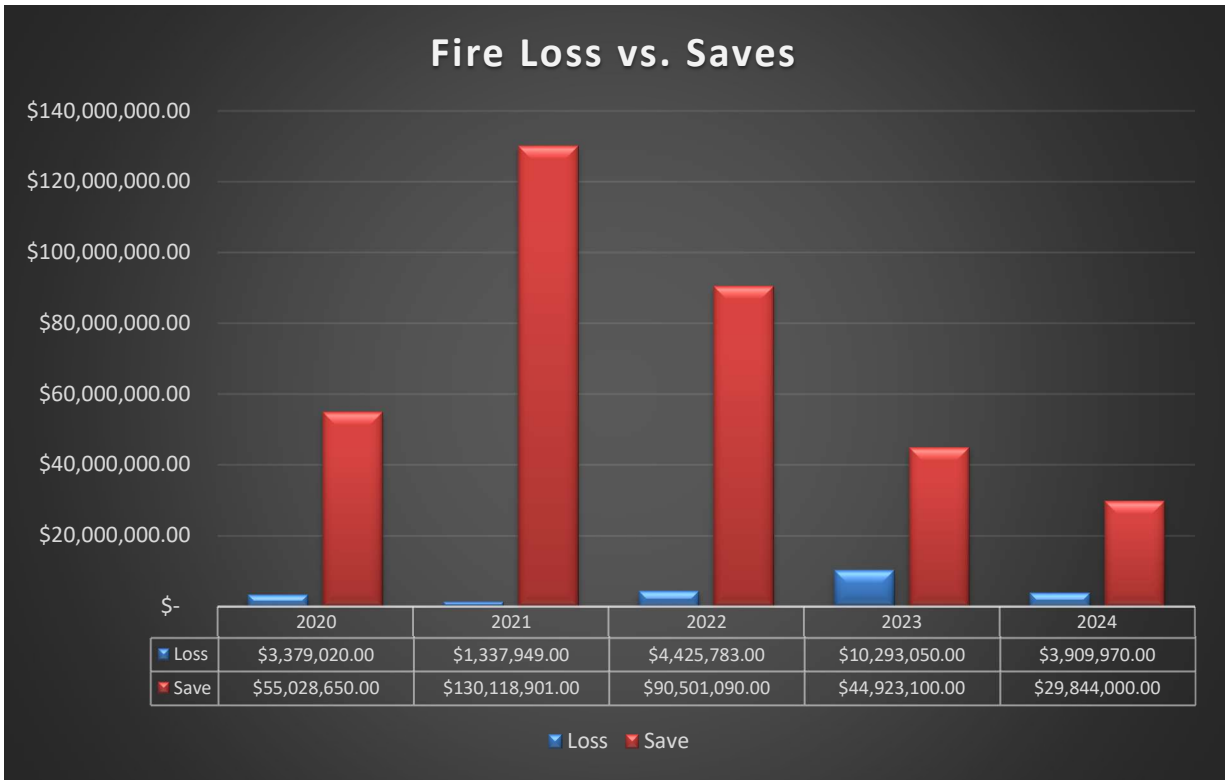
For the period of 2020-2024 there have been a total of 5 civilian injuries and 1 fatality from fires in the jurisdiction.

Firefighter Fire Related Injuries and Deaths

For that same period there have been 19 firefighter injuries and 0 fatalities of CFD personnel.

Fire – Loss versus Saves

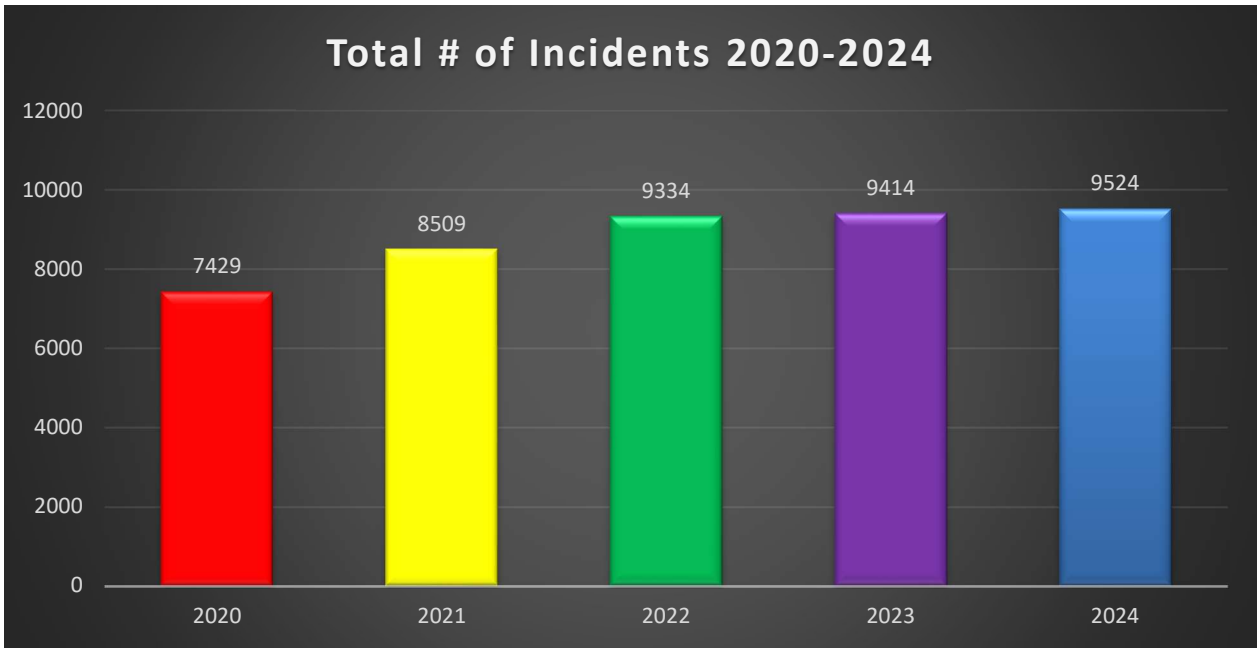
The department does track the loss versus save aspect of all fires. The results are as follows.

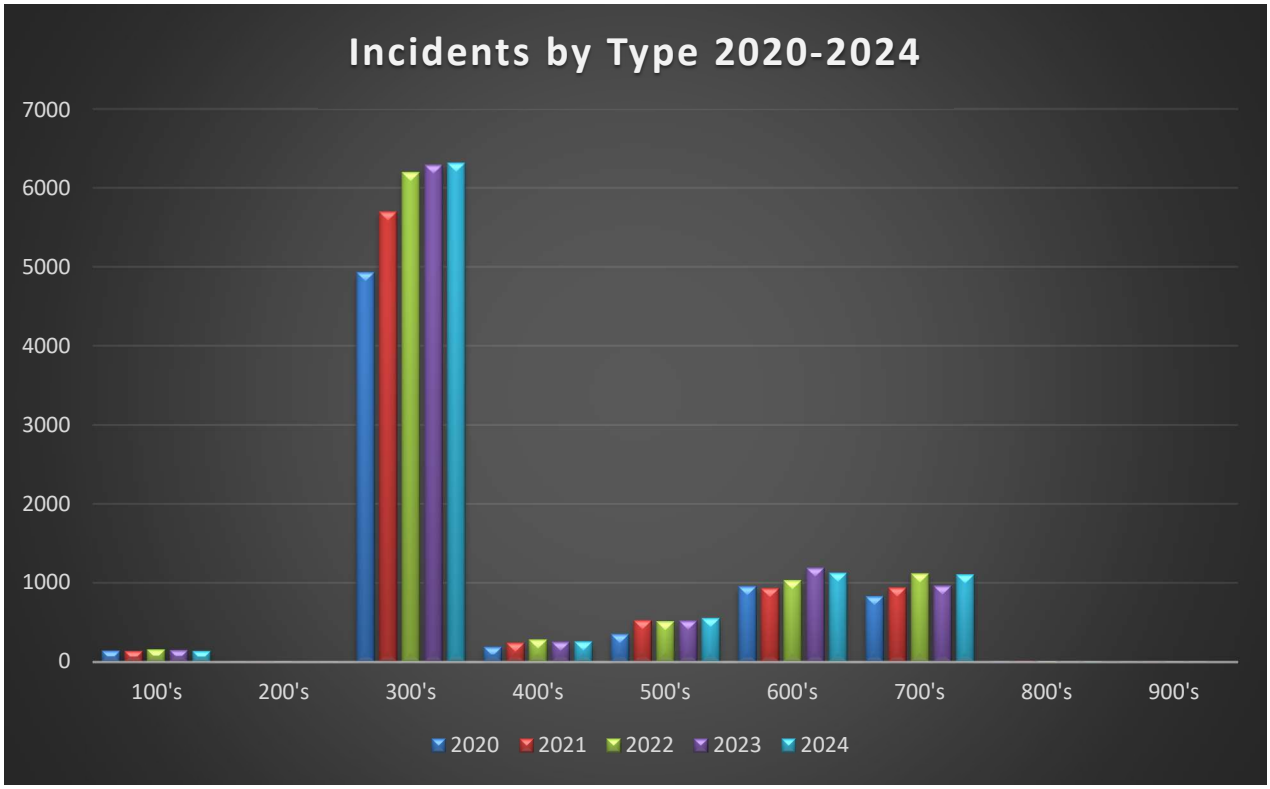


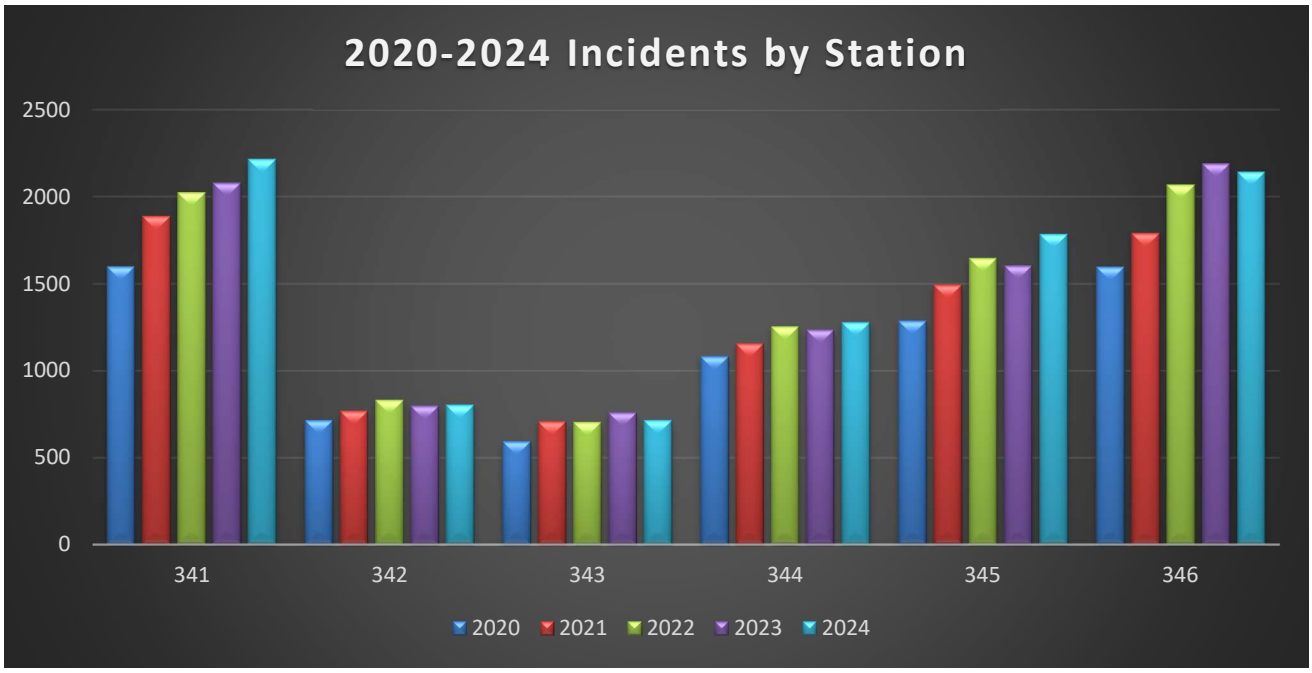
	2020	2021	2022	2023	2024
Loss	$3,379,020.00	$1,337,949.00	$4,425,783.00	$10,293,050.00	$3,909,970.00
Save	$55,028,650.00	$130,118,901.00	$90,501,090.00	$44,923,100.00	$29,844,000.00

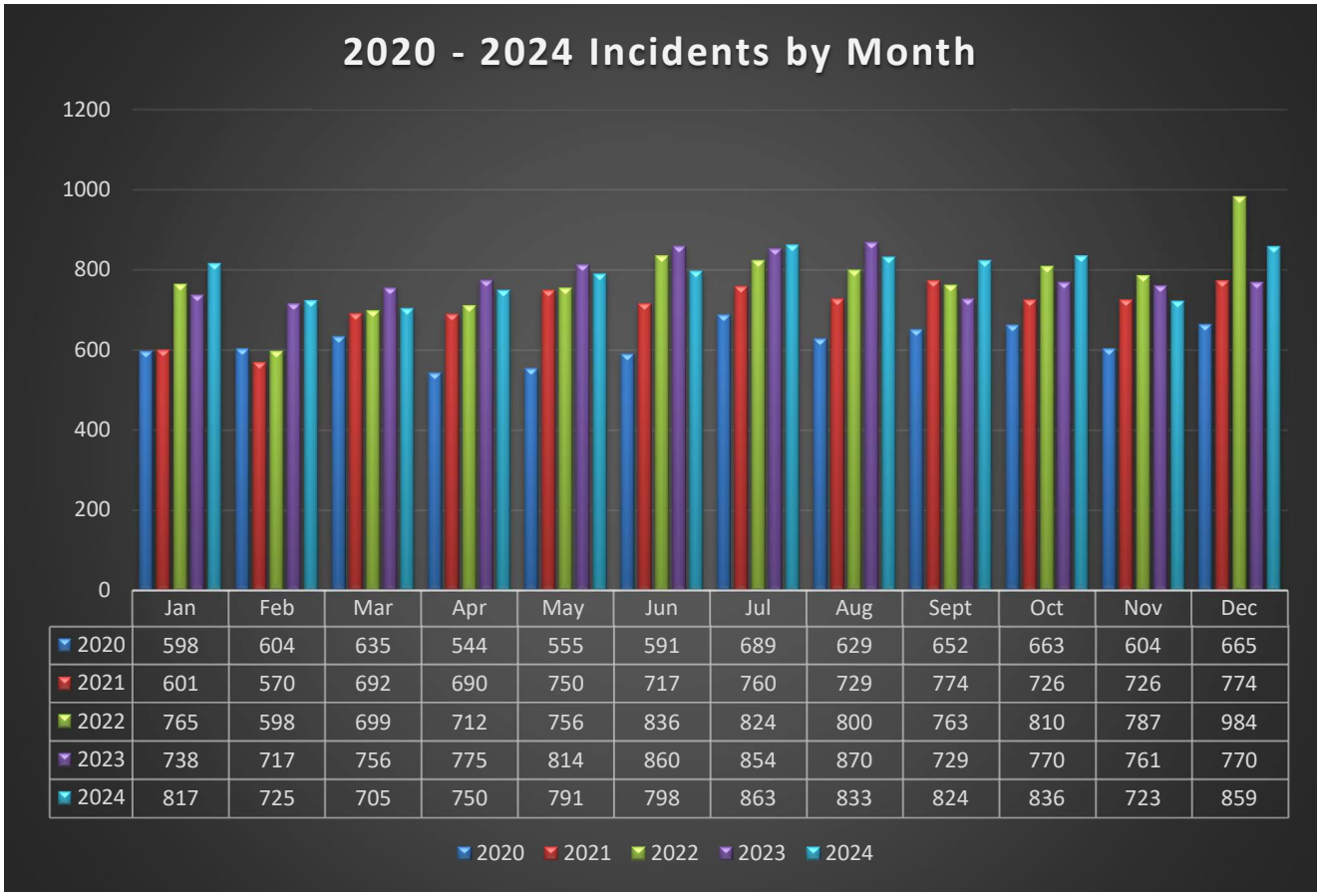
Historical Data

Below you will find historical data information in relation to the number of calls that CFD responds to on a yearly basis. Historical Statistical Charts.









	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
2020	598	604	635	544	555	591	689	629	652	663	604	665
2021	601	570	692	690	750	717	760	729	774	726	726	774
2022	765	598	699	712	756	836	824	800	763	810	787	984
2023	738	717	756	775	814	860	854	870	729	770	761	770
2024	817	725	705	750	791	798	863	833	824	836	723	859

	2024 Calls by Hour of Day and Day of Week							
	1 Mon	2 Tue	3 Wed	4 Thu	5 Fri	6 Sat	7 Sun	Total
00:00-00:59	31	27	35	40	36	26	32	227
01:00-01:59	26	35	20	22	27	33	39	202
02:00-02:59	17	33	27	24	20	21	25	167
03:00-03:59	19	22	30	23	18	18	21	151
04:00-04:59	24	18	23	25	28	18	30	166
05:00-05:59	12	21	26	25	25	27	23	159
06:00-06:59	32	26	33	41	28	26	26	212
07:00-07:59	47	55	61	47	48	44	35	337
08:00-08:59	75	74	73	68	76	50	49	465
09:00-09:59	89	84	76	84	75	62	59	529
10:00-10:59	81	103	79	91	76	72	89	591
11:00-11:59	78	95	96	75	85	82	66	577
12:00-12:59	83	94	85	95	86	79	71	593
13:00-13:59	113	97	93	75	92	72	58	600
14:00-14:59	99	92	104	78	78	75	77	603
15:00-15:59	94	95	80	76	80	80	66	571
16:00-16:59	86	77	76	92	75	57	66	529
17:00-17:59	79	101	73	77	81	64	69	544
18:00-18:59	77	86	79	67	84	68	73	534
19:00-19:59	70	69	49	59	73	87	62	469
20:00-20:59	69	52	62	56	62	49	43	393
21:00-21:59	43	50	48	47	59	74	46	367
22:00-22:59	39	44	34	39	54	43	42	295
23:00-23:59	37	22	30	34	45	37	34	239
Total	1,420	1,472	1,392	1,360	1,411	1,264	1,201	9,520

Busiest Day of Week	**Tuesday**
Busiest Time of Day	**2 PM to 3 PM**
Busiest Time and Day	**1 PM to 2 PM Tuesday**

Overview of Community Risk Assessment

The Carmel Fire Department conducted and analyzed the risk assessment of the community. This has encompassed a wide variety of potential incidents that have occurred and may have the potential of occurring within the response area. The department's data for fire loss, injury and life loss, and property loss is maintained in the Tyler New World® software suite that the department utilizes for the records management system, (RMS) for fire records. The department uses ESO Solutions® as the RMS for emergency medical services incidents. The department has been using the New World software since 2006 and ESO since 2011. The department reviews all levels of risk and identifies the fire and non-fire risks within each of the planning zones and provides running orders for providing an appropriate response. If the department needs additional resources to address the risk, automatic/mutual aid response agreements provide those required for the maximum risk in each of the planning zones. The department reviews all risks within its jurisdiction and has programmed specific emergency responses into the computer-aided dispatch system (CAD). This process also includes reviewing response data collected from each planning zone annually. This allows the department to maintain and/or improve response coverage throughout the district. Data that is analyzed consists of the location of all incidents, travel times for all assigned apparatus as well as the ERF (effective response force) times. These statistics are used to evaluate the effectiveness of available resources and their deployments. The department uses the Emergency Response Data Analysis Guideline as the documented methodology for monitoring the emergency response for each service type in each planning zone (quadrant) within the jurisdiction.

Risk Methodology

The Carmel Fire Department utilizes the 3-axis approach methodology as defined in the 6th edition Community Risk Assessment-Standards of Cover book. The department takes into consideration the probability, consequence, and impact of each incident to determine the risk levels for Fire, EMS, Hazardous Materials and Technical Rescue calls. Each incident type is given a score of low, moderate, high, severe based on historical data. The Carmel Fire Department has created and utilizes the Community Risk Analysis and Profile Guideline as the approved Risk Methodology as detailed below.

Definitions:

Probability: The likelihood of an incident occurring at some point in the future.

Consequence: The possible loss of life that the public faces as a result of the incident.

Impact: The impact that the incident has on staffing resources within the Carmel Fire Department.

Three-Axis Risk Assessment: The mathematical analysis of hazards based on their probability of happening,

their consequence to the public, and their impact on department staffing.

Planning Zone: The Carmel Fire Department has divided the jurisdiction into smaller areas based on the US Census tracts for the purposes of planning.

Procedure:

The department has adopted a three-axis risk methodology for the assessment of risk within the community. The three axes are Probability, Consequence, and Impact. The consequence axis is determined by establishing the number of civilian lives at risk as a result of the incident. A higher number of lives at risk results in a higher consequence number being used in the calculation. The following table is used to determine the consequence number for calculations:

Consequence Number of civilian lives at risk	
0 to 1	2
2 to 10	3
10 to 50	4
50 to 100	5
>100	6

The consequence axis for EMS runs is determined slightly differently. Due to the fact that generally only one life is at risk at a time in an EMS incident the consequence is determined by the severity of the run. A Basic Life Support (BLS) run is the lowest risk for greater harm while certain types of Advanced Life Support (ALS) runs are the highest risk for greater harm. The following table is used to determine the consequence number for EMS run calculations:

Consequence Severity of the EMS run	
Lift Assist	1
BLS/ALS Run	3
EMS Duty Officer Response Run	5

The consequence axis for technical rescue runs is also determined slightly differently. The low probability and generally small number of victims involved in technical rescue runs require a greater importance be given to rescuer risk and safety. The following table is used to determine the consequence number for technical rescue run calculations:

Consequence Severity of risk to the rescuers on Technical Rescue Runs	
Elevator removal	1
Vehicle/Machinery Extrication	3
Water, rope, confined space, trench rescue	5

The impact axis is determined by establishing the number of department personnel that respond to the given call type. A higher number of department responders results in a higher impact number being used in the calculation. The following table is used to determine the impact number for calculations:

Impact Personnel Dispatched on Hazard	
1 to 5	2
6 to 11	3
12 to 17	4
18 to 22	5
>22	6

The third axis is the probability axis. The probability axis is determined through a combination of processes. Primarily the probability is determined through a retrospective study of the emergency runs over the past five-year period. The following table is used to calculate probability number:

Probability # of run type calls/total # of runs x 10,000	
0 to 5	2
5 to 10	3
10 to 100	4
100 to 1000	5
>1000	6

This is sufficient for the overall jurisdiction but does not provide an accurate representation when looking at the planning zone level. Therefore, in the situation where a particular run type does not occur with much frequency (for example a mass casualty incident (MCI)) a different approach is required.

The probability of an MCI is determined by an examination of the most frequently traveled highways within the jurisdiction and assigning a probability number based on the traffic flow on that highway. Similarly, the very low number of severe risk fires (multi-family dwelling, commercial, and institutional fires) requires a different approach. In this case, the existing Building Hazard Risk Analysis Evaluation (BHRAE) is utilized to identify all of the severe risk fire hazards and which planning zone they are located in. A probability number is assigned based on the number of severe hazard buildings within that planning zone.

After establishing the probability, consequence, and impact numbers the Heron's Formula modified to find the volume of a Tetrahedron is used to assign a risk assessment number:

$$\frac{\sqrt{(PJ)^2+(PC)^2+(JC)^2}}{2} = \text{Risk Score}$$

Where:

P = Probability I = Impact

C = Consequence

A Risk Score is established for each fire, EMS, hazardous material, and technical rescue hazard in the jurisdiction. By grouping these hazards into their separate categories and then comparing the Risk Scores a profile of risk is established in each category. The risk profile will establish low, moderate, high, and severe risks in each category for the entire jurisdiction. For example:

To calculate the risk of an assist invalid run for the entire jurisdiction we must establish the probability, consequence, and impact of the hazard.

Probability of Outside Fire = Number of Outside Fire runs for last 5 years divided by the total number of runs for the last 5 years multiplied times 10,000 (to make the number easier to work with). This yields a total of 125.23. Utilizing the table above the probability number is 5.

Consequence of Outside Fire = Number of Civilian lives at risk. For this run type the number of civilian lives at risk is usually 0 to 1. Therefore, the consequence number is 2. Impact of Outside Fire = Number of personnel sent on the initial dispatch. Generally, a single engine company is dispatched on an outside fire (mulch fire, trash fire, etc.). Using the table above the impact number is 2.

The probability, consequence, and impact numbers are now placed into Heron's equation.

$$\frac{\sqrt{(PJ)^2+(PC)^2+(JC)^2}}{2} = \text{Risk Number } \frac{\sqrt{(5x2)^2+(5x2)^2+(2x2)^2}}{2} = 10.39$$

The following table is used to categorize risk into classifications:

Low Risk	0 to 14
Moderate Risk	14 to 20
High Risk	> 20

Therefore, utilizing the table above, Outside Fires constitute a Low Risk for the Carmel Fire Department.

The Risk Profile for the entire jurisdiction is then used to establish a risk profile for each planning zone. The established low, moderate, high, and severe risk categories will be maintained from the jurisdiction profile. However, the probabilities will be recalculated based on the number of previous runs in that specific hazard category. Therefore, while an Outside Fire is a Low Risk, through data analysis we can predict that there is a higher probability for an Outside Fire occurring in quadrant 45F than any other quadrant in the jurisdiction. So, quadrant 45F is at a higher risk for Outside Fires than the other quadrants.

Historical data shows that the risk analysis of each level is as follows:

Risk Legend

Low Risk	**0-14**
Moderate Risk	**14-20**
High Risk	**>20**

EMS	**Consequence**	**Probability**	**Impact**	**Risk Score**
Lift Assist	1	4	3	6.48
BLS/ALS Run	3	6	3	19.09
EDO Response	5	6	3	26.92

Fire	**Consequence**	**Probability**	**Impact**	**Risk Score**
Outside Fire	2	5	2	10.39
SFD Fire	3	4	5	22.85
MFD/Commercial Fire	5	3	6	30.63

Hazardous Materials	**Consequence**	**Probability**	**Impact**	**Risk Score**
CO Leak	3	4	2	11.05
Methane Leak	3	5	4	19.61
Spill/Leak/ Release Other	5	4	4	22.98

Technical Rescue	Consequence	Probability	Impact	Risk Score
Stalled Elevator	1	4	3	9.19
Vehicle/Machinery Extrication	3	3	5	16.29
Water, Trench, Collapse, etc.	5	3	5	23.18

EMS:

The CFD has determined the risk levels for EMS as stated above. The overall consequence, probability, and impact of emergency medical services basic life and advanced life support incidents are low. The overall consequence, probability, and impact of a vehicle accident without injury incident is moderate. The overall consequence, probability, and impact of a vehicle accident with injury incident is high. This has been discovered utilizing historical data and evaluating the impact of the community in the event of an EMS call. In 2020, CFD adjusted the risk criteria for EMS calls.

EMS	2024	2025	2026	2027	2028
High	250				
Moderate	4609				
Low	195				

Fires:

CFD has determined the following risk levels for fires as stated above. Consequence, probability, impact, and property type have been included in this methodology. Outside fires are the lowest of therisk levels. The moderate level risk consists of single-family dwelling fires. The high-level risk consists of multi-family dwelling, commercial, and institutional fires.

Fire	2024	2025	2026	2027	2028
High	13				
Moderate	25				
Low	103				

Hazardous Materials:

CFD has determined the risk levels for Hazardous Materials as stated above. The overall consequence, probability, and impact of CO Leak incident is low. The overall consequence, probability, and impact of methane leak incident is moderate. The overall consequence, probability, and impact of all other Hazardous Materials incidents are high. This has been discovered utilizing historical data and evaluating the impact of the community in the event of a Hazardous Materials call.

HazMat	2024	2025	2026	2027	2028
High	17				
Moderate	127				
Low	15				

Technical Rescue:

CFD has determined the following risk levels for technical rescue as stated above. The overall consequence,probability, and impact of removing a victim from a stalled elevator incident is low. The overall consequence, probability, and impact of extrication of a patient from a motor vehicle incident is moderate.

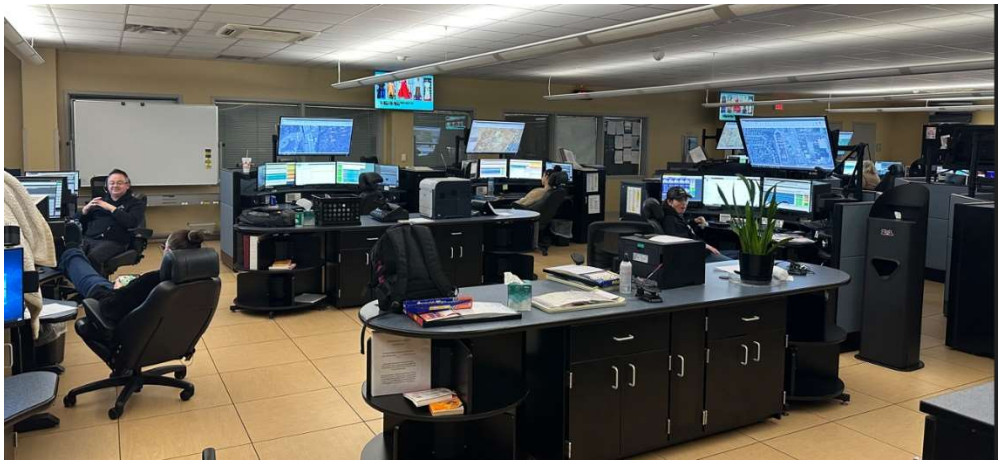
The overall consequence, probability, and impact of all water rescue, confined space, trench, and structural collapse rescue incidents are high. This has been discovered utilizing historical data and evaluating the impact of the community in the event of a technical rescue call.

Tech Rescue	2024	2025	2026	2027	2028
High	1				
Moderate	7				
Low	51				

Response Time Components

The CFAI has defined response time elements as a cascade of events. This cascade is similar to that used by the medical community to describe the events leading up to the initiation, mitigation, and ultimate outcome of a cardiac arrest. It is imperative to keep in mind that certain intervals described can be directly influenced by the fire service (turnout time and travel time). Others can be influenced indirectly such as the discovery and notification interval through public education and engineering practices. The fire service can also influence the call-processing interval through its ability to define standards and compel performance by dispatch centers.

Careful definition of terminology is essential to any conversation about response performance standards. It becomes even more critical when an organization attempts to benchmark its performance against other providers. The following definitions are standardized for discussion of response performance parameters.



The response performance continuum is composed of the following time points and time intervals:

Event Initiation Point is where factors occur that may ultimately result in an activation of the emergency response system. Precipitating factors can occur seconds, minutes, hours, or even days before a point of awareness is reached. An example is the patient who ignores chest discomfort for days until it reaches a critical point at which he/she makes the decision to seek assistance (point of awareness). It is rarely possible to quantify the point at which event initiation occurs.

Emergency Event Awareness is the point at which a human being or technologic "sentinel" (i.e., smoke detector, infrared heat detector, etc.) becomes aware that conditions exist requiring activation of the emergency response system. This is considered the point of awareness.

Alarm is when awareness triggers an effort to notify the emergency response system. An example of this time point is the transmittal of a local or central alarm to a public safety answering point (PSAP). Again, it is difficult to determine the time interval during which this process occurs with any degree of reliability. An

interval exists between the awareness point and the alarm point. This interval can be significant, as the alarm may be transmitted to a distant commercial alarm monitoring organization, which then re-transmits the alarm to the local 9-1-1 dispatch facility.

Notification occurs when the Public Safety Answering Point (PSAP) receives an alarm. This transmittal may take the form of electronic or mechanical notification received and answered by the PSAP.

Call Processing Interval describes the difference between the first ring of the 9-1-1 telephone and/or the first alert of the alarm panel at the dispatch center and the time the dispatch operator activates station and/or company alerting devices. The alarm call processing times are captured via the Tyler Technologies®, (New World®) CAD system.

Dispatch Time is when the dispatcher, having selected appropriate units for response, initiates the notification of response units.

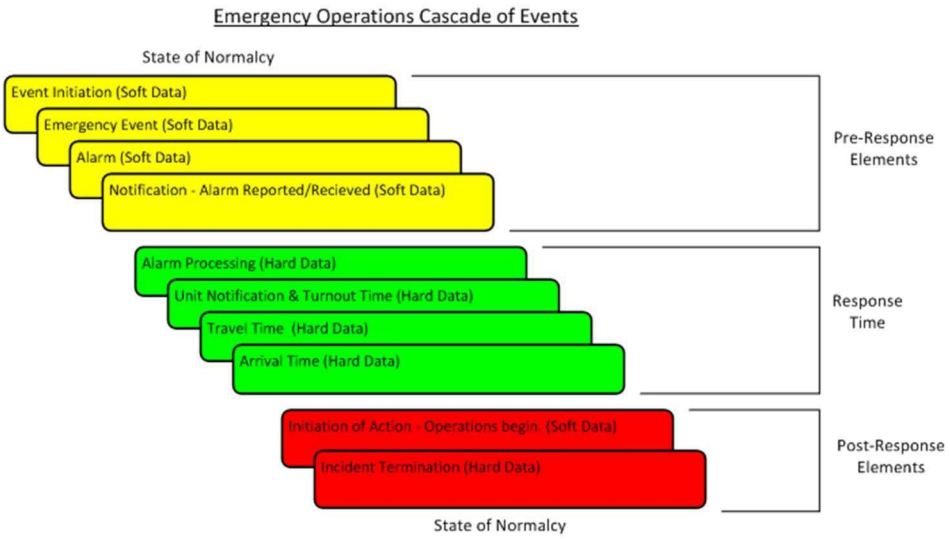
Turnout Time is the interval between the activation of station and/or company alerting devices and the time when the responding crew notifies the dispatcher by voice or mobile data computer that the company is responding. During turnout time, crews cease other activities, don appropriate protective clothing, determine the location of the call, board, and start the fire apparatus. It is expected that the "responding" signal will be given when personnel are on-board the apparatus and the apparatus is beginning to roll toward the call.

Travel Time begins at the termination of the turnout time and ends when the responding unit notifies the dispatcher that it has arrived on the scene.

Arrival Time is the point at which a responding unit arrives on scene.

Initiation of Action occurs when operations to mitigate the event begin. This sometimes varies greatly with arrival on scene and what arriving companies are faced with. An example would be treating a patient on the fifth floor of an office building.

Termination of Incident is where response resources have completed the assignment and are available to respond to another request for service.



On Scene Operations, Critical Tasking and Effective Response Force

On-scene operations, critical tasking, and effective response force are the elements of a standard of cover study that determine staffing levels, number of units needed, and duties to be performed on an emergency scene. A fire department must be able to determine what tasks need to be accomplished in order to ensure a positive outcome of the situation. The number of personnel and apparatus required to complete those tasks is based on this knowledge.

The Carmel Fire Department performs aggressive offensive interior fire attacks whenever possible. Through a structured risk management plan, the department has established the following guidelines to provide direction to on-scene personnel in evaluating conditions:

- We may risk our lives a lot to protect savable lives.
- We may risk our lives a little to protect savable property.
- We will not risk our lives at all to save what is already lost.

On Scene Operations

The variables of fire growth dynamics, life safety hazards of the building's occupants as well as to the firefighters, and the potential loss of property combine to determine the fire ground tasks that must be accomplished to prevent harm and mitigate loss. These tasks are interrelated but can be separated into two basic types: fire flow and life safety. Fire flow tasks are those related to getting water on the fire. Life safety tasks are those related to locating and removing any trapped victims from the fire structure and the establishment of a team to perform rapid intervention team (RIT) tasks.

Fire flow tasks can be accomplished with either handheld hoses or master streams. Master streams take relatively fewer firefighters to operate because they are most often fixed to the apparatus or are operated outside of the hazard zone.

The decision to use interior hand lines or exterior master streams is dependent upon several factors, such as: The building and its inherent characteristics such as size, construction type, and degree of interior compartmentalization; the fire and its size, location, extent, and the length of time it has been burning; the type of occupancy and its contents; the life hazard associated with the occupancy including the number and location of occupants and their physical condition; the arrangement of exterior exposures and the proximity to the involved structure; the number of resources that can be committed to operations as well as the supporting infrastructure such as water supply and fire protection systems; the Carmel Fire Departments actions and the effectiveness or ineffectiveness of those actions; and any special circumstances associated with the incident such as inclement weather.

If the fire has extended beyond the capability of handheld hoses to confine it, or if structural damage is a threat to firefighters' safety, the priority shifts to prevent the fire from advancing to surrounding exposures. First arriving firefighters may use a transitional "defensive to offensive" strategy (discussed below) to limit or remove an Immediate Danger to Life or Health (IDLH) threat while awaiting the arrival of additional resources.

Life safety tasks are based upon the number of occupants, their location, their status (e.g., awake versus sleeping), and their ability to take self-preserving action. For example, ambulatory adults require less assistance than non-ambulatory

adults. The elderly and small children also require more assistance. The key to a fire department's success at a fire is adequate staffing and coordinated teamwork. Before on-scene procedures can be established, the initial Incident Commander (IC) must select an appropriate initial strategy – offensive, defensive, or investigative.

An offensive strategy is an aggressive interior fire attack and is used whenever possible. The top priority is rescue of trapped victims (life safety). The Carmel Fire Department's goal is to eliminate any and all fire related deaths or injuries and to contain fires to their room of origin. The first objective is to put a hose line between the victims and the fire and to rescue those victims by removing them from the hazard area. The second is to extinguish the fire as quickly as possible.

A defensive strategy is one that does not allow interior fire attack except as needed to rescue trapped firefighters. When in the defensive strategy, the structure is considered devoid of all savable human life. There are no tenable spaces within the structure and no attempts are made to retrieve bodies because fire and structural conditions do not warrant the risk to firefighters.

An investigative strategy is where the first arriving unit sees nothing out of the ordinary. All other arriving units will remain in staging to await an assignment from the Incident Commander.

Fire Suppression:

The primary goal of fire operations is to provide enough firefighters and equipment in a strategic location so that an acceptable response force can respond to and reach fire scenes to mitigate the problem before flashover occurs.

Fire suppression requires the goal for the Carmel Fire Department to be arriving on scene with qualified fire personnel and other resources deemed necessary to reduce the advancement of the fire. A prompt response time will allow a better opportunity to rescue any "at-risk" victims, containment of the fire and the ability to

perform the proper salvage operations to preserve the property.

Stages of Fire: All fires, regardless of the speed of growth or length of burn time, go through similar dynamic growth stages. The most critical is the flashover stage.

Smoldering Stage: First phase of a fire when heat is applied to a combustible material, the heat oxidizes the material surface into combustible gases. The heat from oxidization raises the temperature of the surrounding materials. A fire progresses from the smoldering phase either immediately or slowly, determined by the type of fuel, nearby combustibles and/or surrounding air.

Incipient Stage: When temperatures get high enough, visible flames can be seen, and the stage is changed from smoldering to "incipient" or "open burning". Usually, the burning is contained in the immediate area of origin.

Flashover Phase: Not all of the combustible gases are consumed in the incipient stage. They rise and form a superheated gas layer on the ceiling. As the volume of gasses increase, they begin to spread across the ceiling and bank down heating other combustibles until they reach ignition temperatures. When the temperatures are hot enough to ignite all combustibles in the room of origin, a "flashover occurs". The fire room is untenable for human occupation at 212º degrees and when flashover occurs, it instantaneously increases the temperature to approximately 1500ºdegrees. Flashover is the direct result of time and temperature.

Significance of Flashover

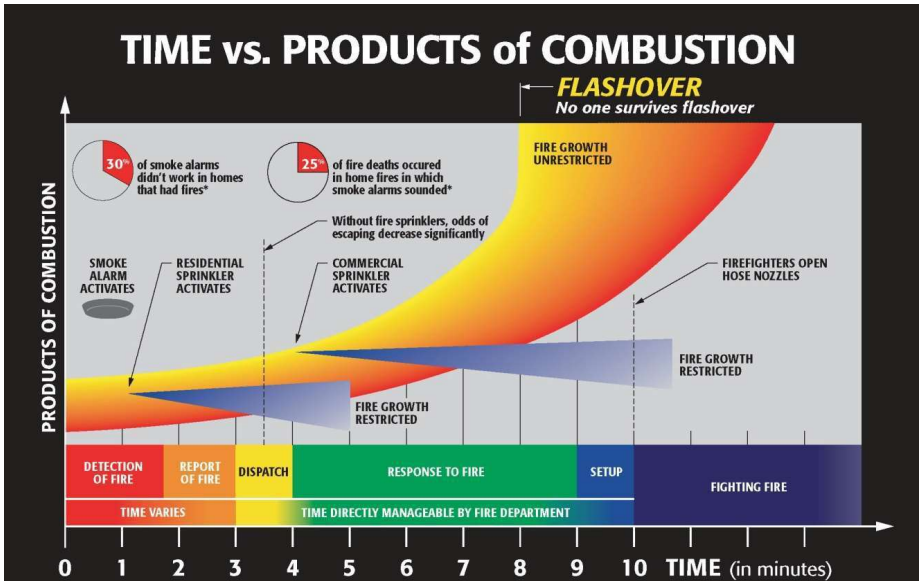
Pre-Flashover	Post-Flashover
Fire limited to room or origin requires small attack lines. Search and rescue efforts easier. Requires few resources and can be handled by initial effective response force.	Fire spreads beyond room of origin. Requires more or larger attack lines. Compounds search and rescue efforts. Requires additional resources.

The "time/temperature curve" standard is based on data from the National Fire Protection Association (NFPA) and the Insurance Services Organization (ISO), which has established that a typical point source of ignition in a residential house will "flashover" at some time between 5 and 30 minutes after ignition, turning a typical "room and contents" fire into a structural fire of some magnitude.

Critical Task Resources

Structure Fire

Single-family dwelling fires are considered the department's most common fire type; therefore, critical tasks are outlined for this type of response. These tasks must be conducted in a timely manner by firefighters in order to control the fire and to give any trapped occupants the greatest chances for survival. The fire department is responsible for assuring that responding companies are capable of performing all of the described tasks in a prompt and proficient manner.



Attack Line: A 1¾-inch hose that produces a minimum of 150 gallon per minute (GPM) manned by a minimum of three firefighters or a 2½-inch hose that produces a minimum of 250 GPM manned by a minimum of three firefighters. Each engine carries a set of attack lines that are pre-connected to the apparatus, folded on the hose bed, or packed for carrying into standpipe equipped high-rise buildings.

The selection of which attack line to use depends upon the speed with which the line must be placed in service,

the type of structure, the potential fuel loading it contains and the presence or lack of dividing walls or partitions within the structure, and the volume of water that is needed to ensure complete extinguishment.

Search and Rescue: A minimum of two firefighters along with a line officer assigned to search for living

victims and remove them from danger while the attack crew moves between the victims and the fire to stop the fire from advancing. A three-person crew is normally sufficient for most moderate risk structures, but more crews are required in multi-story buildings or structures with people who are not capable of self-preservation.

Ventilation Crew: A minimum of two firefighters are required to open a horizontal or vertical ventilation channel when the attack crew is ready to enter the building. Vertical ventilation or ventilation of a multi-story building can require more than two firefighters. Ventilation removes superheated gases, noxious and obscuring smoke, and prevents flashover. This increases firefighter safety by allowing interior crews to see and work closer to the seat of the fire. It also gives the toxic products of combustion an exit route away from endangered occupants or unburned property.

Ventilation must be closely coordinated with the fire attack. If it is performed too soon, the fire will get additional oxygen and grow. If performed too late, the attack crew will be operating in an extremely hostile environment where superheated gases and smoke obscure firefighter's vision and slows down the attack.

Backup Line: A 1¾-inch or 2½-inch line manned by a minimum of three firefighters is deployed behind the attack crew to protect their means of egress in the event the fire overwhelms them, or a problem develops with the attack line.

A 2½-inch line may be used for back up instead of a 1¾-inch line when the type of fire is one that could grow rapidly if not stopped by the initial attack line.

Rapid Intervention Team: A minimum of four firefighters equipped with flashlights, radios, RIT self-contained breathing apparatus (SCBA), flat head axe, halligan tool, RIT search rope, and Thermal Imagining Camera (TIC) are available near the entry point to enter the structure tasked with performing search and rescue of injured or lost firefighters. This requirement is an Occupational Safety and Health Administration (OSHA) rule.

Exposure Line: A minimum of a 1¾-inch attack line manned by three firefighters may be taken above the fire in multi-story buildings to prevent fire extension or used externally to protect nearby structures from igniting from exposure to radiant heat. In situations where the heat release is great, such as fires involving large quantities of flammable liquids, a 2½ inch line or apparatus mounted deck gun could be used.

Pump Operator: A firefighter/engineer must be assigned to operate the fire apparatus and supply the correct pressure to the attack, back up and exposure lines, and to monitor the pressure changes caused by changing flows on each line. This firefighter/engineer also completes the hose hookups to the correct discharges and completes the water supply hookup to the correct intake. The pump operator can sometimes make the hydrant

hookup alone if the engine is near a hydrant, but the hydrant spacing for moderate risk fires often precludes this.

Water Supply: A minimum of one firefighter must establish a reliable water supply by either connecting to a fire hydrant or initiating a tanker shuttle operation. Regardless of which method, timing is a critical factor. An engine has about four minutes of water if one 1¾-inch line is flowing.

Incident Commander: An officer is assigned to remain outside the structure to coordinate the attack, evaluate results, manage the operating strategy, arrange for more resources, and monitor conditions that might jeopardize crew safety.

Staffing Levels - Fires

Low Risk - Outside Fires

Task Performed	Personnel Needed	Apparatus Responsible
Pump Operations	1	1st Arriving Engineer
IC/Safety	1	1st Arriving Company Officer
Hand Line Crew	2	1st Arriving Engine Firefighters
Total Effective Response Force	4	

Moderate Risk – Single Family Dwelling Fires

Task Performed	Personnel Needed	Apparatus Responsible
Incident Command	1	1st Arriving Battalion Chief
Personnel Accountability	1	1st Arriving Executive Officer
Water Supply Pump Operations	1	1st Arriving Engineer
Primary Attack Crew	3	1st Arriving Engine
Secondary Water Supply Back-up Line Pump Operations	1	2nd Arriving Engineer
Back-up Line	3	2nd Arriving Engine
Rapid Intervention Team	4	3rd Arriving Engine
Force Entry/Search/Salvage/Overhaul	8	1st Arriving Ladder 1st Arriving Ambulance 2nd Arriving Ladder
VEIS/Outside Vent/Ladders/Utilities	4	
Tactical Reserve	4	4th Arriving Engine
Scene Safety	1	Safety Officer
Rehab	2	2nd Ambulance
Medical	1	EDO
Total Effective Response Force	34	

High Risk – Multiple Family Dwelling/Commercial/Institutional Fires

Task Performed	Personnel Needed	Apparatus Responsible
Incident Command	1	1st Arriving Battalion Chief
Personnel Accountability	1	1st Arriving Executive Officer
Water Supply Pump Operations	1	1st Arriving Engineer
Primary Attack Crew	5	1st Arriving Engine 1st Arriving Ambulance
Water Supply Support Sprinkler System Pump secondary attack line	1	2nd Arriving Engineer
Secondary Attack Crew	3	2nd Arriving Engine
Water Supply/Supply Aerial/Back-up Pump Operations	1	3rd Arriving Engineer
Back-up Line	3	3rd Arriving Engine
RIT	4	4th Arriving Engine
FE/Ventilation/Overhaul/Salvage	5	1st Arriving Ladder
Search/Ventilation	5	2nd Arriving Ladder
Tactical Reserve	4	5th Arriving Engine
Medical	1	EDO
Rehab	2	2nd Ambulance
Scene Safety	1	Safety Officer
Total Effective Response Force	38	

Emergency Medical Service (EMS)

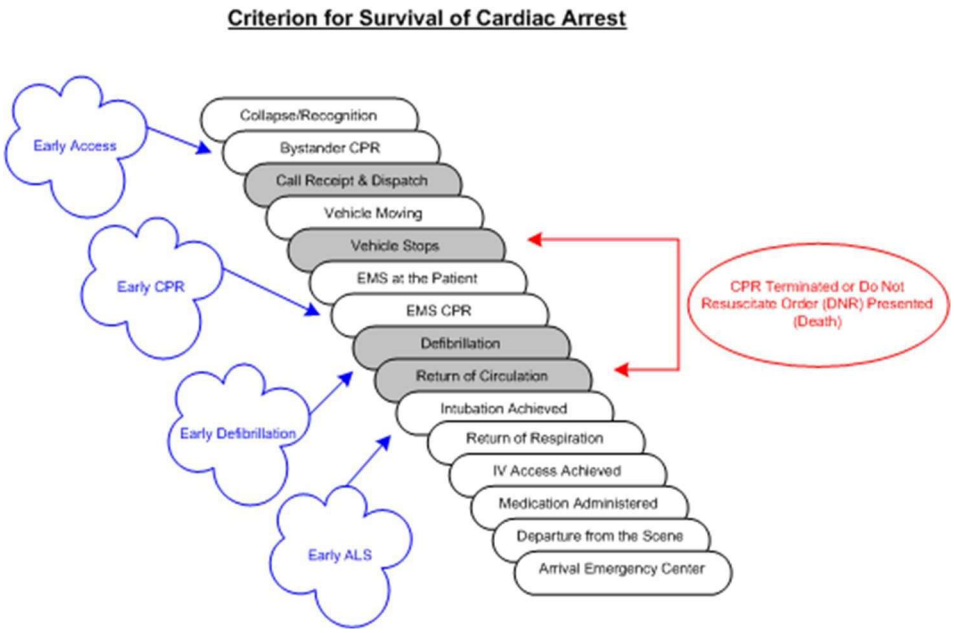
Time requirements for emergency medical service calls are comparable to fire incidents. Brain damage is normally irreversible after 10 minutes. Interventions include early cardiopulmonary resuscitation (CPR) and electrical defibrillation. Equally important is expedient intervention in cases of acute myocardial infarction (AMI), stroke, and traumatic injury.

The Carmel Fire Department has Life Pak® 15's in all frontline apparatus and 3 administrative paramedic staff cars, the remaining staff cars carry automatic external defibrillators, (AED's). The department promotes "public access defibrillation" by assisting businesses, schools, and organizations in the education and procurement of AED's. In addition, the department has worked closely with the Carmel police department to promote the inclusion of an AED on each police vehicle assigned to road patrol.

The Carmel Fire Department also maintains its own Community Training Center (CTC) for the American Heart Association (AHA). The training center provides the Carmel and Clay township residents, along with

doctors, nurses, paramedics, EMT's, and first responders courses in Advanced Cardiac Life Support (ACLS), Pediatric Advanced Life Support (PALS), Cardiopulmonary Resuscitation (CPR), Automatic External Defibrillation (AED), first responder, and basic first aid in schools. The training is provided by Carmel firefighters who have been trained as instructors for the American Heart Association.

Early recognition and treatment of acute myocardial infarction (heart attack) has been enhanced by utilizing sophisticated heart monitoring (12 lead), on each ALS unit that allows the paramedic to begin early treatment of heart attack victims to help minimize the damage heart muscle.



Emergency Medical Services Critical Tasking

Requests for Emergency Medical Services (EMS) comprise approximately 65% of all service demands for thedepartment. These calls include, but are not limited to: car accidents, childbirth, heart attack, stroke, difficulty breathing, and cardiac arrest (i.e., not breathing, no pulse). The wide assortment of EMS calls makes it difficult to outline the critical tasks for each call type; however local protocol is followed for all

situations. For most responses, an advanced life support (ALS) engine and an advanced life support/basic life support (BLS) ambulance respond which allows for a minimum of six personnel certified as EMT-B and one being a certified paramedic to provide medical care.

Based on the call type, a response can be upgraded, or subsequently downgraded, either automatically via dispatch, or by individual personnel based on information provided.

All EMS alarms are processed and dispatched by the Hamilton County Communications Center utilizing the Medical Priority Emergency Medical Dispatching (EMD) protocols.

Staffing Levels – EMS

Low Risk – Lift Assist Calls

Task Performed	Personnel Needed	Apparatus Responsible
BLS/ALS Patient Care	3	Engine
IC/Safety	1	Engine Officer
Total Effective ResponseForce	4	

Moderate Risk – BLS/ALS Response Calls

Task Performed	Personnel Needed	Apparatus Responsible
BLS/ALS Patient Care	3	Engine
Treatment/Transport	2	Ambulance
IC/Safety	1	Engine Officer
Total Effective ResponseForce	6	

High Risk - EDO Response Calls

Task Performed	Personnel Needed	Apparatus Responsible
BLS/ALS Patient Care	3	Engine
Treatment/Transport	2	Ambulance
IC/Safety	1	Engine Officer
Medical Support	1	EDO
Total Effective ResponseForce	7	

Hazardous Materials (Haz-Mat)/Weapons of Mass Destruction (WMD)

All Carmel Fire Department personnel are trained to the Haz-Mat/WMD operations level per OSHA 1910.120 at a minimum. Additionally, several firefighters are trained to the hazmat technician level and participate as members of the Hamilton County Hazardous Materials Task Force (HCHMTF). In the event a hazardous materials incident requires a technician response, the Carmel Fire Department will utilize the HCHMTF and will provide on-duty personnel to assist as technicians.

Hazardous Materials Response Critical Tasking

All Carmel Fire Department personnel are trained to the HazMat operations level as a minimum, per OSHA 1910.120. Additionally, about 50% of firefighters are trained to the HazMat technician level and participate as members of the Hamilton County Hazardous Materials Task Force (HCHMTF). In the event a hazardous materials incident requires atechnician response, the Carmel Fire Department will utilize the HCHMTF and provide on-duty personnel to assist as technicians. The tasking for hazmat incidents is followed through guidelines established internally and supplemented by the District 5 Hazardous Materials Training and Advisory Council.

Staffing Levels – Hazardous Materials

Low Risk - Carbon Monoxide Alarm

Task Performed	Personnel Needed	Apparatus Responsible
IC/Safety	1	Engine Officer
Monitor Atmosphere	3	1st Arriving Engine
Total Effective ResponseForce	4	

Moderate Risk – Gas Line Cut

Task Performed	Personnel Needed	Apparatus Responsible
Incident Command	1	1st Arriving Battalion Chief
Personnel Accountability	1	1st Arriving Executive Officer
Monitor Atmosphere	4	1st Arriving Engine
Pump Protection Line	1	2nd Arriving Engineer
Protection Line	2	2nd Arriving Engine
Safety	1	2nd Arriving Engine Officer
Total Effective ResponseForce	10	

High Risk – Spill/Leak/Release other than CO or Methane

Task Performed	Personnel Needed	Apparatus Responsible
Incident Command	1	1st Arriving Battalion Chief
Personnel Accountability	1	1st Arriving Executive Officer
Pump Protection Line	1	1st Arriving Engineer
Protection Line	3	1st Arriving Engine
Defensive and Offensive Operations	6	Engine 345 Hazmat 345
Medical Monitoring	2	1st Arriving Ambulance
Scene Safety	1	Safety Officer
Total Effective ResponseForce	15	

Technical Rescue:

Technical rescue incidents require the same response as any other emergency run. The first unit to arrive assumes the responsibility and will determine if the incident is beyond the scope of the first responder's level of expertise. The Carmel Fire Department does not have a technical rescue unit; instead, it relies on automatic aid. The Carmel Fire Department utilizes mutual aid from Westfield, Fishers, Noblesville, and Cicero Fire Departments to respond with members who are trained to the technician level to deliver a coordinated response.

Low Risk - Remove from Stalled Elevator

Task Performed	Personnel Needed	Apparatus Responsible
Command/Accountability	1	1st Engine Officer
Contact Victim	1	1st Arriving Engine Firefighter
Secure Power	1	1st Arriving Engine Firefighter
Remove Victim	6	1st Arriving Engine 1st Arriving Ladder
Scene Safety	1	Safety Officer
Total Effective Response Force	10	

Moderate Risk - Extricate from Vehicle

Task Performed	Personnel Needed	Apparatus Responsible
Incident Command	1	1st Arriving Battalion Chief
Personnel Accountability	1	1st Arriving Executive Officer
Triage	1	1st Arriving Paramedic
Treatment	3	1st Arriving Engine
Pump Protective Line	1	2nd Arriving Engineer
Operate Protective Line	3	2nd Arriving Engine
Extricate Victim	5	1st Arriving Ladder
Medical Support	1	EDO
Transport Victims	4	1st Ambulance 2nd Ambulance
Scene Safety	1	Safety Officer
Total Effective ResponseForce	21	

High Risk - Rescue from Rope, Confined Space, Trench, Water

Task Performed	Personnel Needed	Apparatus Responsible
Incident Command	1	1st Arriving Battalion Chief
Personnel Accountability	1	1st Arriving Executive Officer
Medical Support	1	EDO
Victim Stabilization and Transport	4	1st Arriving Ambulance 2nd Arriving Ambulance
Rescue Officer	1	Ladder 341 Officer or external tech rescue team member
Rigging Officer	1	Ladder 341 Rope Technician or external tech rescue team member
Victim Extrication	15	Engine 341 Ladder 341 External tech rescue team
Scene Safety	1	Safety Officer
Total Effective ResponseForce	25	

Establishment of an Effective Response Force

On March 7, 2017, the Hamilton County Public Safety Communications went live on a new computer aided dispatch (CAD) system. During the CAD build process, many new call types were created. The department's command staff met and reviewed all system call types in order to establish an appropriate effective response force (ERF) for each incident type. The department has conducted a critical task analysis of each risk category and/or fire incident to determine the first-due and ERF capabilities. These incidents: fire, emergency medical response (EMS), hazardous materials, and technical rescue are identified during the risk assessment and are based upon historical response.

Once critical tasks have been identified and defined, an effective response force can be established. This force is defined as the amount of equipment and personnel that must reach a specific location within the specified response time. Fire risk cannot be held to zero. Thus, the objective of this standard of response coverage study is to identify a balance among distribution, concentration, and reliability that will keep fire risk at a reasonable level, while yielding the maximum savings of life and property.

The fire scene is unpredictable in many ways. While it is possible to state what critical tasks must be

accomplished in order to extinguish a fire, it is not always possible to predict how many firefighters it will take to accomplish those tasks. The number of personnel and the amount of equipment necessary to accomplish the critical tasks listed will vary due to the following factors:

- Delayed response;
- Building construction;
- Number of occupants;
- Physical and emotional condition of occupants;
- Extent of fire upon arrival (flashover);
- Built-in fire protection;
- Area of fire involvement;
- Firefighter or civilian injuries;
- Water supply
- Equipment failure.

The need for more personnel may arise on any fire scene at any time. Fire conditions must dictate the minimum response needed for any given fire, even if that response exceeds the requirements listed in this document. The experience and professional judgment of our officers to request additional resources early in an incident is highly valued. Officers are encouraged to call for help whenever they feel it may be useful.

The Carmel Fire Department utilizes risk assessment, staffing considerations, equipment standards, and task analysis of the necessary elements needed to mitigate common fire emergencies. These elements are outlined in the tables listed below.

Distribution

The term "distribution" describes the station and resource locations needed to minimize and terminate emergencies by assuring a sufficiently rapid first due response deployment. Distribution is measured by the percent of the jurisdiction covered by first due units within the jurisdiction**.**

Concentration

Concentration is the spacing of multiple resources arranged within close enough proximity that an initial effective response force can be assembled on-scene within sufficient time frames. An initial effective response force is one that will most likely stop the escalation of an emergency of a specific risk type.

In determining concentration, the Carmel Fire Department again looked at risk assessment, call volume, population, and critical tasking. When considering the concentration of units, it should be noted that the

Department has entered into automatic and/or mutual aid agreements with all surrounding communities. These agreements benefit the Carmel Fire Department by allowing the use of neighboring fire stations within close enough proximity to bolster initial effective response forces for the Carmel Fire Department.

Additional resources may be obtained by utilizing automatic aid through the established running orders in the Computer Aided Dispatch (CAD) Center. The running orders have been established to go up to at least 100 stations deep for any call type in the CAD system.

With the current running orders, there has not been a need to write special running orders for a specific structure in the Carmel Fire Department response area. However, the department will continue to review new and existing structures to see if there is a need to establish a special running order.

Reliability

Response reliability is defined as the probability that the required amount of staffing and apparatus will be available when a fire or emergency call is received.

If every piece of fire department's apparatus were available in its desired location every time a fire/EMS call was received, then the department's response reliability would be 100 percent. If, however, a call is received for a particular company and that company is busy with another call, a substitute company must be assigned from another station. If the substituting station is too far away, that company cannot respond within the maximum prescribed travel time.

The department has implemented a video conferencing system that allows apparatus to stay in district and participate in classroom training, which will help with reliability keeping those units in their primary district while still participating in training activities. Also, the department has implemented a modified response during severe storms when there is the probability of several back-to-back alarm calls, meaning a single unit will respond to the alarm call for an investigation. The department is continually looking for ways to make sure response reliability is considered in all aspects of the department.

As the number of emergency calls per day increases, so does the probability that a needed piece of apparatus will already be busy when a call is received. Consequently, the department's response reliability decreases.

The department examines the emergency response data for occurrences of simultaneous responses in the same district. As the number of simultaneous responses increases the reliability of having the closest apparatus available to respond decreases. The chart below shows the number of simultaneous responses for each response district along with the percentage of the total. 95% and greater is colored green, 90-95% is colored yellow, and below 90% is colored red. Below 90% means that at least 10% of the time or 1 out of 10 times

there is already at least one run happening in the response district when a second run is dispatched.

It should be noted that an unusually strong windstorm occurred in 2019 that accounted for many simultaneous runs being dispatched for power lines and trees that had been knocked down.

Greater than 95% is green. Between 90% and 95% is yellow. Less than 90% is red.

District	2020	2021	2022	2023	2024	Grand Total	Percent
41A	135	155	190	109	183	772	
1	131	149	186	109	179	754	98%
2	4	6	4		4	18	

District	2020	2021	2022	2023	2024	Grand Total	Percent
41B	241	255	248	321	300	1365	
1	229	243	240	300	288	1300	95%
2	12	12	8	18	12	62	
3				3		3	

District	2020	2021	2022	2023	2024	Grand Total	Percent
41C	467	687	621	640	712	3127	
1	447	627	573	604	656	2907	93%
2	20	60	48	36	50	214	
3					6	6	

District	2020	2021	2022	2023	2024	Grand Total	Percent
41D	548	519	582	626	688	2963	
1	508	493	549	588	633	2771	94%
2	40	26	30	38	52	186	
3			3		3	6	

District	2020	2021	2022	2023	2024	Grand Total	Percent
41D - HIGH			1			1	
1			1			1	100%

District	2020	2021	2022	2023	2024	Grand Total	Percent
41F	1	3	5	4	4	17	
1	1	3	5	4	2	15	88%
2					2	2	

District	2020	2021	2022	2023	2024	Grand Total	Percent
41G	4	2		2	1	9	

1	4	2		2	1	9	100%
District	**2020**	**2021**	**2022**	**2023**	**2024**	**Grand Total**	**Percent**
41H	28	39	49	60	35	211	
1	28	37	47	60	35	207	98%
2		2	2			4	
District	**2020**	**2021**	**2022**	**2023**	**2024**	**Grand Total**	**Percent**
41J	246	291	369	376	362	1644	
1	238	275	355	354	352	1574	96%
2	8	16	14	22	10	70	
District	**2020**	**2021**	**2022**	**2023**	**2024**	**Grand Total**	**Percent**
42A	107	133	113	129	113	595	
1	107	129	111	129	109	585	98%
2		4	2		4	10	
District	**2020**	**2021**	**2022**	**2023**	**2024**	**Grand Total**	**Percent**
42B	252	271	293	299	278	1393	
1	248	267	277	287	272	1351	97%
2	4	4	16	12	6	42	
District	**2020**	**2021**	**2022**	**2023**	**2024**	**Grand Total**	**Percent**
42C	51	51	67	64	77	310	
1	51	51	67	64	75	308	99%
2					2	2	
District	**2020**	**2021**	**2022**	**2023**	**2024**	**Grand Total**	**Percent**
42D	59	71	61	47	49	287	
1	59	71	61	47	49	287	100%
District	**2020**	**2021**	**2022**	**2023**	**2024**	**Grand Total**	**Percent**
42E	171	77	59	55	43	405	
1	169	75	59	55	43	401	99%
2	2	2				4	
District	**2020**	**2021**	**2022**	**2023**	**2024**	**Grand Total**	**Percent**
42ET		1				1	
1		1				1	100%
District	**2020**	**2021**	**2022**	**2023**	**2024**	**Grand Total**	**Percent**
42F	13	20	33	18	24	108	

1	13	20	33	18	24	108	100%
District	**2020**	**2021**	**2022**	**2023**	**2024**	**Grand Total**	**Percent**
42G	72	64	67	64	69	336	
1	68	64	67	64	69	332	99%
2	4					4	
District	**2020**	**2021**	**2022**	**2023**	**2024**	**Grand Total**	**Percent**
42H				1		1	
1				1		1	100%
District	**2020**	**2021**	**2022**	**2023**	**2024**	**Grand Total**	**Percent**
42I		85	150	129	155	519	
1		85	144	125	155	509	98%
2			6	4		10	
District	**2020**	**2021**	**2022**	**2023**	**2024**	**Grand Total**	**Percent**
43A	110	121	119	133	106	589	
1	110	121	117	133	106	587	100%
2			2			2	
District	**2020**	**2021**	**2022**	**2023**	**2024**	**Grand Total**	**Percent**
43B	85	87	63	93	86	414	
1	85	85	61	93	84	408	99%
2		2	2		2	6	
District	**2020**	**2021**	**2022**	**2023**	**2024**	**Grand Total**	**Percent**
43C	255	304	290	285	268	1402	
1	249	290	282	277	249	1347	96%
2	6	14	8	8	12	48	
3					3	3	
4					4	4	
District	**2020**	**2021**	**2022**	**2023**	**2024**	**Grand Total**	**Percent**
43D	9	14	10	10	4	47	
1	9	14	10	10	4	47	100%
District	**2020**	**2021**	**2022**	**2023**	**2024**	**Grand Total**	**Percent**
43E	17	18	31	26	29	121	
1	17	18	31	26	29	121	100%
District	**2020**	**2021**	**2022**	**2023**	**2024**	**Grand Total**	**Percent**

43F	109	153	195	192	201	850	
1	107	149	187	192	197	832	98%
2	2	4	8		4	18	
District	**2020**	**2021**	**2022**	**2023**	**2024**	**Grand Total**	**Percent**
43G	3	10	14	14	16	57	
1	3	10	14	14	14	55	96%
2					2	2	
District	**2020**	**2021**	**2022**	**2023**	**2024**	**Grand Total**	**Percent**
43H	7	13	6	10	14	50	
1	7	13	6	10	14	50	100%
District	**2020**	**2021**	**2022**	**2023**	**2024**	**Grand Total**	**Percent**
44A	267	269	281	270	275	1362	
1	259	252	277	248	271	1307	96%
2	8	14	4	22	4	52	
3		3				3	
District	**2020**	**2021**	**2022**	**2023**	**2024**	**Grand Total**	**Percent**
44B	377	381	429	462	452	2101	
1	338	357	402	426	428	1951	93%
2	36	24	24	36	24	144	
3	3		3			6	
District	**2020**	**2021**	**2022**	**2023**	**2024**	**Grand Total**	**Percent**
44C	129	129	181	129	128	696	
1	129	127	175	127	124	682	98%
2		2	6	2	4	14	
District	**2020**	**2021**	**2022**	**2023**	**2024**	**Grand Total**	**Percent**
44D	7	12	10	8	10	47	
1	7	12	10	8	10	47	100%
District	**2020**	**2021**	**2022**	**2023**	**2024**	**Grand Total**	**Percent**
44E	167	200	185	194	187	933	
1	163	192	185	190	181	911	98%
2	4	8		4	6	22	
District	**2020**	**2021**	**2022**	**2023**	**2024**	**Grand Total**	**Percent**
44F	146	169	165	183	224	887	
1	144	167	159	177	220	867	98%

2	2	2	6	6	4	20	
District	**2020**	**2021**	**2022**	**2023**	**2024**	**Grand Total**	**Percent**
44G	1	3	1	5	3	13	
1	1	3	1	5	3	13	100%
District	**2020**	**2021**	**2022**	**2023**	**2024**	**Grand Total**	**Percent**
44H	6	10	6	5	4	31	
1	4	10	6	5	4	29	94%
2	2					2	
District	**2020**	**2021**	**2022**	**2023**	**2024**	**Grand Total**	**Percent**
44I	9	12	16	14	15	66	
1	9	12	14	14	15	64	97%
2			2			2	
District	**2020**	**2021**	**2022**	**2023**	**2024**	**Grand Total**	**Percent**
45A	76	90	114	129	160	569	
1	74	81	112	127	158	552	97%
2	2	6	2	2	2	14	
3		3				3	
District	**2020**	**2021**	**2022**	**2023**	**2024**	**Grand Total**	**Percent**
45A - HIGH	1					1	
1	1					1	100%
District	**2020**	**2021**	**2022**	**2023**	**2024**	**Grand Total**	**Percent**
45B	713	828	900	859	1019	4319	
1	635	727	788	769	908	3827	89%
2	78	92	106	90	102	468	
3		9	6		9	24	
District	**2020**	**2021**	**2022**	**2023**	**2024**	**Grand Total**	**Percent**
45C	81	84	100	99	74	438	
1	81	82	96	99	74	432	99%
2		2	4			6	
District	**2020**	**2021**	**2022**	**2023**	**2024**	**Grand Total**	**Percent**
45D	97	134	155	145	154	685	
1	95	134	151	145	150	675	99%
2	2		4		4	10	

District	2020	2021	2022	2023	2024	Grand Total	Percent
45D - HIGH	1					1	
1	1					1	100%

District	2020	2021	2022	2023	2024	Grand Total	Percent
45E	28	49	49	54	48	228	
1	28	49	49	54	48	228	100%

District	2020	2021	2022	2023	2024	Grand Total	Percent
45E - HIGH			2			2	
1			2			2	100%

District	2020	2021	2022	2023	2024	Grand Total	Percent
45F	289	340	354	338	363	1684	
1	275	330	350	330	340	1625	96%
2	14	10	4	8	20	56	
3					3	3	

District	2020	2021	2022	2023	2024	Grand Total	Percent
45G	12	6	14	8	13	53	
1	12	6	14	8	13	53	100%

District	2020	2021	2022	2023	2024	Grand Total	Percent
45H	15	26	25	25	23	114	
1	15	26	25	25	23	114	100%

District	2020	2021	2022	2023	2024	Grand Total	Percent
46A	432	555	555	571	490	2603	
1	420	521	514	544	458	2457	94%
2	12	34	38	24	32	140	
3			3	3		6	

District	2020	2021	2022	2023	2024	Grand Total	Percent
46B	291	320	359	320	326	1616	
1	275	306	339	308	316	1544	96%
2	16	14	20	12	10	72	

District	2020	2021	2022	2023	2024	Grand Total	Percent
46D	8	6	7	15	7	43	
1	8	6	7	15	7	43	100%

District	2020	2021	2022	2023	2024	Grand Total	Percent
46E	208	189	216	291	281	1185	
1	204	183	212	281	271	1151	97%
2	4	6	4	10	10	34	

District	2020	2021	2022	2023	2024	Grand Total	Percent
46F	51	38	65	55	55	264	
1	49	38	65	55	55	262	99%
2	2					2	

District	2020	2021	2022	2023	2024	Grand Total	Percent
46G	270	291	345	334	371	1611	
1	258	283	327	306	348	1522	94%
2	12	8	18	28	20	86	
3					3	3	

District	2020	2021	2022	2023	2024	Grand Total	Percent
46H	339	422	562	647	672	2642	
1	315	388	521	598	594	2416	91%
2	24	34	38	46	78	220	
3			3	3		6	

District	2020	2021	2022	2023	2024	Grand Total	Percent
46H - HIGH	3		4			7	
1	3		4			7	100%

District	2020	2021	2022	2023	2024	Grand Total	Percent
46J	6	9	8	12	10	45	
1	6	9	8	12	10	45	100%

District	2020	2021	2022	2023	2024	Grand Total	Percent
46K	5	4	7	7	13	36	
1	5	4	7	7	11	34	94%
2					2	2	

District	2020	2021	2022	2023	2024	Grand Total	Percent
46L		4	5	4	3	16	
1		4	5	4	3	16	100%

Districts that had a percentage total less than 95% for non-simultaneous runs were further scrutinized by

examining the percentages on an annual basis to look for trending toward less reliability or a single bad year's performance.

District	2020		2021		2022		2023		2024		Grand Total	Percent
41C	467		687		621		640		712		3127	
1	447	95.7%	627	91.3%	573	92.3%	604	94.4%	656	92.1%	2907	93%
2	20		60		48		36		50		214	
3									6		6	

District	2020		2021		2022		2023		2024		Grand Total	Percent
41D	548		519		582		626		688		2963	
1	508	92.7%	493	95.0%	549	94.3%	588	93.9%	633	92.0%	2771	94%
2	40		26		30		38		52		186	
3					3				3		6	

District	2020		2021		2022		2023		2024		Grand Total	Percent
41F	1		3		5		4		4		17	
1	1	100.0%	3	100.0%	5	100.0%	4	100.0%	2	50.0%	15	88%
2									2		2	

District	2020		2021		2022		2023		2024		Grand Total	Percent
44B	377		381		429		462		452		2101	
1	338	89.7%	357	93.7%	402	93.7%	426	92.2%	428	94.7%	1951	93%
2	36		24		24		36		24		144	
3	3				3						6	

District	2020		2021		2022		2023		2024		Grand Total	Percent
44H	6		10		6		5		4		31	
1	4	66.7%	10	100.0%	6	100.0%	5	100.0%	4	100.0%	29	94%
2	2										2	

District	2020		2021		2022		2023		2024		Grand Total	Percent
45B	713		828		900		859		1019		4319	
1	635	89.1%	727	87.8%	788	87.6%	769	89.5%	908	89.1%	3827	89%
2	78		92		106		90		102		468	
3			9		6				9		24	

District	2020		2021		2022		2023		2024		Grand Total	Percent
46A	432		555		555		571		490		2603	
1	420	97.2%	521	93.9%	514	92.6%	544	95.3%	458	93.5%	2457	94%
2	12		34		38		24		32		140	

3					3		3				6	
District	**2020**		**2021**		**2022**		**2023**		**2024**		**Grand Total**	**Percent**
46G	270		291		345		334		371		1611	
1	258	95.6%	283	97.3%	327	94.8%	306	91.6%	348	93.8%	1522	94%
2	12		8		18		28		20		86	
3									3		3	

Most districts were noted to have had a single bad event year. A few, however, had multiple years of less than 95% non-simultaneous runs. Further analysis of these districts reveals that they have a high volume of runs to extended care facilities (ECF) or are districts that are wholly dedicated to a section of Keystone or US-31. The department will remain vigilant of reliability in these areas though it would be impractical to implement additional staffing there at this time.

Resilience

Occasionally large-scale emergencies or events such as severe weather will create conditions that overwhelm the capacity of the department as a whole to respond. When this happens the Carmel Fire Department relies on our mutual aid partners from our surrounding communities to assist with answering these calls for help. The ability of the department to respond to normal operations is known as resilience. We measure our resilience by counting the number of emergency responses that occur within Carmel that do not have an apparatus from CFD on the call. In other words, the Carmel Fire Department was overwhelmed with requests and could not answer any other calls. The following chart indicates the resiliency of the department from 2020-2024.

2020	
Outside Agency Coverage Type	Count
554 Assist invalid	1
551 Assist police or other governmental agency	1
321 EMS call, excluding vehicle accident with injury	1
611 Dispatched & canceled en route	1
Total	4
Incident Dates:	
7/5/2020	1
8/18/2020	1
10/6/2020	1
10/23/2020	1

2021	
Outside Agency Coverage Type	Count
611 Dispatched & canceled en route	2
321 EMS call, excluding vehicle accident with injury	2
143 Grass fire	1
Total	5
Incident Dates:	
3/10/2021	1
6/13/2021	1
7/9/2021	1
9/2/2021	1
11/20/2021	1

2022	
Outside Agency Coverage Type	Count
321 EMS call, excluding vehicle accident with injury	4
611 Dispatched & canceled en route	2
814 Lightning strike (no fire)	1
Total	7
Incident Dates:	
4/29/2022	1
4/30/2022	3
7/3/2022	1
7/17/2022	1
8/1/2022	1

2023	
Outside Agency Coverage Type	Count
142 Brush or brush-and-grass mixture fire	2
321 EMS call, excluding vehicle accident with injury	3
444 Power line down	2
551 Assist police or other governmental agency	1
622 No incident found on arrival at dispatch address	1
735 Alarm system sounded due to malfunction	1
Total	10
Incident Dates:	
1/31/2023	1
4/11/2023	1
5/19/2023	1
5/24/2023	1
6/29/2023	2
7/28/2023	2
9/15/2023	1
12/7/23	1

2024	
Outside Agency Coverage Type	Count
321 EMS call, excluding vehicle accident with injury	5
551 Assist police or other governmental agency	1
611 Dispatched & canceled en route	2
651 Smoke scare, odor of smoke	1
Total	9
Incident Dates:	
1/31/2024	2
2/6/2024	2
4/13/2024	3
6/28/2024	1
9/27/2024	1

Performance Goals, Objectives, and Measures

We realize our customers have the highest regard for what the Carmel Fire Department offers and expect the "best of the best" when requesting service. To ensure customer expectations are met, we rely heavily on historical data and focus on the criterion that directly relates to the Carmel Fire Departments response time, which includes:

- Call to dispatch
- Dispatch to turn out

- Turn out to arrival
- Arrival to position

The time benchmark that has been outlined in this report is a goal that department is aiming to achieve with a 90% success rate. Throughout this process, the Carmel Fire Department continually monitors and analyzes the data to concentrate on whatever improvements are needed to serve the customers.

Statistical Review

The department has established baseline and benchmark objectives for delivery of service in the entire response area. The department utilizes and maintains a Standard of Cover (SOC) in which those benchmarks are stated. Benchmark or goal times are measured against current or baseline times. When the benchmark times are achieved with a 90% success rate, they are reevaluated, and new benchmark times are established.

Incidents

The following is a five-year history of all incidents occurring within the Carmel Fire Department response area.

Emergency Incidents in the Carmel Fire Department Response area:

Year	Total Incidents	Fires	EMS	Haz-Mat	Tech Rescue	Other
2020	7429	1.70%	70.86%	1.83%	0.36%	25.25%
2021	8509	1.66%	61.10%	1.77%	0.48%	34.99%
2022	9334	2.27%	66.42%	1.92%	0.40%	28.99%
2023	9414	1.60%	65.09%	1.71%	0.62%	30.98%
2024	9524	1.48%	67.48%	1.67%	0.62%	29.37%

Outliers

Outliers in the data were identified through the use of the Determining Data Outliers GOG:

- Any units dispatched more than 2 minutes after the initial dispatch.
- Any call for service with a greater than 3 minute and 21 second alarm handling time
- Any call for service with a greater than 2 minute and 38 second turn-out time
- Any call for service with a greater than 9 minute and 15 second travel time
- Any ERF unit with a greater than 14 minute and 01 second arrival time

Dispatch

The Carmel Fire Department tracks dispatch times from the time the call is received until the call is dispatched. Hamilton County Communications Center dispatches all calls for the Carmel Clay area.

The Carmel Fire Department is working with the Hamilton County Communications Center to improve the call processing times and changes have already been made to decrease the times. Due to the implementation of the new CAD Program, the HCC is experiencing longer alarm to dispatch times. Along with the new CAD Program, there are new EMD, EMP, ProQ/A procedures in place. The department is actively working with the HCC to reduce these times.

Call Processing Times

The Carmel Fire Department has adopted call processing time benchmarks for the following risks. Highlighted baseline times meet or exceed the benchmark goal but do not have the 50 responses required to set a new benchmark goal.

Call Processing Baselines & Benchmarks			
Category	Risk Level	Benchmark	Baseline
Fire	Low	1:53	2:20
	Moderate	2:04	2:06
	High	2:08	2:23
EMS	Low	1:34	2:19
	Moderate	0:57	2:11
	High	0:43	2:07
HazMat	Low	2:19	2:30
	Moderate	1:38	2:11
	High	2:38	2:30
Tech Rescue	Low	1:22	2:02
	Moderate	1:49	1:35
	High	2:26	2:35

Turnout Response Times

Turnout Time Baselines & Benchmarks			
Category		Benchmark	Baseline
Fire	Low	1:14	1:36
	Moderate	1:28	1:45
	High	1:35	2:15
EMS	Low	1:14	1:37
	Moderate	1:19	1:35
	High	1:22	1:38
HazMat	Low	1:21	1:42
	Moderate	1:17	1:34
	High	1:17	1:29
Tech Rescue	Low	1:04	1:23
	Moderate	1:14	1:26
	High	1:26	1:14

Travel Time Response Fire Travel Time Response

Travel Times		1st Arriving		Effective Response Force	
Category	Risk Level	Benchmark	Baseline	Benchmark	Baseline
Fire	Low Risk	5:34	6:14	6:00	6:20
	Moderate Risk	5:24	5:39	8:26	8:42
	High Risk	4:20	5:13	7:04	N/A

Fire Travel Time Response – Low Risk Fires

The Carmel Fire Department has adopted a travel time response benchmark of 5:34 for all Low-Risk Fire Incidents.

The Carmel Fire Department has a travel time response baseline of 6:14 for all 2020-2024 Low Risk Fire Incidents.

The Carmel Fire Department will strive to maintain the travel time response benchmark with a minimum force of firefighters and equipment, which are strategically located so that the initial fire department unit arrives within 5:34 minutes from en-route time to on-scene time, with the balance of the first alarm assignment arriving within 6:00 minutes from en-route time to on-scene time. The Carmel Fire Department has an effective

response force travel time baseline of 6:20 for all 2020-2024 Low Risk Fire Incidents.

Fire Travel Time Response – Moderate Risk Fires

The Carmel Fire Department has adopted a travel time response benchmark of 5:24 for all Moderate Risk Fire Incidents.

The Carmel Fire Department has a travel time response baseline of 5:39 for all 2020-2024 Moderate Risk Fire Incidents.

The Carmel Fire Department will strive to maintain the travel time response benchmark with a minimum force of firefighters and equipment, which are strategically located so that the initial fire department unit arrives within 5:24 minutes from en-route time to on-scene time, with the balance of the first alarm assignment arriving within 8:26 minutes from en-route time to on-scene time. The Carmel Fire Department has an effective response force travel time baseline of 8:42 for all 2020-2024 Moderate Risk Fire Incidents.

Fire Travel Time Response – High Risk Fires

The Carmel Fire Department has adopted a travel time response benchmark of 4:20 for all High-Risk Fire Incidents.

The Carmel Fire Department has a travel time response baseline of 5:13 for all 2020-2024 High Risk Fire Incidents.

The Carmel Fire Department will strive to maintain the travel time response benchmark with a minimum force of firefighters and equipment, which are strategically located so that the initial fire department unit arrives within 4:20 minutes from en-route time to on-scene time with the balance of the first alarm assignment arriving within 7:04 minutes from en-route time to on-scene time. The Carmel Fire Department has not had any High-Risk Fires that required a full Effective Response Force in the time frame of 2020-2024.

Emergency Medical Services Travel Time Response

Travel Times		1st Arriving		Effective Response Force	
Category	Risk Level	Benchmark	Baseline	Benchmark	Baseline
EMS	Low Risk	5:12	5:27	5:45	6:00
	Moderate Risk	5:13	5:28	6:59	7:12
	High Risk	5:02	5:23	7:40	7:55

Emergency Medical Services Travel Time Response – Low Risk

The Carmel Fire Department has adopted a travel time response benchmark of 5:12 for all Low-Risk EMS

Incidents.

The Carmel Fire Department has a travel time response baseline of 5:27 for all 2020-2024 Low Risk EMS Incidents.

The Carmel Fire Department will strive to maintain the travel time response benchmark with a minimum force of firefighters and equipment, which are strategically located so that the initial fire department unit arrives within 5:12 from en-route time to on-scene time, with the balance of the first alarm assignment arriving within 5:45 minutes from en-route time to on-scene time. The Carmel Fire Department has an effective response force travel time baseline of 6:00 for all 2020-2024 Low Risk EMS Incidents.

Emergency Medical Services Travel Time Response – Moderate Risk

The Carmel Fire Department has adopted a travel time response benchmark of 5:13 for all Moderate Risk EMS Incidents.

The Carmel Fire Department has a travel time response baseline of 5:28 for all 2020-2024 Moderate Risk EMS Incidents.

The Carmel Fire Department will strive to maintain the travel time response benchmark with a minimum force of firefighters and equipment, which are strategically located so that the initial fire department unit arrives within 5:13 from en-route time to on-scene time, with the balance of the first alarm assignment arriving within 6:59 minutes from en-route time to on-scene time. The Carmel Fire Department has an effective response force travel time baseline of 7:12 for all 2020-2024 Moderate Risk EMS Incidents.

Emergency Medical Services Travel Time Response – High Risk

The Carmel Fire Department has adopted a travel time response benchmark of 5:02 for all High-Risk EMS Incidents.

The Carmel Fire Department has a travel time response baseline of 5:23 for all 2020-2024 High Risk EMS Incidents.

The Carmel Fire Department will strive to maintain the travel time response benchmark with a minimum force of firefighters and equipment, which are strategically located so that the initial fire department unit arrives within 5:02 from en-route time to on-scene time with the balance of the first alarm assignment arriving within 7:40 from en-route time to on-scene time. The Carmel Fire Department has an effective response force travel time baseline of 7:55 for all 2020-2024 High Risk EMS Incidents.

Hazardous Materials Travel Time Response

Travel Times		1st Arriving		Effective Response Force	
Category	Risk Level	Benchmark	Baseline	Benchmark	Baseline
HazMat	Low Risk	6:00	6:24	6:09	6:15
	Moderate Risk	6:15	6:23	7:30	8:23
	High Risk	5:57	6:09	7:00	7:08

Hazardous Materials Travel Time Response – Low Risk

The Carmel Fire Department has adopted a travel time response benchmark of 6:00 for all Low-Risk Hazardous Materials Incidents.

The Carmel Fire Department has a travel time response baseline of 6:24 for all 2020-2024 Low Risk Hazardous Materials Incidents.

The Carmel Fire Department will strive to maintain the travel time response benchmark with a minimum force of firefighters and equipment, which are strategically located so that the initial fire department unit arrives within 6:00 from en-route time to on-scene time, with the balance of the first alarm assignment arriving within 6:09 from en-route time to on-scene time. The Carmel Fire Department has an effective response force travel time baseline of 6:15 for all 2020-2024 Low Risk Hazardous Materials Incidents.

Hazardous Materials Travel Time Response – Moderate Risk

The Carmel Fire Department has adopted a travel time response benchmark of 6:15 for all Moderate Risk Hazardous Materials Incidents.

The Carmel Fire Department has a travel time response baseline of 6:23 for all 2020-2024 Moderate Risk Hazardous Materials Incidents.

The Carmel Fire Department will strive to maintain the travel time response benchmark with a minimum force of firefighters and equipment, which are strategically located so that the initial fire department unit arrives within 6:15 from en-route time to on-scene time, with the balance of the first alarm assignment arriving within 7:30 from en-route time to on-scene time. The Carmel Fire Department has an effective response force travel time baseline of 8:23 for all 2020-2024 Moderate Risk Hazardous Materials Incidents.

Hazardous Materials Travel Time Response – High Risk

The Carmel Fire Department has adopted a travel time response benchmark of 5:57 for all High-Risk Hazardous Materials Incidents.

The Carmel Fire Department has a travel time response baseline of 6:09 for all 2020-2024 High Risk Hazardous Materials Incidents.

The Carmel Fire Department will strive to maintain the travel time response benchmark with a minimum force of firefighters and equipment, which are strategically located so that the initial fire department unit arrives within 5:57 from en-route time to on-scene time, with the balance of the first alarm assignment arriving within 7:00 from en-route time to on-scene time. The Carmel Fire Department has an effective response force travel time baseline of 7:08 for all 2020-2024 High Risk Hazardous Materials Incidents

Technical Rescue Travel Time Response

Travel Times		1st Arriving		Effective Response Force	
Category	Risk Level	Benchmark	Baseline	Benchmark	Baseline
Tech Rescue	Low Risk	4:35	4:51	7:23	7:43
	Moderate Risk	4:54	6:05	13:49	8:07
	High Risk	5:34	5:09	30:00	N/A

Technical Rescue – Low Risk

The Carmel Fire Department has adopted a travel time response benchmark of 4:35 for all Low-Risk Technical Rescue Incidents.

The Carmel Fire Department has a travel time response baseline of 4:51 for all 2020-2024 Low Risk Technical Rescue Incidents.

The Carmel Fire Department will strive to maintain the travel time response benchmark with a minimum force of firefighters and equipment, which are strategically located so that the initial fire department unit arrives within 4:35 minutes from en-route time to on-scene time, with the balance of the first alarm assignment arriving within 7:23 from en-route time to on-scene time. The Carmel Fire Department has an effective response force travel time baseline of 7:43 for all 2020-2024 Low Risk Technical Rescue Incidents.

Technical Rescue – Moderate Risk

The Carmel Fire Department has adopted a travel time response benchmark of 4:54 for all Moderate Risk Technical Rescue Incidents.

The Carmel Fire Department has a travel time response baseline of 6:05 for all 2020-2024 Moderate Risk Technical Rescue Incidents.

The Carmel Fire Department will strive to maintain the travel time response benchmark with a minimum force

of firefighters and equipment, which are strategically located so that the initial fire department unit arrives within 4:54 minutes from en-route time to on-scene time, with the balance of the first alarm assignment arriving within 13:49 from en-route time to on-scene time. The Carmel Fire Department has an effective response force travel time baseline of 8:07 for all 2020-2024 Moderate Risk Technical Rescue Incidents.

Technical Rescue – High Risk

The Carmel Fire Department has adopted a travel time response benchmark of 5:34 for all High-Risk Technical Rescue Incidents.

The Carmel Fire Department has a travel time response baseline of 5:09 for all 2020-2024 High Risk Technical Rescue Incidents.

The Carmel Fire Department will strive to maintain the travel time response benchmark with a minimum force of firefighters and equipment, which are strategically located so that the initial fire department unit arrives within 5:34 minutes from en-route time to on-scene time, with the balance of the first alarm arriving within 30:00 from en-route to on-scene time. The Carmel Fire Department has not had any High-Risk Technical Rescues that required a full Effective Response Force in the time frame of 2020-2024.

Fire Benchmark Performance Objectives

The first-due unit for all risk levels shall be capable of: providing a minimum of 500 gallons of water and 1,500 gallons per minute (gpm) pumping capacity; initiating command; requesting additional resources; establishing and advancing an attack line flowing a minimum of 150 gpm; establishing an uninterrupted water supply; containing the fire; rescuing at-risk victims; and performing salvage operations. These operations shall be done in accordance with departmental general operations guidelines while providing for the safety of responders and the general public.

The ERF shall be capable of establishing command and safety; providing an uninterrupted water supply; advancing an attack line and a backup line for fire control; complying with the Occupational Safety and Health Administration (OSHA) requirements of two in-two out; completing forcible entry; searching for and rescuing at-risk victims; ventilating the structure; controlling utilities; performing salvage and overhaul; and placing elevated streams into service from aerial ladders. These operations shall be done in accordance with departmental general operations guidelines while providing for the safety of responders and the general public.

FIRE ERF Benchmark Staffing	
Fire (Low Risk)	4
Fire (Moderate Risk)	34

Fire (High Risk)	38

Total Response Time		1st Arriving		Effective Response Force	
Category	Risk Level	Benchmark	Baseline	Benchmark	Baseline
Fire	Low Risk	9:10	9:43	9:36	9:24
	Mod. Risk	8:45	9:00	10:36	9:37
	High Risk	7:53	8:37	9:03	N/A

Benchmark for First Arriving Unit Total Response Time for **Low** Fire Risks: For 90 percent of all fires, the total response time for the arrival of the first-due unit, staffed with 3 firefighters and 1 officer, shall be: 9:10 in urban areas. The ERF benchmark for **Low** Fire Risks: For 90 percent of all low-risk fires, the total response time for the arrival of the effective response force as described shall be: 9:36 in urban areas.

Benchmark for First Arriving Unit Total Response Time for **Moderate** Fire Risks: For 90 percent of all fires, the total response time for the arrival of the first-due unit, staffed with 3 firefighters and 1 officer, shall be: 8:45 in urban areas. The ERF benchmark for **Moderate** Fire Risks: For 90 percent of all moderate risk fires, the total response time for the arrival of the effective response force as described shall be: 10:36 in urban areas.

Benchmark for First Arriving Unit Total Response Time for **High** Fire Risks: For 90 percent of all fires, the total response time for the arrival of the first-due unit, staffed with 3 firefighters and 1 officer, shall be: 7:53 in urban areas. The ERF benchmark for **High** Fire Risks: For 90 percent of all high-risk fires, the total response time for the arrival of the effective response force as described shall be: 9:03 in urban areas.

Fire Suppression Baseline Performance Measures:

Baseline for First Arriving Unit Total Response Time for **Low-Risk** Fires: For 90 percent of all 2020-2024 low risk fires, the total response time for the arrival of the first-due unit, staffed with 3 firefighters and 1 officer, is: 9:43. Baselines for Effective Response Force (ERF) Total Response Time for **Low-Risk** Fires: For 90 percent of all 2020-2024 low risk fires, the total response time for the arrival of the effective response force (ERF) staffed with the appropriate number of personnel to meet critical tasking, is: 9:24 in urban areas.

Baseline for First Arriving Unit Total Response Time for **Moderate** Risk Fires: For 90 percent of all 2020-2024 moderate risk fires, the total response time for the arrival of the first-due unit, staffed with 3 firefighters and 1 officer, is: 9:00 in urban areas. Baselines for Effective Response Force (ERF) Total Response Time for **Moderate** Risk Fires: For 90 percent of all 2020-2024 moderate risk fires, the total response time for the arrival of the effective response force (ERF) staffed with the appropriate number of personnel to meet critical tasking, is: 9:37 in urban areas.

Baseline for First Arriving Unit Total Response Time for **High-Risk** Fires: For 90 percent of all 2019-2023 high risk fires, the total response time for the arrival of the first-due unit, staffed with 3 firefighters and 1 officer, is: 8:37 in urban areas. Baselines for Effective Response Force (ERF) Total Response Time for **High-Risk** Fires: The Carmel Fire Department did not have any high risk fires that required a full effective response in 2020-2024..

EMS Benchmark Performance Objectives

The same qualified fire personnel administer EMS services as fire suppression with the overall goal being to arrive in a timely fashion, assess the scene, and evaluate the incident as to what is needed. Provide immediate and appropriate medical treatment and transport the patient to the corresponding medical facility. This is done with the department's specific time benchmarks as a goal.

The first-due unit for all risk levels shall be capable of: assessing scene safety and establishing command; sizing-up the situation; conducting initial patient assessment; obtaining vitals and patient's medical history; initiating mitigation efforts within one minute of arrival; providing basic life support including automatic external defibrillation (AED) and packaging the patient for transportation.

The ERF shall be capable of establishing command, safety, and related documentation; completing patient assessment; providing appropriate treatment; providing advanced life support; performing defibrillation; providing intravenous (IV) access-medication administration; and patient transportation.

EMS ERF Benchmark Staffing	
EMS (Low Risk)	4
EMS (Moderate Risk)	6
EMS (High Risk)	7

Total Response Time		1st Arriving		Effective Response Force	
Category	Risk Level	Benchmark	Baseline	Benchmark	Baseline
EMS	Low Risk	8:56	8:12	8:14	8:36
	Mod. Risk	6:56	8:00	8:22	9:17
	High Risk	6:41	7:51	9:24	9:39

Benchmark for the First Arriving Unit Total Response Time for **Low-Risk** EMS: For 90 percent of all EMS responses, the total response time for the arrival of the first-due unit, staffed with a minimum of 4 Firefighters, shall be: 8:56 in urban areas. Benchmark for the Effective Response Force (ERF) Total Response Time for **Low-Risk** EMS: For 90 percent of all EMS responses, the total response time for the arrival of effective

response force (ERF), staffed with the appropriate number of personnel to meet critical tasking, shall be: 8:14 in urban areas.

Benchmark for the First Arriving Unit Total Response Time for **Moderate** Risk EMS: For 90 percent of all EMS responses, the total response time for the arrival of the first-due unit, staffed with a minimum of 2 Firefighters, shall be: 6:56 in urban areas. Benchmark for the Effective Response Force (ERF) Total Response Time for **Moderate** Risk EMS: For 90 percent of all EMS responses, the total response time for the arrival of effective response force (ERF), staffed with the appropriate number of personnel to meet critical tasking, shall be: 8:22 in urban areas.

Benchmark for the First Arriving Unit Total Response Time for **High-Risk** EMS: For 90 percent of all EMS responses, the total response time for the arrival of the first-due unit, staffed with a minimum of 2 Firefighters, shall be 6:41 in urban areas. Benchmark for the Effective Response Force (ERF) Total Response Time for **High-Risk** EMS: For 90 percent of all EMS responses, the total response time for the arrival of effective response force (ERF), staffed with the appropriate number of personnel to meet critical tasking, shall be: 9:24 in urban areas.

EMS Response Baseline Performance Measures:

Baseline for the First Arriving Unit Total Response Time for **Low-Risk** EMS: For 90 percent of all 2020-2024 low risk EMS responses, the total response time for the arrival of the first-due unit, staffed with a minimum of 4 firefighters, is 8:12 in urban areas. Baselines for the Effective Response Force (ERF) Total Response Time for **Low-Risk** EMS: For 90 percent of all 2020-2024 low risk EMS responses, the total response time for the arrival of the effective response force (ERF) staffed with the appropriate number of personnel to meet critical tasking, is: 8:36 in urban areas.

Baseline for the First Arriving Unit Total Response Time for **Moderate** Risk EMS: For 90 percent of all 2020-2024 moderate risk EMS responses, the total response time for the arrival of the first-due unit, staffed with a minimum of 2 firefighters, is: 8:00 in urban areas. Baseline for the Effective Response Force (ERF) Total Response Time for **Moderate** Risk EMS: For 90 percent of all 2020-2024 moderate risk EMS responses, the total response time for the arrival of the effective response force (ERF) staffed with the appropriate number of personnel to meet critical tasking, is: 9:17 in urban areas.

Baseline for the First Arriving Unit Total Response Time for **High-Risk** EMS: For 90 percent of all 2020-2024 high risk EMS responses, the total response time for the arrival of the first-due unit, staffed with a minimum of 2 firefighters, is: 7:51 in urban areas. Baselines for the Effective Response Force (ERF) Total

Response Time for **High-Risk** EMS: For 90 percent of all 2019-2023 high risk EMS responses, the total response time for the arrival of the effective response force (ERF) staffed with the appropriate number of personnel to meet critical tasking, is: 9:39 in urban areas.

Hazardous Materials (HazMat) Benchmark Performance:

The Hazardous Materials Team's immediate goal is to assess and identify the situation, stabilize, and secure the area and have an action plan to bring the incident under control and return the area to a safe level. Upon arrival, if the incident appears to pose a threat that is beyond the operations level of training of Carmel Fire Department personnel, a request will be made for assistance in the form of mutual aid from the Hamilton County Hazardous Materials task force for mitigation. The Carmel Fire Department will provide whatever assistance needed that falls within the training level to help ensure the safety and protection of fire personnel, customers (citizens), and the environment.

The first-due unit for all risk levels shall be capable of: assessing scene safety and establishing command; sizing-up the situation to determine the presence of potential hazardous materials or explosive devices; determining the need for additional resources; estimating the potential harm without intervention; and begin establishing hot, warm, and cold zones.

The ERF shall be capable of establishing command, safety, and related documentation; providing equipment, technical expertise, knowledge, skills, and abilities to mitigate a hazardous materials incident in accordance with department general operations guidelines.

Hazardous Materials ERF Benchmark Staffing	
Hazardous Materials (Low Risk)	4
Hazardous Materials (Moderate Risk)	10
Hazardous Materials (High Risk)	15

Total Response Time		1st Arriving		Effective Response Force	
Category	Risk Level	Benchmark	Baseline	Benchmark	Baseline
HazMat	Low Risk	9:13	9:28	9:16	9:27
	Mod. Risk	8:29	9:04	9:40	10:27
	High Risk	9:50	7:04	10:33	9:36

Benchmark for First Arriving Unit Total Response Time for **Low** Hazardous Materials Risks: For 90 percent of all Hazardous Materials responses, the total response time for the arrival of the first-due unit, staffed with 3

firefighters and 1 officer, shall be: 9:13 in urban areas. Benchmark for Effective Response Force (ERF) Total Response Time for **Low** Hazardous Materials Risks: For 90 percent of all Hazardous Materials responses, the total response time for the arrival of effective response force (ERF), staffed with the appropriate number of personnel to meet critical tasking, shall be: 9:16 in urban areas.

Benchmark for First Arriving Unit Total Response Time for **Moderate** Hazardous Materials Risks: For 90 percent of all Hazardous Materials responses, the total response time for the arrival of the first-due unit, staffed with 3 firefighters and 1 officer, shall be: 8:29 in urban areas. Benchmark for Effective Response Force (ERF) Total Response Time for **Moderate** Hazardous Materials Risks: For 90 percent of all Hazardous Materials responses, the total response time for the arrival of effective response force (ERF), staffed with the appropriate number of personnel to meet critical tasking, shall be: 9:40 in urban areas.

Benchmark for First Arriving Unit Total Response Time for **High** Hazardous Materials Risks: For 90 percent of all Hazardous Materials responses, the total response time for the arrival of the first-due unit, staffed with 3 firefighters and 1 officer, shall be: 9:50 in urban areas. Benchmark for Effective Response Force (ERF) Total Response Time for **High** Hazardous Materials Risks: For 90 percent of all Hazardous Materials responses, the total response time for the arrival of effective response force (ERF), staffed with the appropriate number of personnel to meet critical tasking, shall be: 10:33 in urban areas.

Hazardous Materials Baseline Performance Measures:

Baseline for First Arriving Unit Total Response Time for **Low-Risk** Hazardous Materials Responses: For 90 percent of all 2020-2024 low risk Hazardous Materials responses, the total response time for the arrival of the first-due unit, staffed with 3 firefighters and 1 officer, is: 9:28 in urban areas. Baseline for Effective Response Force (ERF) Total Response Time for **Low-Risk** Hazardous Materials Responses: For 90 percent of all 2019-2023 low risk Hazardous Materials responses, the total response time for the arrival of the effective response force (ERF) staffed with the appropriate number of personnel to meet critical tasking, is: 9:27 seconds in urban areas.

Baseline First Arriving Unit Total Response Time for **Moderate** Risk Hazardous Materials Responses: For 90 percent of all 2020-2024 moderate risk Hazardous Materials responses, the total response time for the arrival of the first-due unit, staffed with 3 firefighters and 1 officer, is: 9:04 in urban areas. Baseline Effective Response Force (ERF) Total Response Time for **Moderate** Risk Hazardous Materials Responses: For 90 percent of all 2020-2024 moderate risk Hazardous Materials responses, the total response time for the arrival of the effective response force (ERF) staffed with the appropriate number of personnel to meet critical tasking, is: 10:27 seconds in urban areas.

Baseline First Arriving Unit Total Response Time for **High-Risk** Hazardous Materials Responses: For 90 percent of all 2020-2024 high risk Hazardous Materials responses, the total response time for the arrival of the first-due unit, staffed with 3 firefighters and 1 officer, is: 7:04 seconds in urban areas. Baseline Effective Response Force (ERF) Total Response Time for **High-Risk** Hazardous Materials Responses: For 90 percent of all 2020-2024 moderate risk Hazardous Materials responses, the total response time for the arrival of the effective response force (ERF) staffed with the appropriate number of personnel to meet critical tasking, is: 9:36 seconds in urban areas.

Technical Rescue Benchmark Performance Objectives

The Carmel Fire Department's immediate goal is to assess and identify the situation, stabilize, and secure the area and have an action plan to bring the incident under control and return the area to a safe level. Upon arrival, if the incident appears to pose a threat that is beyond the level of training of Carmel Fire Department personnel, a request will be made for assistance in the form of mutual aid from the Hamilton County mutual aid partners of Westfield, Fishers, Noblesville, and Cicero or from the Indianapolis Fire Department for mitigation. The Carmel Fire Department will provide whatever assistance needed that falls within the training level to help ensure the safety and protection of fire personnel, customers (citizens), and the environment.

The first-due unit for all risk levels shall be capable of: assessing scene safety and establishing command; sizing-up the situation to determine if technical rescue response is required; requesting additional resources; and providing advanced and or basic life support to any victim without endangering response personnel.

The ERF shall be capable of establishing command, safety, and related documentation; establishing patient contact; staging and apparatus set-up; providing equipment, technical expertise, knowledge, skills, and abilities to mitigate a technical rescue incident in accordance with department general operations guidelines or best practices for incidents that are beyond the scope of the Carmel Fire Department.

Technical Rescue ERF Benchmark Staffing	
Tech Rescue (Low Risk)	10
Tech Rescue (Moderate Risk)	21
Tech Rescue (High Risk)	25

Total Response Time		1st Arriving		Effective Response Force	
Category	Risk Level	Benchmark	Baseline	Benchmark	Baseline
Tech Rescue	Low Risk	7:30	7:25	10:12	10:21
	Mod. Risk	7:30	8:28	15:03	9:26
	High Risk	7:45	8:11	35:00	N/A

Benchmark for First Arriving Unit Total Response Time for **Low** Risk Technical Rescue: For 90 percent of low risk Technical Rescue responses, the total response time for the arrival of the first-due unit, staffed with 3 firefighters and 1 officer, shall be 7:30. Benchmark for Effective Response Force (ERF) Total Response Time for **Low** Technical Rescue Risks: For 90 percent of low technical rescue responses, the total response time for the arrival of effective response force (ERF), staffed with the appropriate number of personnel to meet critical tasking, shall be: 10:12 in urban areas.

Benchmark for First Arriving Unit Total Response Time for **Moderate** Risk Technical Rescue: For 90 percent of moderate risk Technical Rescue responses, the total response time for the arrival of the first-due unit, staffed with 3 firefighters and 1 officer, shall be 7:30. Benchmark for Effective Response Force (ERF) Total Response Time for **Moderate** Technical Rescue Risks: For 90 percent of low technical rescue responses, the total response time for the arrival of effective response force (ERF), staffed with the appropriate number of personnel to meet critical tasking, shall be: 15:03 in urban areas.

Benchmark for First Arriving Unit Total Response Time for **High** Risk Technical Rescue: For 90 percent of high risk Technical Rescue responses, the total response time for the arrival of the first-due unit, staffed with 3 firefighters and 1 officer, shall be: 7:45. Benchmark for Effective Response Force (ERF) Total Response Time for **High** Technical Rescue Risks: For 90 percent of high risk technical rescue responses, the total response time for the arrival of effective response force (ERF), staffed with the appropriate number of personnel to meet critical tasking, shall be: 35:00 in urban areas.

Technical Rescue Baseline Performance Measures:

Baseline for First Arriving Unit Total Response Time for **Low-Risk** Technical Rescue Responses: For 90 percent of all 2020-2024 low risk Technical Rescue responses, the total response time for the arrival of the first-due unit, staffed with 3 firefighters and 1 officer, is: 7:25 in urban areas. Baseline for Effective Response

Force (ERF) Total Response Time for **Low-Risk** Technical Rescue Responses: For 90 percent of all 2020-2024 low risk Technical Rescue responses, the total response time for the arrival of the effective response force (ERF) staffed with the appropriate number of personnel to meet critical tasking, is: 10:21 in urban areas.

First Arriving Unit Total Response Time for **Moderate** Risk Technical Rescue Responses: For 90 percent of all 2020-2024 moderate risk Technical Rescue responses, the total response time for the arrival of the first-due unit, staffed with 3 firefighters and 1 officer, is: 8:28 in urban areas. Baseline for Effective Response Force (ERF) Total Response Time for **Moderate** Risk Technical Rescue Responses: For 90 percent of all 2020-2024 moderate risk Technical Rescue responses, the total response time for the arrival of the effective response force (ERF) staffed with the appropriate number of personnel to meet critical tasking, is: 9:26 in urban areas.

First Arriving Unit Total Response Time for **High-Risk** Technical Rescue Responses: For 90 percent of all 2020-2024 High risk Technical Rescue responses, the total response time for the arrival of the first-due unit, staffed with 3 firefighters and 1 officer, is: 8:11 in urban areas. Effective Response Force (ERF) Total Response Time for **High-Risk** Technical Rescue Responses: The Carmel Fire Department did not have any high-risk technical rescue responses that required a full effective response in 2020-2024.

Performance Charts

90th percentile baseline data is expressed below in mm:ss. The data below does include automatic aid responses from other agencies.

Low Risk Fire Suppression - 90th Percentile Times - Baseline Performance			Benchmark (Target)	2020-2024	2024	2023	2022	2021	2020
Alarm Handling	Pick-up to Dispatch	Urban		2:20	2:00	2:00	2:03	2:05	3:02
Turnout Time	Turnout Time 1st Unit	Urban		1:36	1:29	1:38	1:27	1:29	1:42
Travel Time	Travel Time 1st Unit **Distribution**	Urban		6:14	6:29	6:00	6:37	6:51	5:46
	Travel Time ERF **Concentration**	Urban		6:20	6:52	6:00	6:20	6:59	5:50
Total Response Time	Total Response Time 1st Unit on Scene **Distribution**	Urban	9:10	9:43	9:25	8:23	9:05	9:23	11:25
				n=509	n=101	n=106	n=107	n=99	n=96
	Total Response Time ERF **Concentration**	Urban	9:10	9:24	9:54	8:00	8:45	9:31	10:13
				n=428	n=79	n=81	n=91	n=90	n=87

Moderate Risk Fire Suppression - 90th Percentile Times - Baseline Performance			Benchmark (Target)	2020-2024	2024	2023	2022	2021	2020
Alarm Handling	Pick-up to Dispatch	Urban		2:06	1:57	1:40	2:02	2:32	2:19
Turnout Time	Turnout Time 1st Unit	Urban		1:45	1:26	1:40	2:06	1:42	1:38
Travel Time	Travel Time 1st Unit **Distribution**	Urban		5:39	5:34	5:04	6:14	5:00	5:27
	Travel Time ERF **Concentration**	Urban		8:42	N/A	8:42	N/A	N/A	N/A
Total Response Time	Total Response Time 1st Unit on Scene **Distribution**	Urban	8:45	9:00	8:52	6:51	9:22	9:19	8:51
				n=72	n=12	n=18	n=18	n=10	n=14
	Total Response Time ERF **Concentration**	Urban	10:36	9:37	N/A	9:37	N/A	N/A	N/A
				n=1	n=0	n=1	n=0	n=0	n=0

High Risk Fire Suppression - 90th Percentile Times - Baseline Performance			Benchmark (Target)	2020-2024	2024	2023	2022	2021	2020
Alarm Handling	Pick-up to Dispatch	Urban		2:23	1:45	2:25	2:02	1:13	2:08
Turnout Time	Turnout Time 1st Unit	Urban		2:15	2:19	1:50	1:05	1:20	1:20
Travel Time	Travel Time 1st Unit **Distribution**	Urban		5:13	4:02	4:35	3:49	4:20	5:13
	Travel Time ERF **Concentration**	Urban		N/A	N/A	N/A	N/A	N/A	N/A
Total Response Time	Total Response Time 1st Unit on Scene **Distribution**	Urban	7:53	8:37	8:37	8:07	5:55	6:45	8:40
				n=43	n=8	n=9	n=7	n=10	n=9
	Total Response Time ERF **Concentration**	Urban	9:03	N/A	N/A	N/A	N/A	N/A	N/A
				n=0	n=0	n=0	n=0	n=0	n=0

Low Risk EMS - 90th Percentile Times - Baseline Performance			Benchmark (Target)	2020-2024	2024	2023	2022	2021	2020
Alarm Handling	Pick-up to Dispatch	Urban		2:19	1:48	2:25	2:24	2:32	1:00
Turnout Time	Turnout Time 1st Unit	Urban		1:37	1:29	1:48	1:34	1:33	1:38
Travel Time	Travel Time 1st Unit **Distribution**	Urban		5:27	6:16	5:11	5:30	5:25	5:36
	Travel Time ERF **Concentration**	Urban		6:00	6:16	5:56	6:00	6:00	6:15
Total Response Time	Total Response Time 1st Unit on Scene **Distribution**	Urban	8:56	8:12	9:11	8:02	8:22	8:28	7:24
				n=7116	n=194	n=1736	n=1857	n=1701	n=1628
	Total Response Time ERF **Concentration**	Urban	8:14	8:36	8:29	8:30	8:44	8:54	7:53
				n=6733	n=169	n=1658	n=1774	n=1611	n=1521

Moderate Risk EMS - 90th Percentile Times - Baseline Performance			Benchmark (Target)	2020-2024	2024	2023	2022	2021	2020
Alarm Handling	Pick-up to Dispatch	Urban		2:11	1:12	2:19	2:20	2:32	00:52
Turnout Time	Turnout Time 1st Unit	Urban		1:35	1:35	1:39	1:31	1:32	1:41
Travel Time	Travel Time 1st Unit **Distribution**	Urban		5:28	5:29	5:14	5:32	5:32	5:32
	Travel Time ERF **Concentration**	Urban		7:12	7:14	7:11	7:07	7:12	7:14
Total Response Time	Total Response Time 1st Unit on Scene **Distribution**	Urban	6:56	8:00	7:11	8:00	8:29	8:31	7:17
				n=15,952	n=4596	n=3180	n=3065	n=2958	n=2153
	Total Response Time ERF **Concentration**	Urban	8:22	9:17	8:37	9:40	9:40	9:48	8:39
				n=13,436	n=3851	n=2728	n=2598	n=2451	n=1808

High Risk EMS - 90th Percentile Times - Baseline Performance			Benchmark (Target)	2020-2024	2024	2023	2022	2021	2020
Alarm Handling	Pick-up to Dispatch	Urban		02:07	00:58	2:07	2:15	2:27	1:09
Turnout Time	Turnout Time 1st Unit	Urban		1:38	1:38	1:46	1:30	1:32	1:42
Travel Time	Travel Time 1st Unit **Distribution**	Urban		5:23	5:17	5:00	5:17	5:23	5:29
	Travel Time ERF **Concentration**	Urban		7:55	8:19	8:00	7:36	8:26	7:44
Total Response Time	Total Response Time 1st Unit on Scene **Distribution**	Urban	6:41	7:51	6:56	8:00	8:11	8:25	7:26
				n=2258	n=249	n=385	n=409	n=422	n=793
	Total Response Time ERF **Concentration**	Urban	9:24	9:39	9:39	10:00	9:41	9:55	9:14
				n=432	n=112	n=92	n=51	n=55	n=122

Low Risk Hazmat - 90th Percentile Times - Baseline Performance			Benchmark (Target)	2020-2024	2024	2023	2022	2021	2020
Alarm Handling	Pick-up to Dispatch	Urban		2:30	1:46	2:05	1:40	2:30	2:59
Turnout Time	Turnout Time 1st Unit	Urban		1:42	2:03	1:32	1:22	1:42	1:38
Travel Time	Travel Time 1st Unit **Distribution**	Urban		6:24	7:02	5:06	5:41	6:26	6:10
	Travel Time ERF **Concentration**	Urban		6:15	5:05	5:11	6:15	6:24	6:10
Total Response Time	Total Response Time 1st Unit on Scene **Distribution**	Urban	9:13	9:28	13:35	8:00	8:32	9:14	9:28
				n=90	n=15	n=20	n=18	n=20	n=17
	Total Response Time ERF **Concentration**	Urban	9:16	9:27	8:24	8:00	9:12	8:57	9:28
				n=79	n=12	n=18	n=16	n=17	n=16

Moderate Risk Hazmat - 90th Percentile Times - Baseline Performance			Benchmark (Target)	2020-2024	2024	2023	2022	2021	2020
Alarm Handling	Pick-up to Dispatch	Urban		2:11	1:53	2:00	1:53	1:53	2:47
Turnout Time	Turnout Time 1st Unit	Urban		1:34	1:32	1:43	1:33	1:42	1:35
Travel Time	Travel Time 1st Unit **Distribution**	Urban		6:23	6:30	6:00	6:34	5:59	6:29
	Travel Time ERF **Concentration**	Urban		8:23	7:45	8:23	8:23	8:50	7:59
Total Response Time	Total Response Time 1st Unit on Scene **Distribution**	Urban	8:29	9:04	8:44	8:41	8:38	9:02	10:09
				n=556	n=119	n=110	n=148	n=104	n=75
	Total Response Time ERF **Concentration**	Urban	9:40	10:27	9:55	10:11	10:29	10:48	10:16
				n=201	n=42	n=38	n=63	n=35	n=23

High Risk Hazmat - 90th Percentile Times - Baseline Performance			Benchmark (Target)	2020-2024	2024	2023	2022	2021	2020
Alarm Handling	Pick-up to Dispatch	Urban	[redacted]	2:30	1:43	2:28	2:21	2:11	2:35
Turnout Time	Turnout Time 1st Unit	Urban		1:29	1:24	1:12	1:35	1:37	1:29
Travel Time	Travel Time 1st Unit **Distribution**	Urban		6:09	5;26	6:09	5:55	5:28	6:48
	Travel Time ERF **Concentration**	Urban		7:08	6;18	7:08	5:27	6:59	7:15
Total Response Time	Total Response Time 1st Unit on Scene **Distribution**	Urban	9:43	9:50	7:04	8:53	9:09	9:50	12:04
				n=100	n=16	n=20	n=19	n=24	n=21
	Total Response Time ERF **Concentration**	Urban	10:33	9:36	9:15	9:13	6:46	10:31	9:36
				n=10	n=2	n=2	n=1	n=3	n=2

Low Risk Technical Rescue - 90th Percentile Times - Baseline Performance			Benchmark (Target)	2020-2024	2024	2023	2022	2021	2020
Alarm Handling	Pick-up to Dispatch	Urban		2:02	1:37	2:00	2:04	1:52	2:10
Turnout Time	Turnout Time 1st Unit	Urban		1:23	1:31	1:19	1:13	1:19	1:20
Travel Time	Travel Time 1st Unit **Distribution**	Urban		4:51	5:08	4:34	4:49	4:46	4:37
	Travel Time ERF **Concentration**	Urban		7:43	6:48	7:52	7:13	7:20	7:57
Total Response Time	Total Response Time 1st Unit on Scene **Distribution**	Urban	7:30	7:25	7:59	7:36	6:49	7:17	7:25
				n=165	n=51	n=44	n=24	n=26	n=20
	Total Response Time ERF **Concentration**	Urban	10:12	10:21	9:08	10:21	8:57	9:59	12:00
				n=80	n=9	n=29	n=11	n=16	n=15

Moderate Risk Technical Rescue - 90th Percentile Times - Baseline Performance			Benchmark (Target)	2020-2024	2024	2023	2022	2021	2020
Alarm Handling	Pick-up to Dispatch	Urban		1:35	1:31	2:20	00:37	1:30	N/A
Turnout Time	Turnout Time 1st Unit	Urban		1:26	1:20	1:29	1:14	1:26	N/A
Travel Time	Travel Time 1st Unit **Distribution**	Urban		6:05	6:11	3:18	6:26	5:09	N/A
	Travel Time ERF **Concentration**	Urban		8:07	N/A	8:07	N/A	N/A	N/A
Total Response Time	Total Response Time 1st Unit on Scene **Distribution**	Urban	7:30	8:28	8:28	8:30	7:47	7:34	N/A
				n=20	n=7	n=5	n=2	n=6	n=0
	Total Response Time ERF **Concentration**	Urban	15:03	9:26	N/A	9:26	N/A	N/A	N/A
				n=1	n=0	n=1	n=0	n=0	n=0

High Risk Technical Rescue - 90th Percentile Times - Baseline Performance			Benchmark (Target)	2020-2024	2024	2023	2022	2021	2020
Alarm Handling	Pick-up to Dispatch	Urban		2:35	N/A	1:32	2:35	2:05	2:09
Turnout Time	Turnout Time 1st Unit	Urban		1:14	N/A	1:25	1:09	1:09	1:14
Travel Time	Travel Time 1st Unit **Distribution**	Urban		5:09	N/A	5:03	3:34	6:32	3;43
	Travel Time ERF **Concentration**	Urban		N/A	N/A	N/A	N/A	N/A	N/A
Total Response Time	Total Response Time 1st Unit on Scene **Distribution**	Urban	7:45	8:11	N/A	8:11	5:29	8:32	7:06
				n=22	n=0	n=6	n=8	n=5	n=3
	Total Response Time ERF **Concentration**	Urban	35:00	N/A	N/A	N/A	N/A	N/A	N/A
				n=0	n=0	n=0	n=0	n=0	n=0

Compliance Methodology

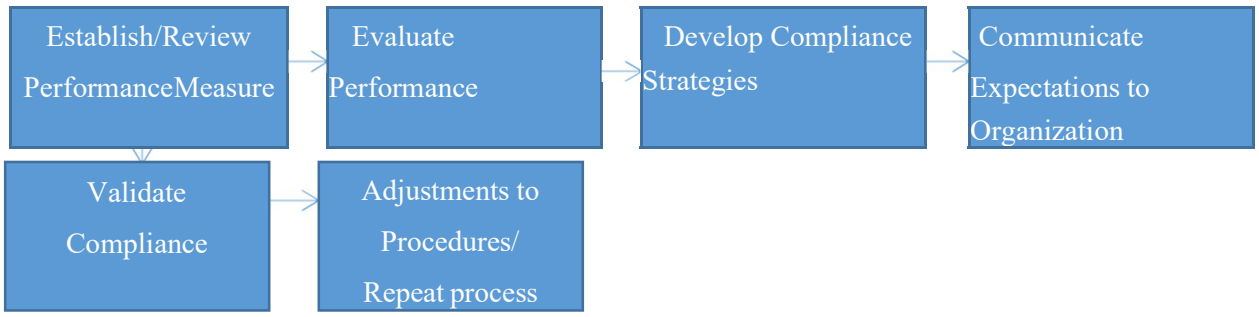
The preceding sections of this report provide a detailed analysis of the historical performance of the Carmel Fire Department. In order for this to prove beneficial to department and city policy makers, continued analysis will be performed on a routine basis. The data provided to the project team for analysis initially proved to be difficult to analyze from the standpoint of being consistent and complete. The creation and implementation of a continuous quality assurance program on all Carmel Fire Department incident records helped to ensure accurate data for this report.

The Carmel Fire Department is committed to a continual process of analyzing and evaluating actual performance against the adopted standards of cover and will enhance the data collection procedures of field operations personnel. Periodic review of the department's records management system reports will be necessary to ensure compliance and reliability of data.

Compliance Model

Compliance is best achieved through a systematic approach. Carmel Fire Department has identified the following six-step compliance model.

Maintenance of Effort Compliance Model



Step 1: Establish/Review Performance Measures

Complete the initial standard of cover process. Conduct a full review of the performance measures every annually. This process is risk-based and evaluates whether:

- Services provided are identified
- Levels of service are defined
- Levels of risk are categorized Performance objectives and measures developed:
- Distribution measures
- Concentration measures
-

Step 2: Evaluate Performance

Performance measures are applied to actual services provided:

- System level
- First Due Area level
- Unit level

Step 3: Develop Compliance Strategies

- Determine issues and opportunities:
- Determine what needs to be done to close identified gaps
- Determine if resources can or should be reallocated
- Seek alternative methods to provide service at desired levels
- Develop budget estimates as necessary
- Seek additional funding commitment as necessary

Step 4: Communicate Expectations to Organization and Stakeholders

Communicate expectations:

- Explain method of measuring compliance to personnel who are expected to perform the services
- Provide feedback mechanisms
- Define consequences of noncomplianceTrain Personnel
- Provide appropriate levels of training/direction for all affected personnel
- Communicate consequences of noncompliance
- Modify (remediate) internal processes, application systems, and technical infrastructure as necessaryto comply.

Step 5: Validate Compliance

Develop and deploy verification tools and/or techniques that can be used by divisions of the organization on an ongoing basis to verify that they are meeting the requirements:

Monthly evaluation:

- Performance by Unit

- Overall Performance
- Review of performance by Division

Quarterly evaluation:

- Performance by Unit
- Performance by First Due
- Overall evaluation of performance by Executive Management

Determine whether independent validation and verification techniques will be used to measure performance and solicit external assistance as necessary.

Step 6: Make Adjustments/Repeat Process

Review changes to ensure that service levels have been maintained or improved. Develop and implement a review program to ensure ongoing compliance:

Annual Review and Evaluation

- Performance by Unit
- Performance by First Due
- Overall Performance
- Review of performance by Governing Body
- Adjustment of performance standards by Governing Body as necessary

Five-Year Update of Standards

- Performance by Unit
- Performance by First Due
- Overall Performance
- Adoption of performance measures by Governing Body

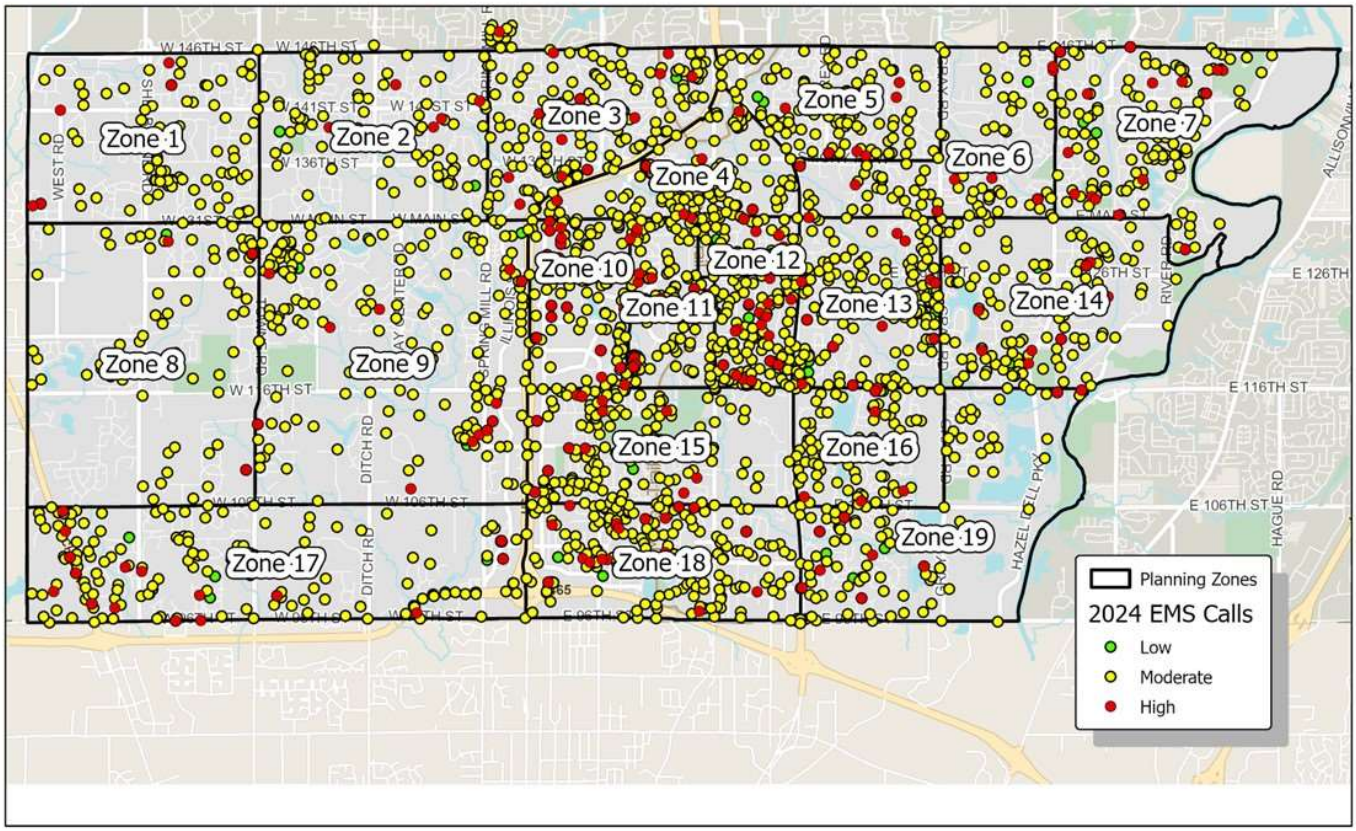
Establish management processes to deal with future changes in the Carmel Fire Department jurisdiction.

Annual Response Maps and Planning Zone Maps & Analysis

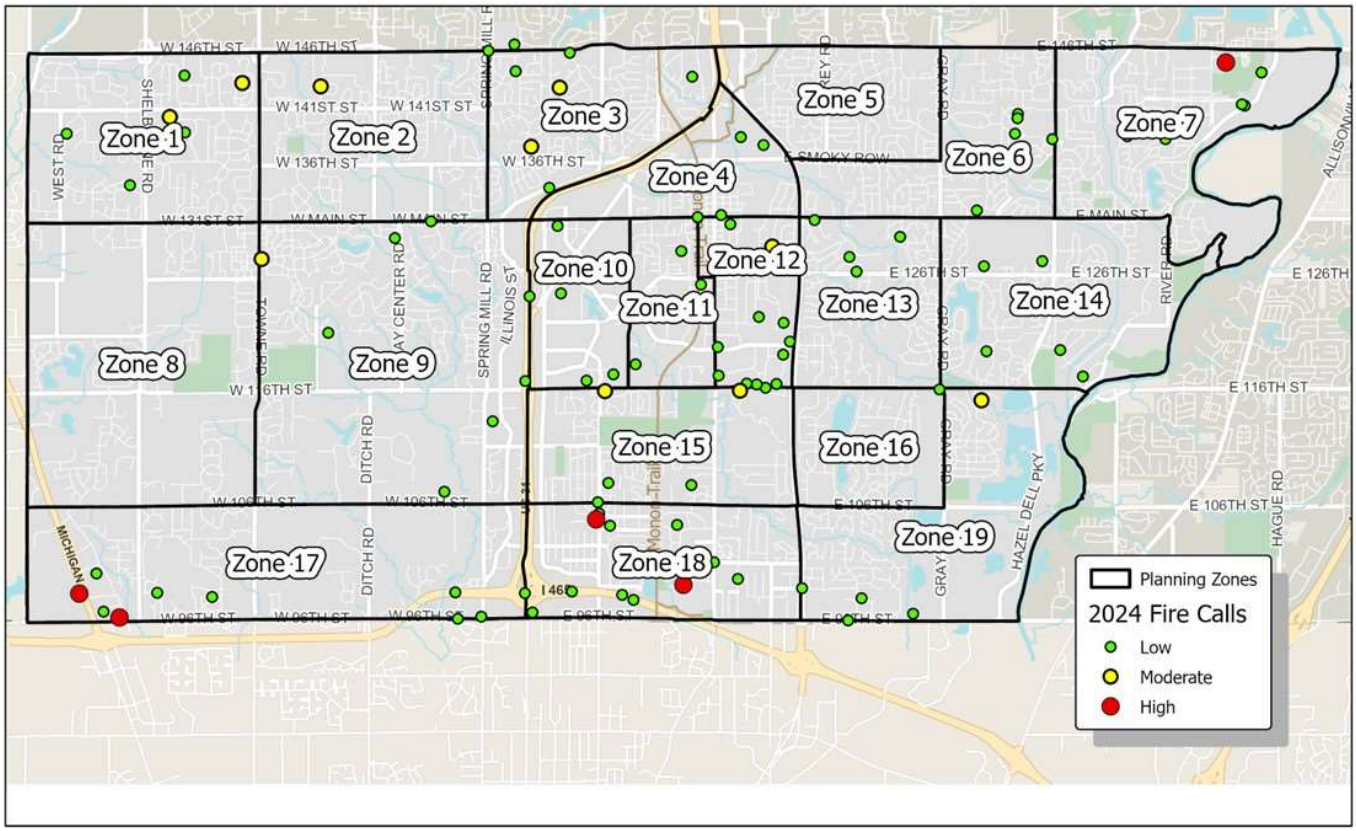
See below for Annual Response Maps and Planning Zone Maps & Analysis.

Annual Response MAPS

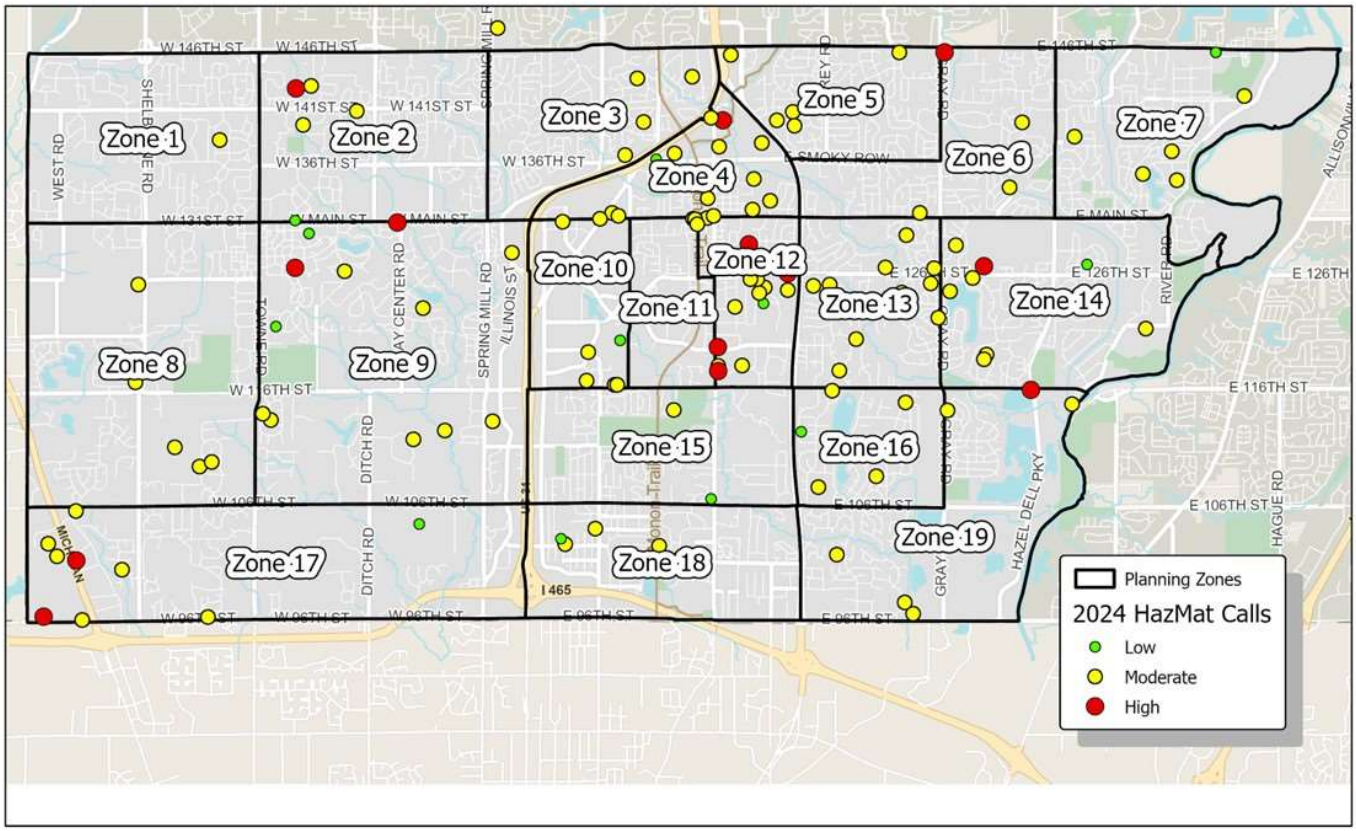
2024 EMS Incidents
(Records Management Data)



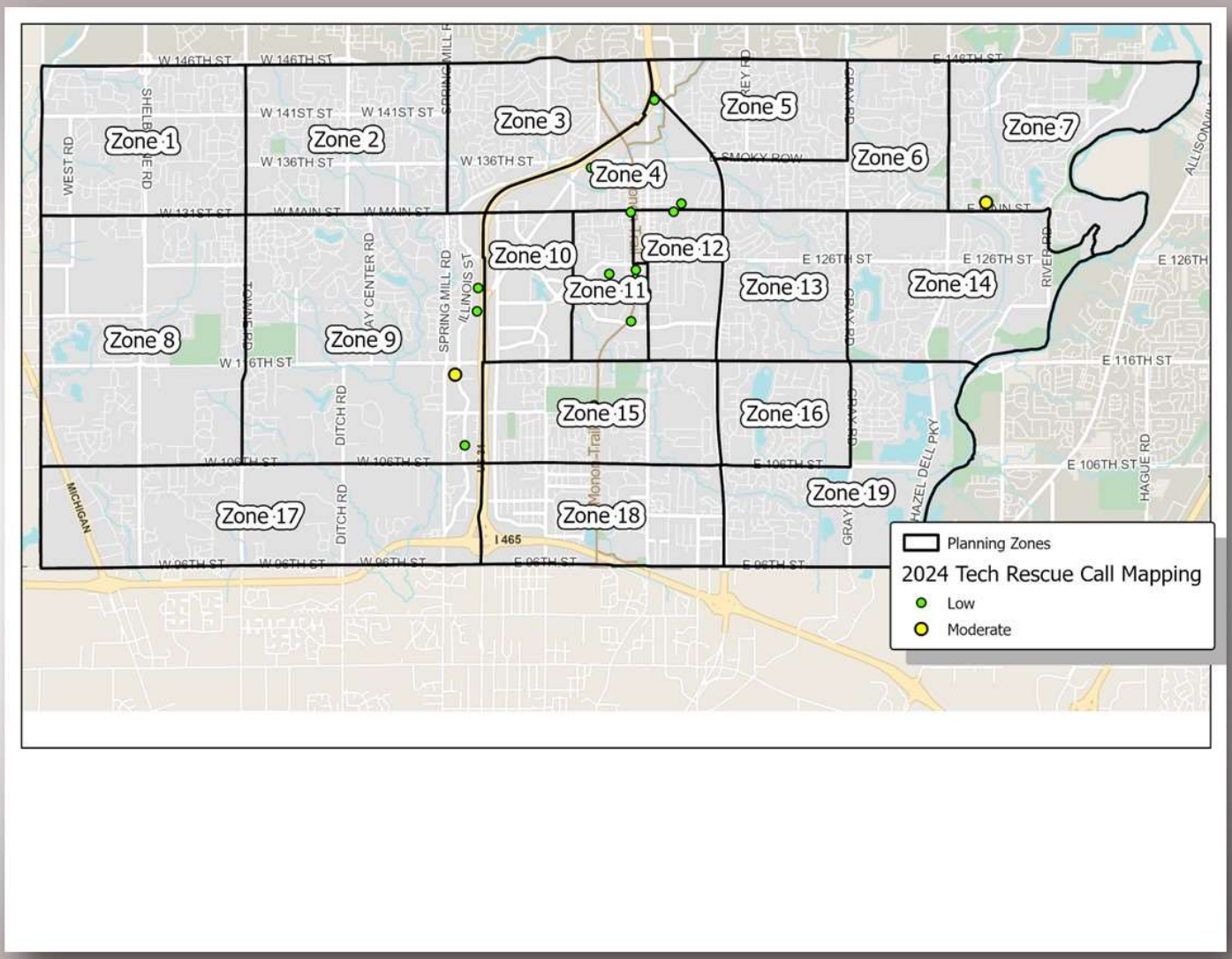
2024 Fire Incidents (Records Management Data)



2024 Haz-Mat Incidents (Records Management Data)

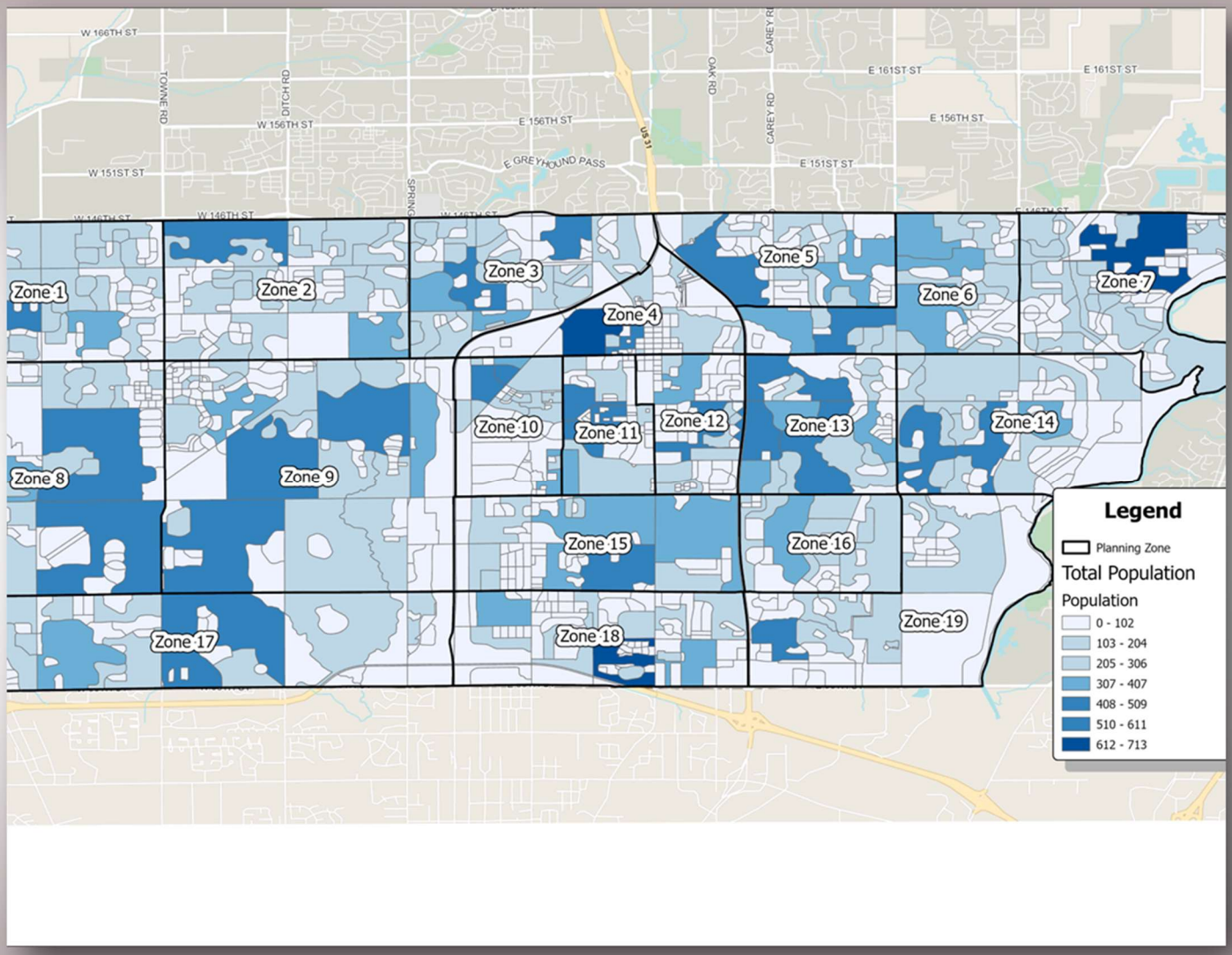


2024 Tech Rescue Incidents (Records Management Data)

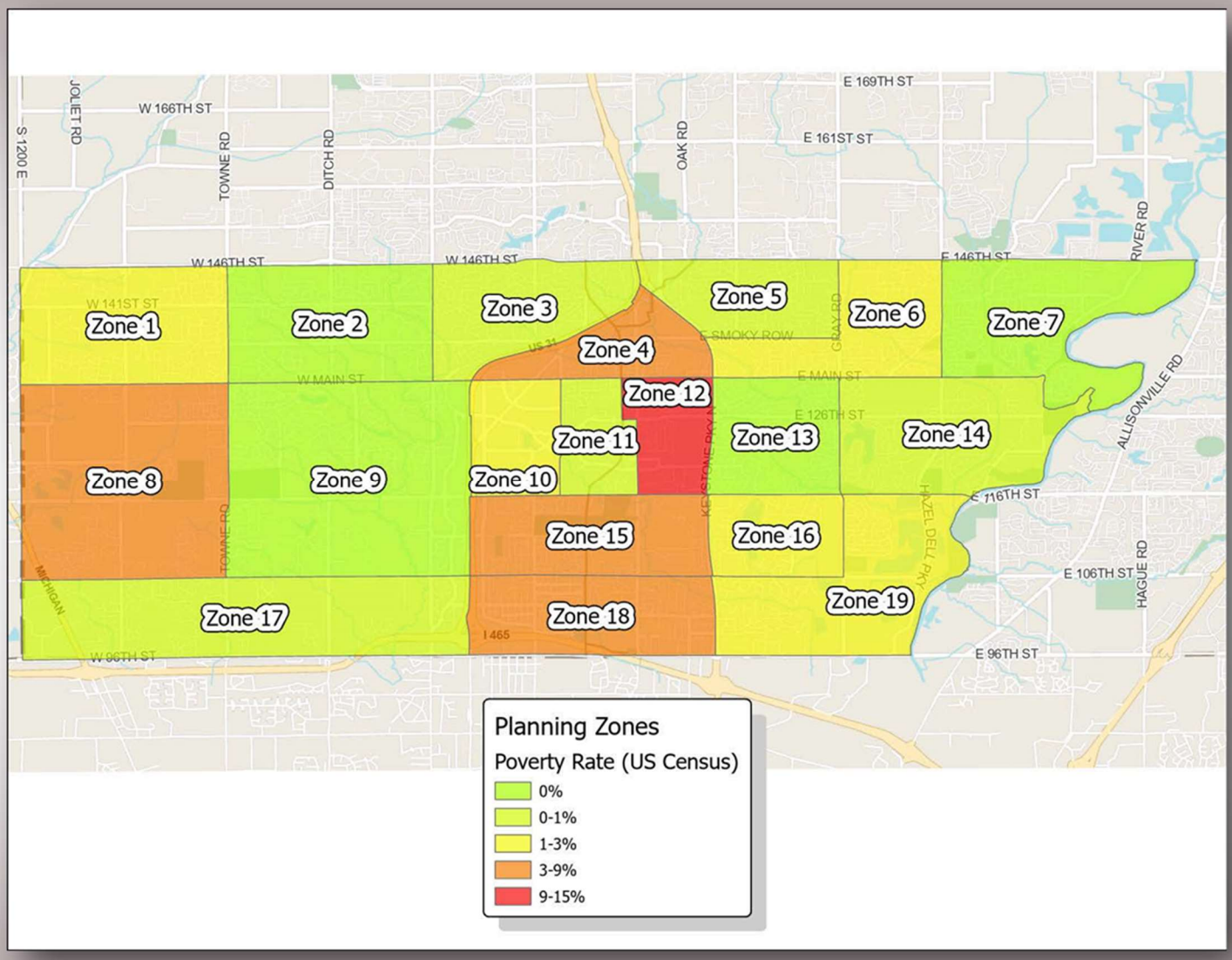


PLANNING ZONE MAPS & ANALYSIS

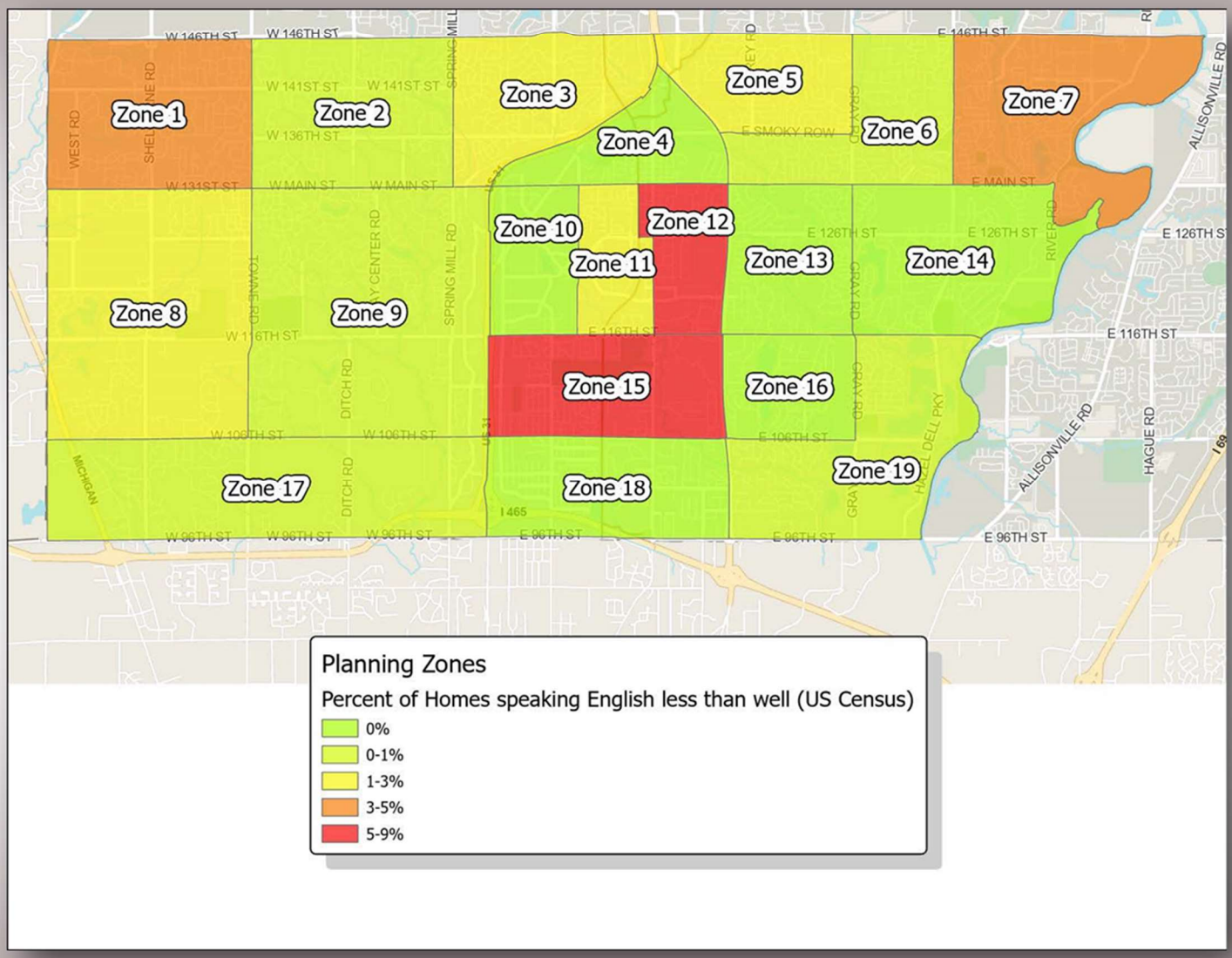
Total Population
(US Census Block Group Data)



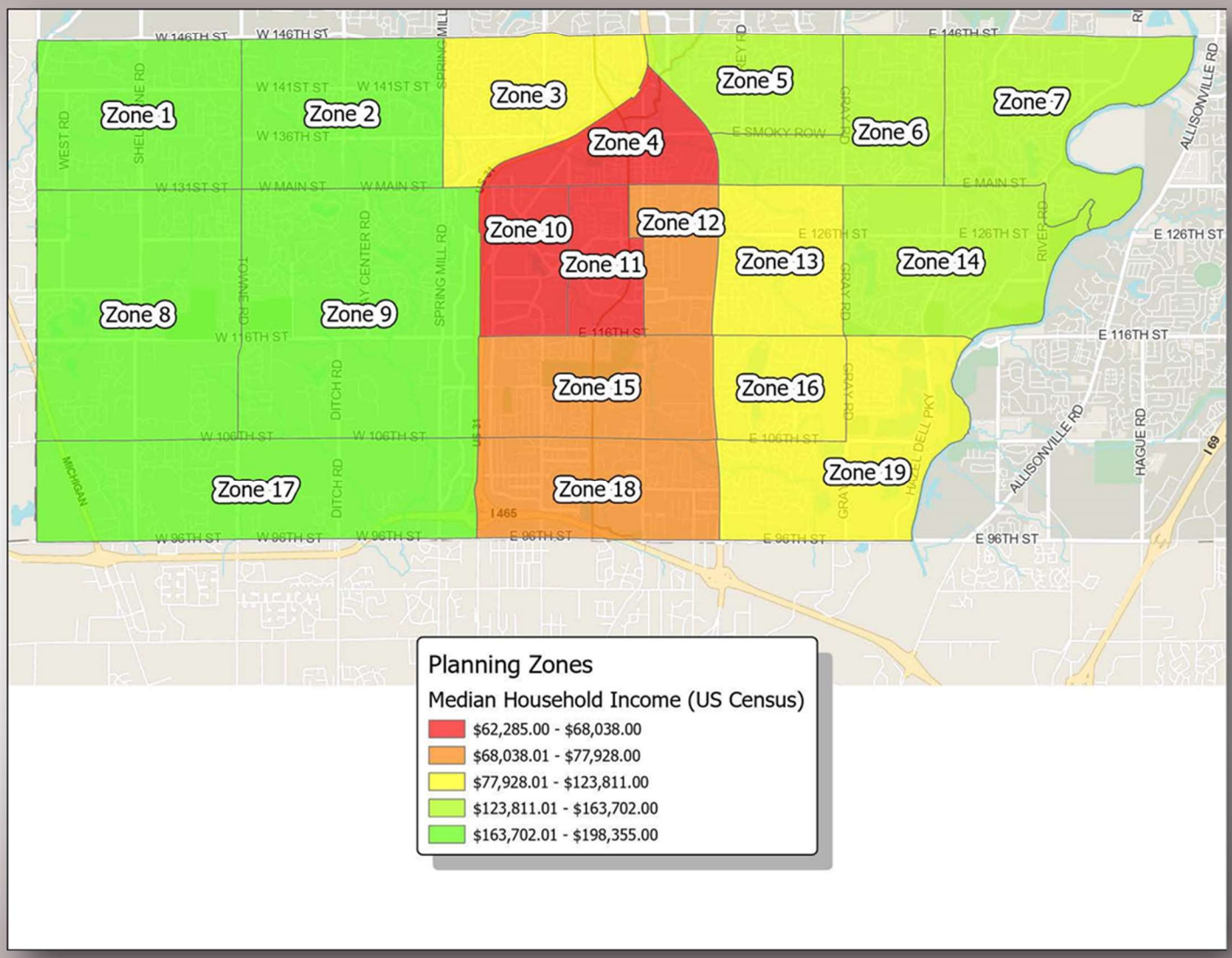
Poverty Rate (US Census)



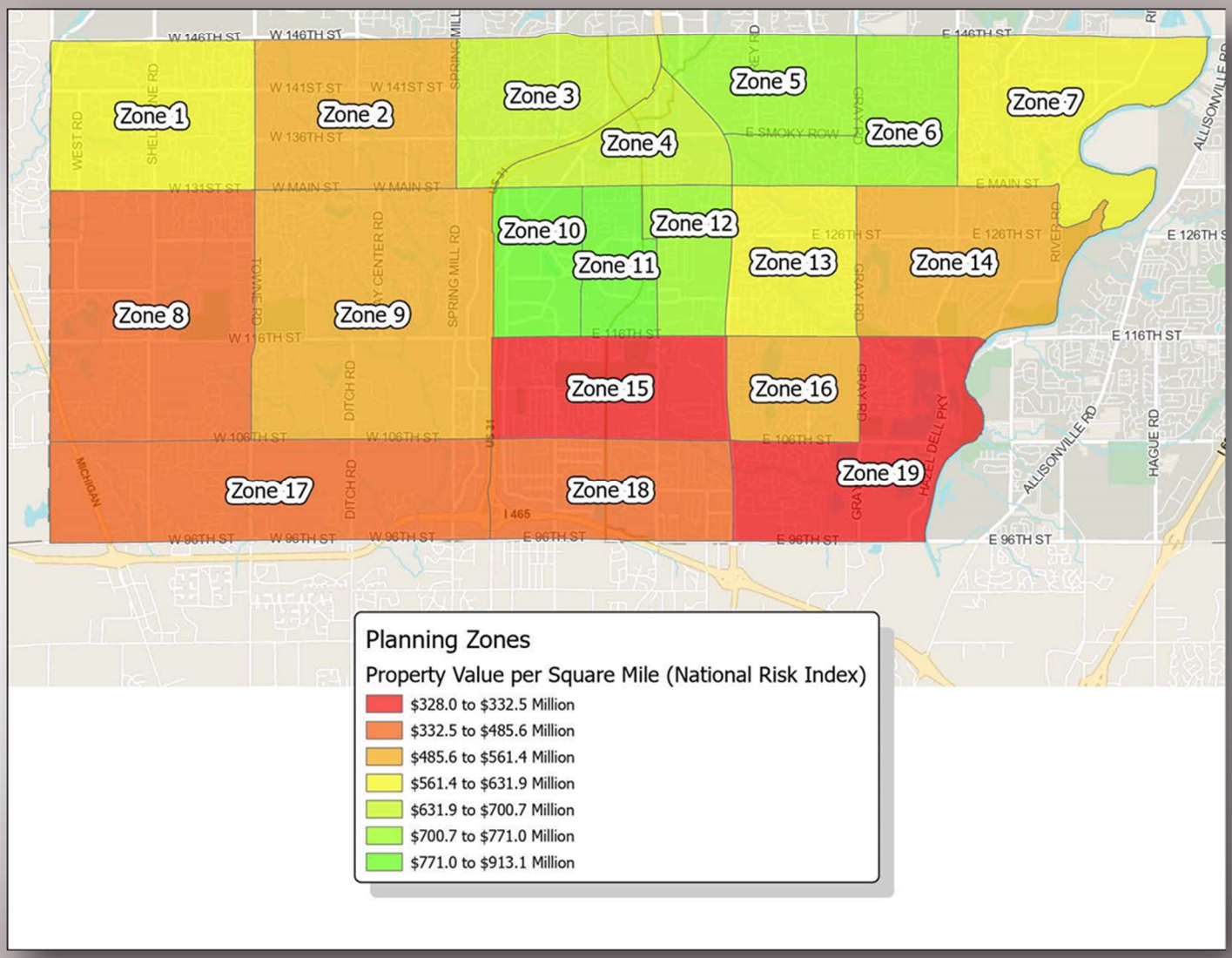
Homes Not Speaking English (US Census Data)



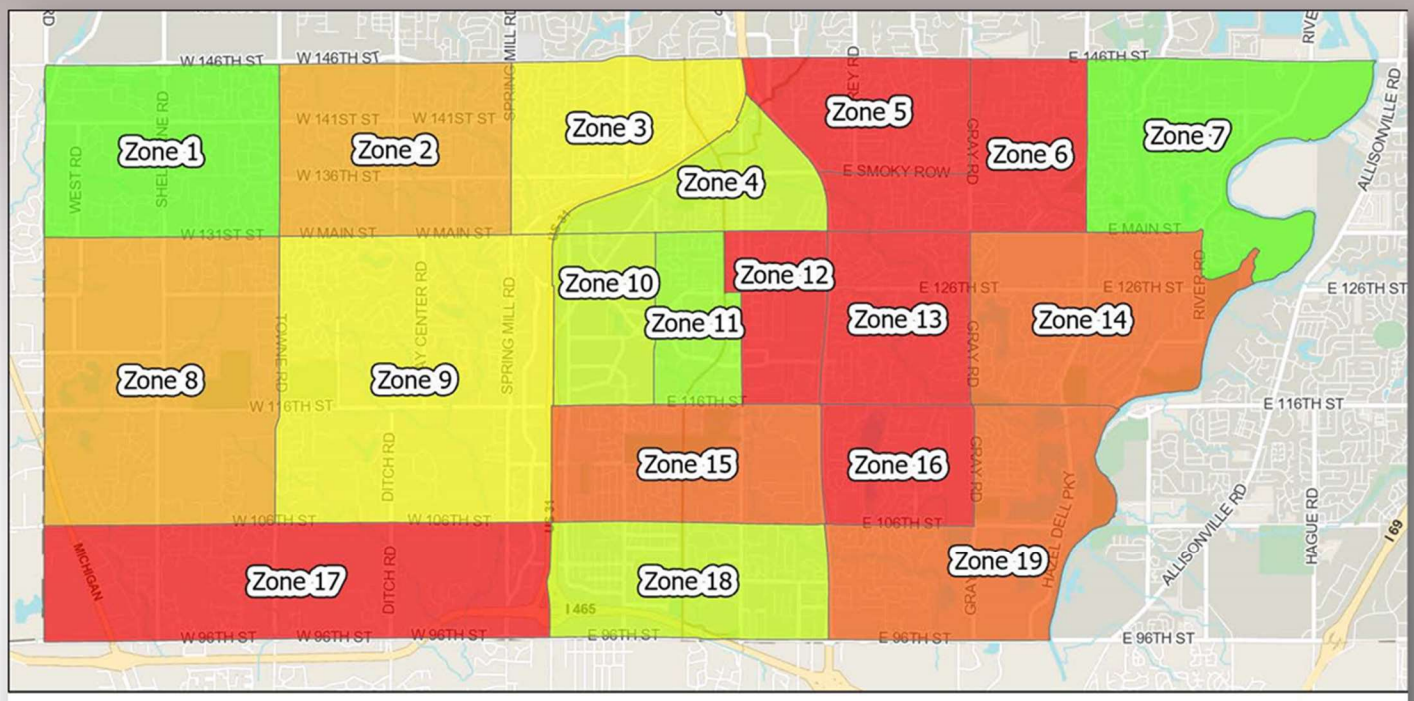
Median Household Income (US Census Data)



Property Value per Square Mile (National Risk Index Data)



Percent of Houses Built After 2014 (US Census Data)

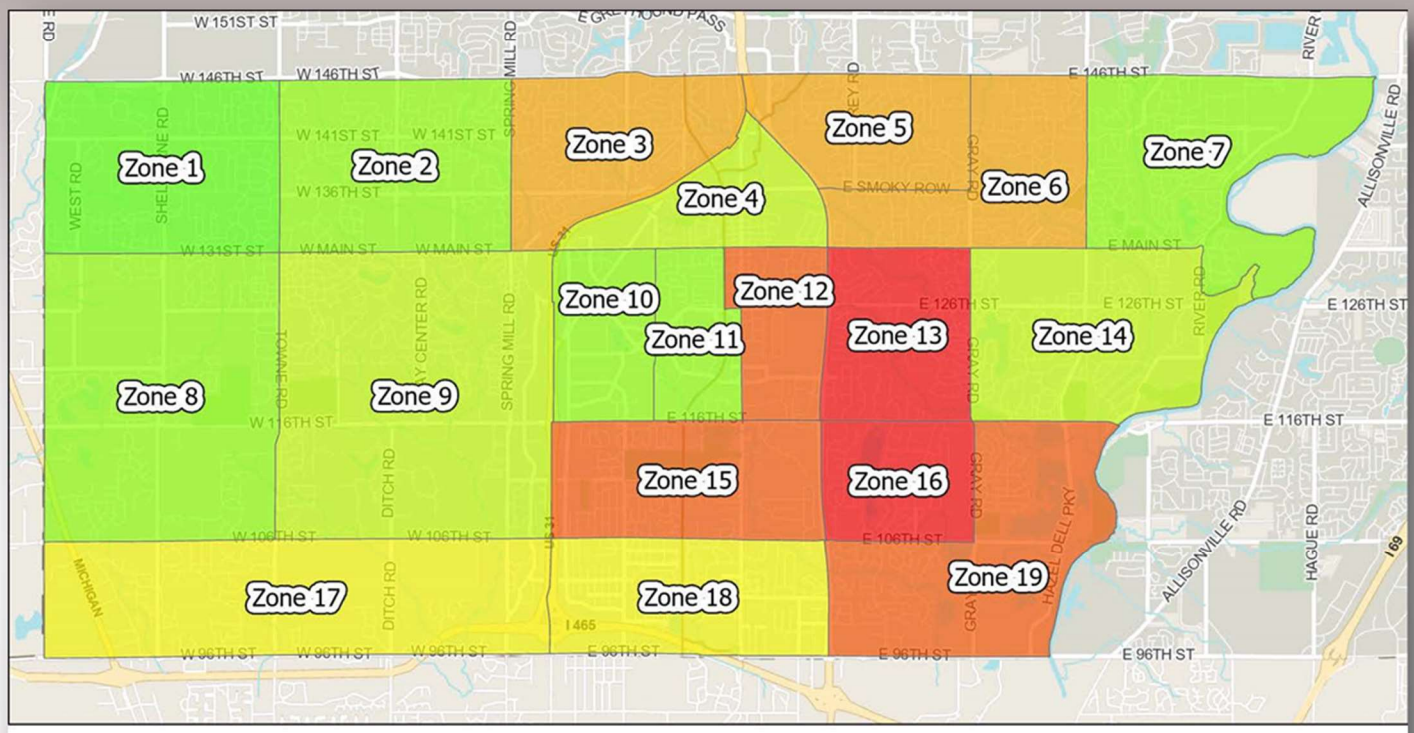


Planning Zones

Percent of Housing built in or after 2014 (US Census)

- 0 to 1%
- 1 to 4%
- 4 to 8%
- 8 to 11%
- 11 to 16%
- 16 to 19%
- 19 to 23%

Percent of Houses Built After 2000 (US Census Data)

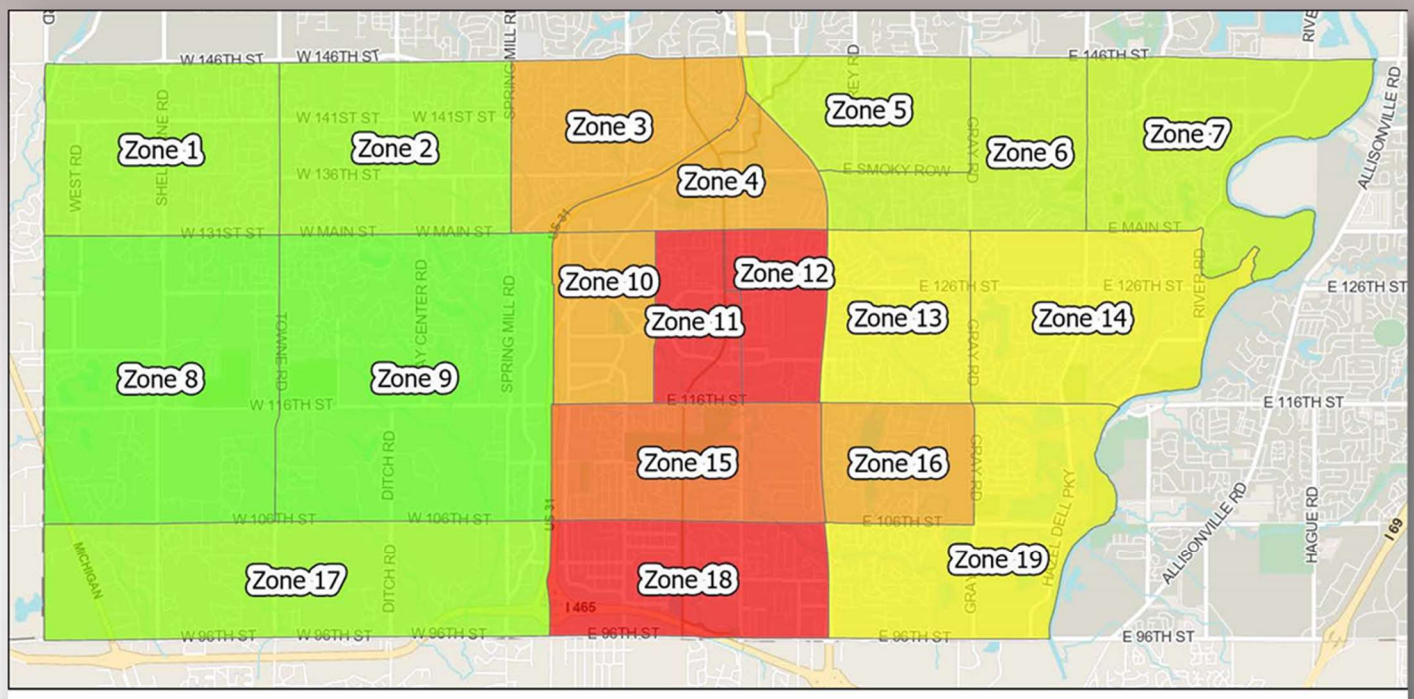


Planning Zones

Percent of Housing Built after 2000 (US Census)

- 1 to 6%
- 6 to 11%
- 11 to 16%
- 16 to 26%
- 26 to 49%
- 49 to 65%
- 65 to 94%

Median Home Value (US Census Data)

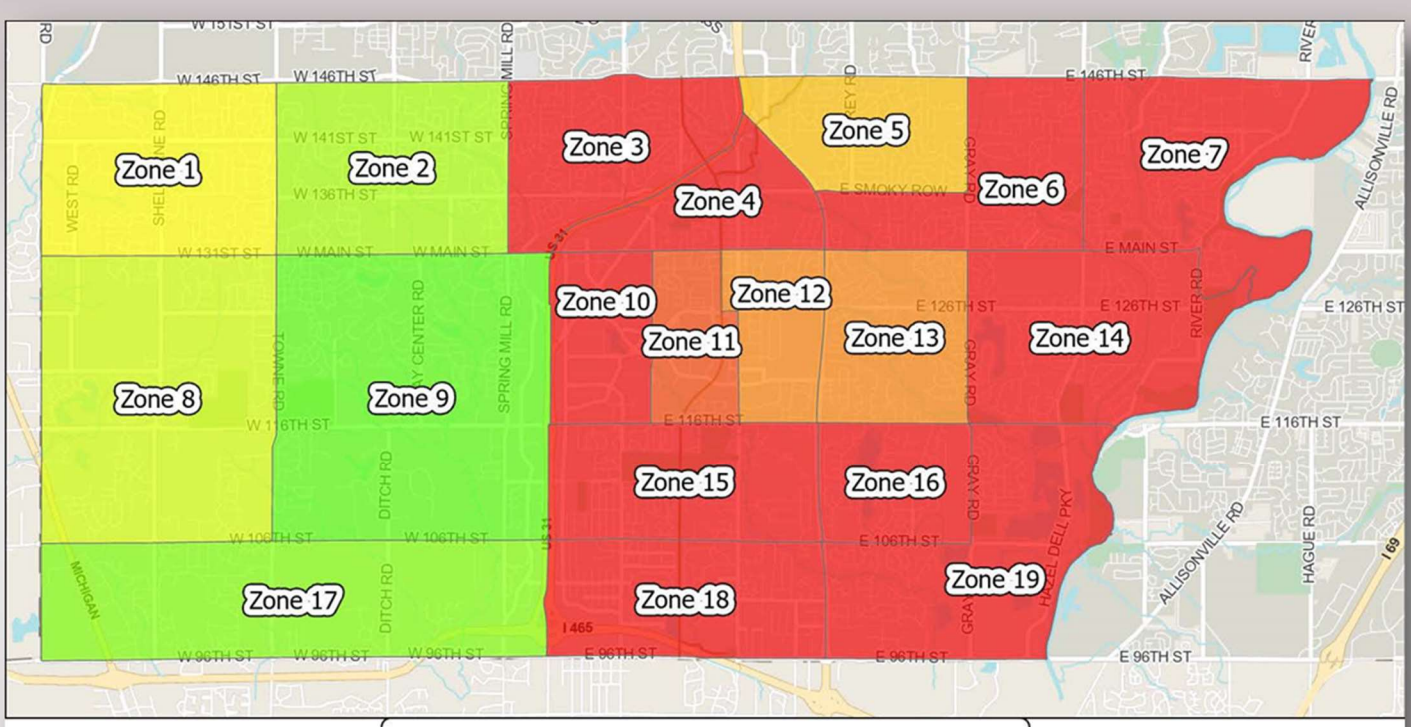


Planning Zones

Median Home Value (US Census)

- $197,300.00 - $207,700.00
- $207,700.01 - $228,400.00
- $228,400.01 - $290,100.00
- $290,100.01 - $348,800.00
- $348,800.01 - $408,900.00
- $408,900.01 - $446,900.00
- $446,900.01 - $532,300.00

Number of Houses Valued in Excess of $1 Million (US Census Data)

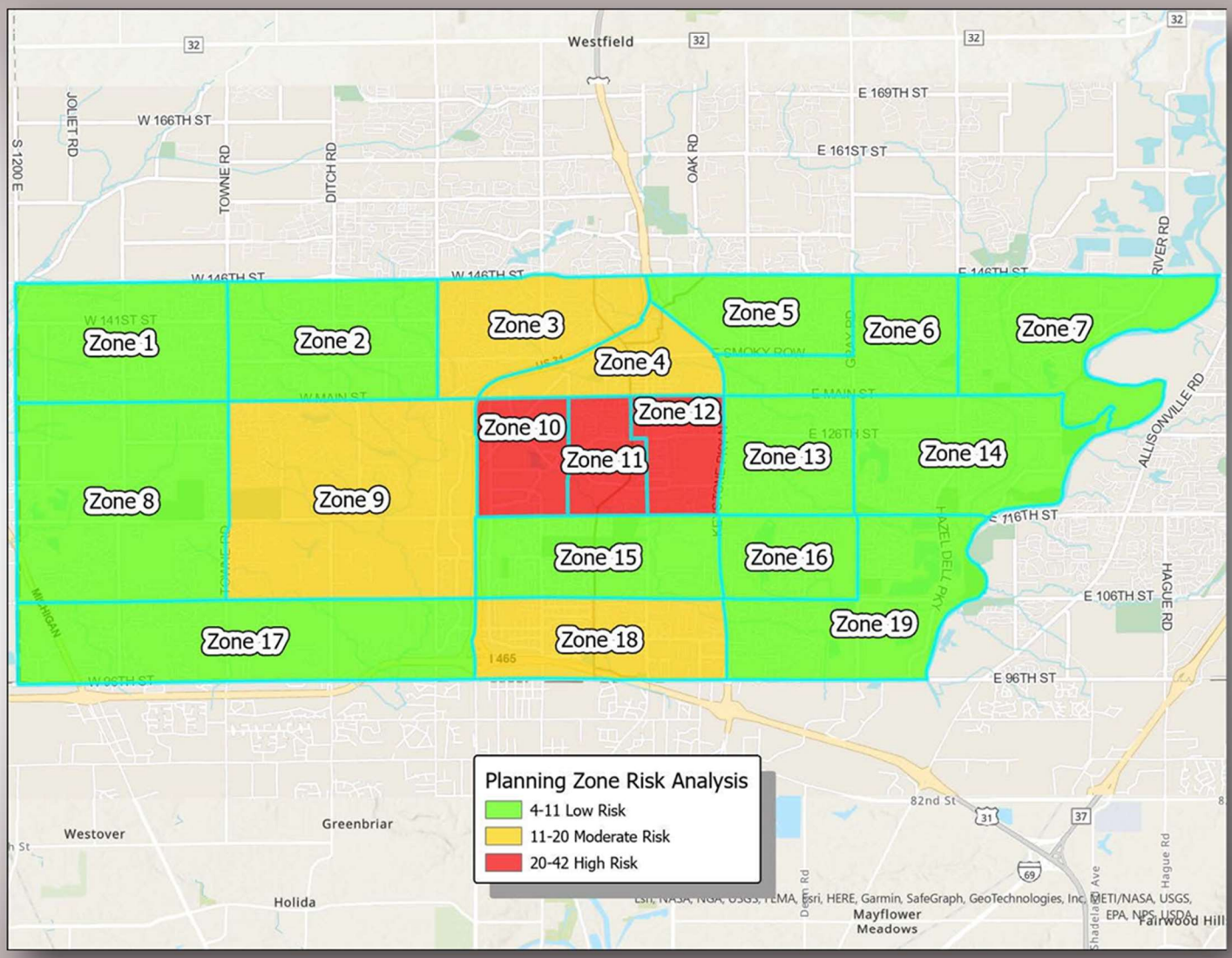


Planning Zones

Number of Houses Valued at over $1 Million (US Census)

- 0
- 7
- 8
- 9
- 16
- 68
- 236
- 272
- 316

Planning Zone Risk Analysis (Multiple Data Sources)

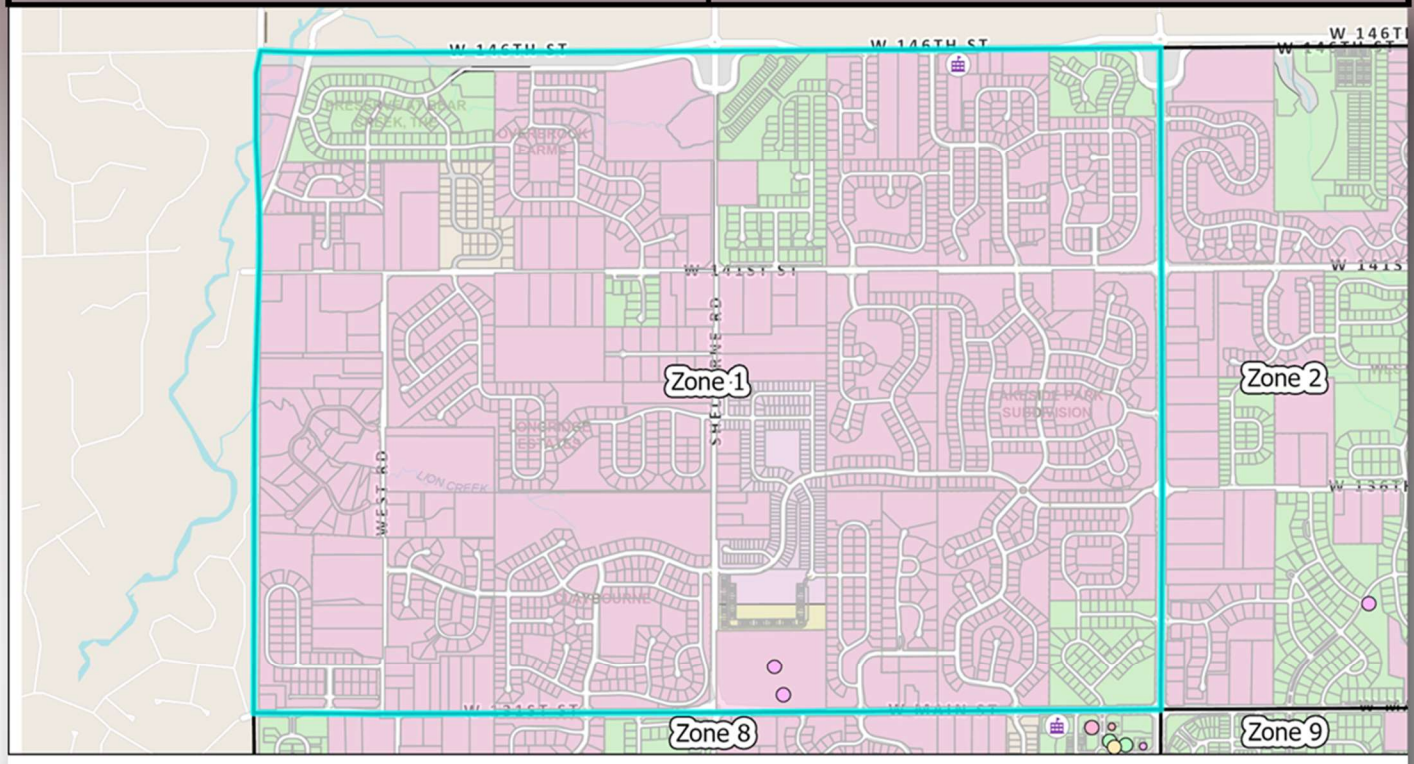


PLANNING ZONE: 1

PLANNING ZONE RISK LEVEL: LOW

THIS ZONE RISK SCORE: 7.13

LOWEST 4.28 HIGHEST 41.85



Zoning

Description

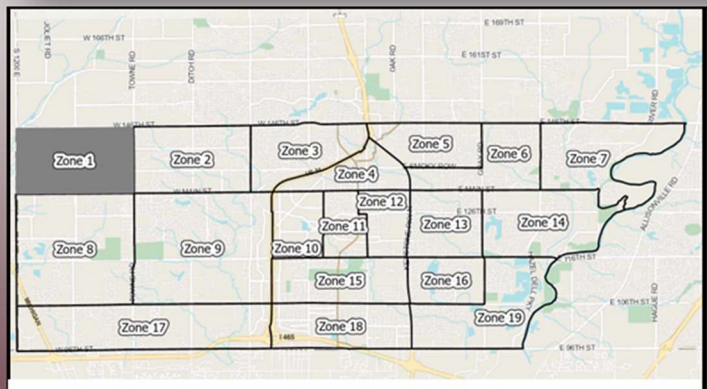
- High Density Residential
- Low to Medium Density Residential
- Low-Density Single Family Residential
- Planned Unit Development
- Single Family Residential, Large Lots

BLDG TYPE (Dot size represents risk level)

- BANK
- CITY OF CARMEL
- COMMERCIAL
- RESTAURANT
- RETAIL

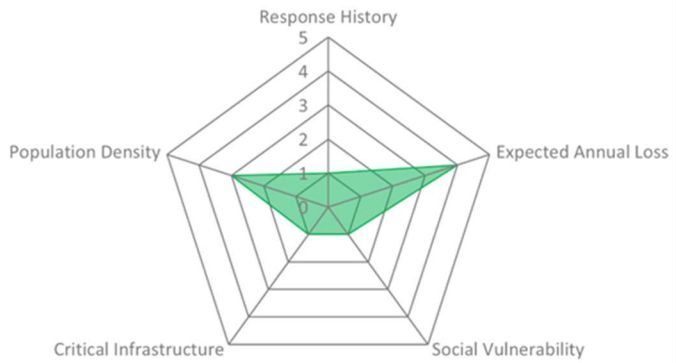
BLDG TYPE

- SCHOOL



PLANNING ZONE LOCATOR

RISK CATEGORIZATION RADAR CHART [ZONE:1]



PLANNING ZONE: 1

		RANK IN CARMEL (out of 19)
ESTIMATED POPULATION	7,040	4
POPULATION DENSITY (people/sq mile)	2,347	10
HOUSEHOLDS BELOW POVERTY LEVEL	2.7%	8
% of people that speak English less than well	3.7%	4
POPULATION OVER 25 WITHOUT HIGH SCHOOL CREDENTIALS	2.4%	7
HOUSEHOLD MEDIAN INCOME	$179,244	4
PLANNING ZONE LAND AREA (sq mi)	3.0	4
TOTAL PROPERTY VALUE (Billions)	1.82 Billion	5
TOTAL PROPERTY VALUE/ sq mi (Millions)	$606 Million	10
HOUSING UNITS	2,135	7
% OF HOMES BUILT AFTER 2014	21.0%	2
% OF HOMES BUILT AFTER 2000	94.0%	1
MEDIAN HOME VALUE	$433,700	4
HOMES VALUED BELOW $100K	5	11
HOMES VALUED ABOVE $1 MILLION	16	5

Planning Zone 1 lies in the northwest corner of the city. It is an area of very strong growth as indicated by the fact that 94% of the homes in the zone have been built after 2000 and 21% were built in the last 9 years.

Planning Zone 1 has relatively little critical infrastructure within its boundaries but it does contain the city's street department and main utilities office along with a large water storage tower on its southern edge. The remainder of the zone is residential with 16 of the homes valued in excess of $1 million.

Protection of this zone is split between station 346 located on the eastern edge of zone 2 and station 342 located on southern edge of zone8. Zionsville Fire Department Engine 92 provides mutual aid to this zone.

The predominant second language spoken in Planning Zone 1 is Asian and Pacific Island Languages at a rate of approximately 21%.

All Incidents - Planning Zone 1 (Response Time Components)						
	Overall	2024	2025	2026	2027	2028
Call Processing	1:39	1:39				
Turnout	1:36	1:36				
Travel	7:29	7:29				
Dispatch to Arrival	8:49	8:49				
Call to Arrival	10:15	10:15				

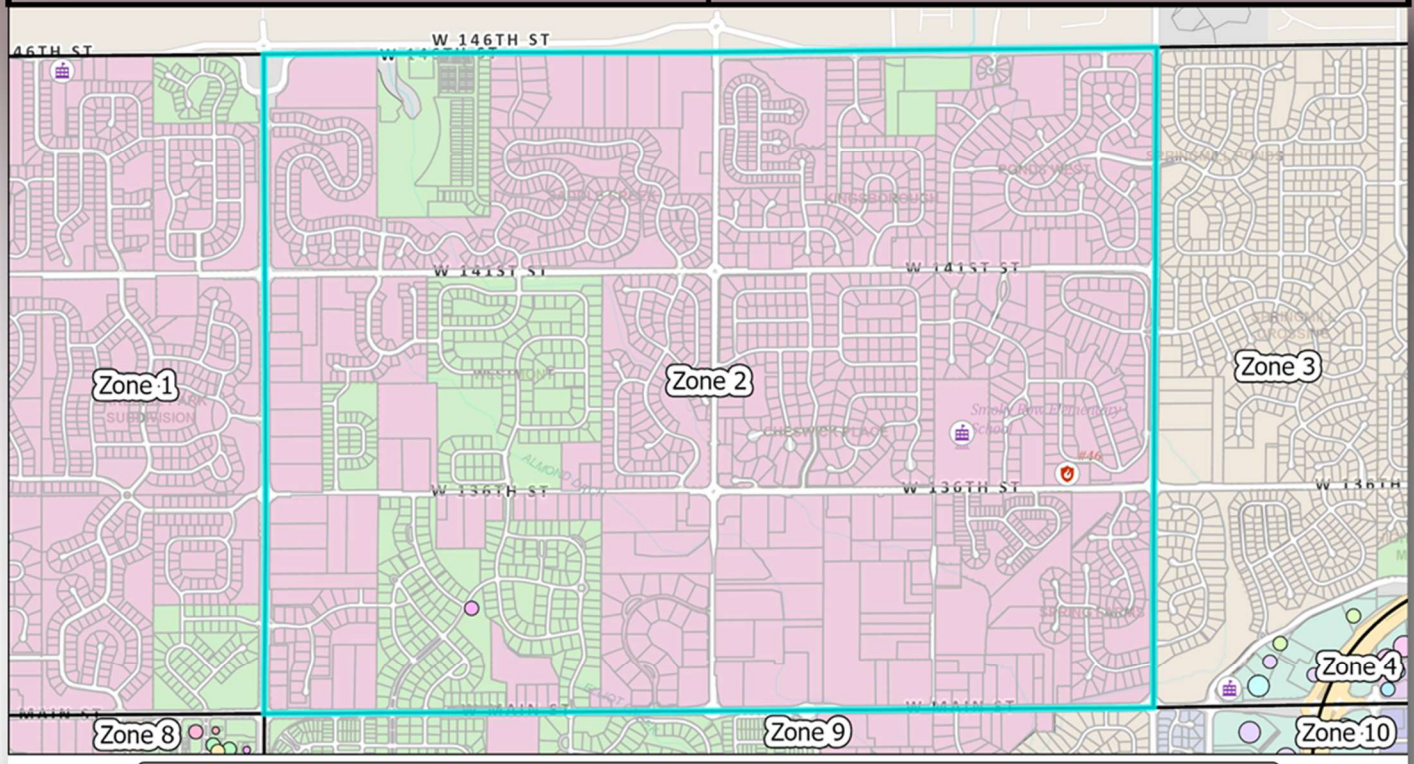
Zone 1		2024-2028 Responses	% Total for Zone	%Total of type for city
Fire	Low	4	2.4%	4.7%
	Moderate	2	1.2%	20.0%
	High	0		
EMS	Low	0		
	Moderate	99	59.6%	2.2%
	High	4	2.4%	1.6%
Hazmat	Low	0		
	Moderate	1	0.6%	0.9%
	High	0		
Tech Rescue	Low	0		
	Moderate	0		
	High	0		
Others		56	33.7%	2.9%
Total Runs		166		1.9%

PLANNING ZONE: 2

PLANNING ZONE RISK LEVEL: LOW

THIS ZONE RISK SCORE: 7.13

LOWEST 4.28 HIGHEST 41.85



Zoning

Description

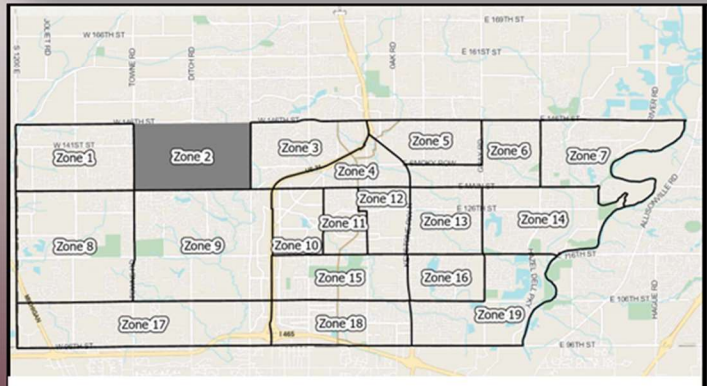
- Low-Density Single Family Residential
- Medium Density Residential
- Meridian Corridor
- Planned Unit Development
- Single Family Residential, Large Lots
- Urban Core
- Urban Residential

BLDG TYPE (Dot size represents risk level)

- APARTMENTS
- BANK
- CHURCH
- CITY OF CARMEL
- COMMERCIAL
- HEALTHCARE
- HOTEL
- MULTI-TENANT
- OFFICE
- RESTAURANT
- RETAIL
- STRIP MALL

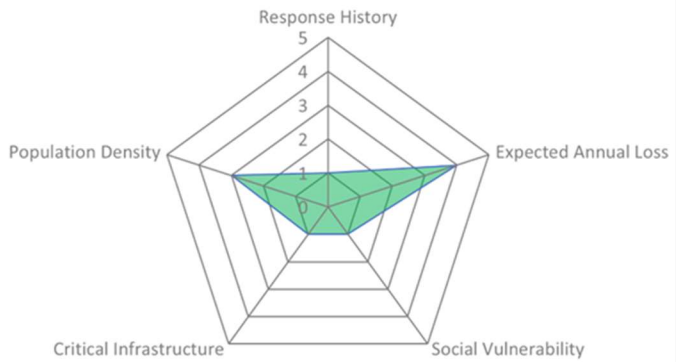
BLDG TYPE

- FIRE STATION
- SCHOOL



PLANNING ZONE LOCATOR

RISK CATEGORIZATION RADAR CHART [ZONE:2]



PLANNING ZONE: 2

		RANK IN CARMEL (out of 19)
ESTIMATED POPULATION	6,486	3
POPULATION DENSITY (people/sq mile)	2,156	13
HOUSEHOLDS BELOW POVERTY LEVEL	0.4%	16
% of people that speak English less than well	1.0%	12
POPULATION OVER 25 WITHOUT HIGH SCHOOL CREDENTIALS	3.0%	4
HOUSEHOLD MEDIAN INCOME	$186,674	3
PLANNING ZONE LAND AREA (sq mi)	3.0	4
TOTAL PROPERTY VALUE (Billions)	1.90 Billion	4
TOTAL PROPERTY VALUE/ sq mi (Millions)	$632 Million	8
HOUSING UNITS	2,139	6
% OF HOMES BUILT AFTER 2014	6.4%	12
% OF HOMES BUILT AFTER 2000	57.0%	5
MEDIAN HOME VALUE	$446,900	3
HOMES VALUED BELOW $100K	0	13
HOMES VALUED ABOVE $1 MILLION	236	3

Planning Zone 2 lies on the northern edge of the city. It is almost exclusively residential with the exception of Smoky Row Elementary school and Carmel Fire Station 346. The residential areas are predominantly single family dwellings on large lots and include 236 homes valued in excess of $1 million.

Planning Zone 2 was an area of strong growth in the early 2000's however it has become more built out and growth has slowed with only 6.4% of homes built after 2014.

Along the southern edge near the southwest corner lies the northern edge of the Village of West Clay which is mostly located in planning zone 9. The village is zoned as planned unit development and was modeled along the lines of Celebration, Florida located in Orlando near Disney World.

All Incidents - Planning Zone 2 (Response Time Components)

	Overall	2024	2025	2026	2027	2028
Call Processing	2:07	2:07				
Turnout	1:29	1:29				
Travel	5:09	5:09				
Dispatch to Arrival	7:01	7:01				
Call to Arrival	8:28	8:28				

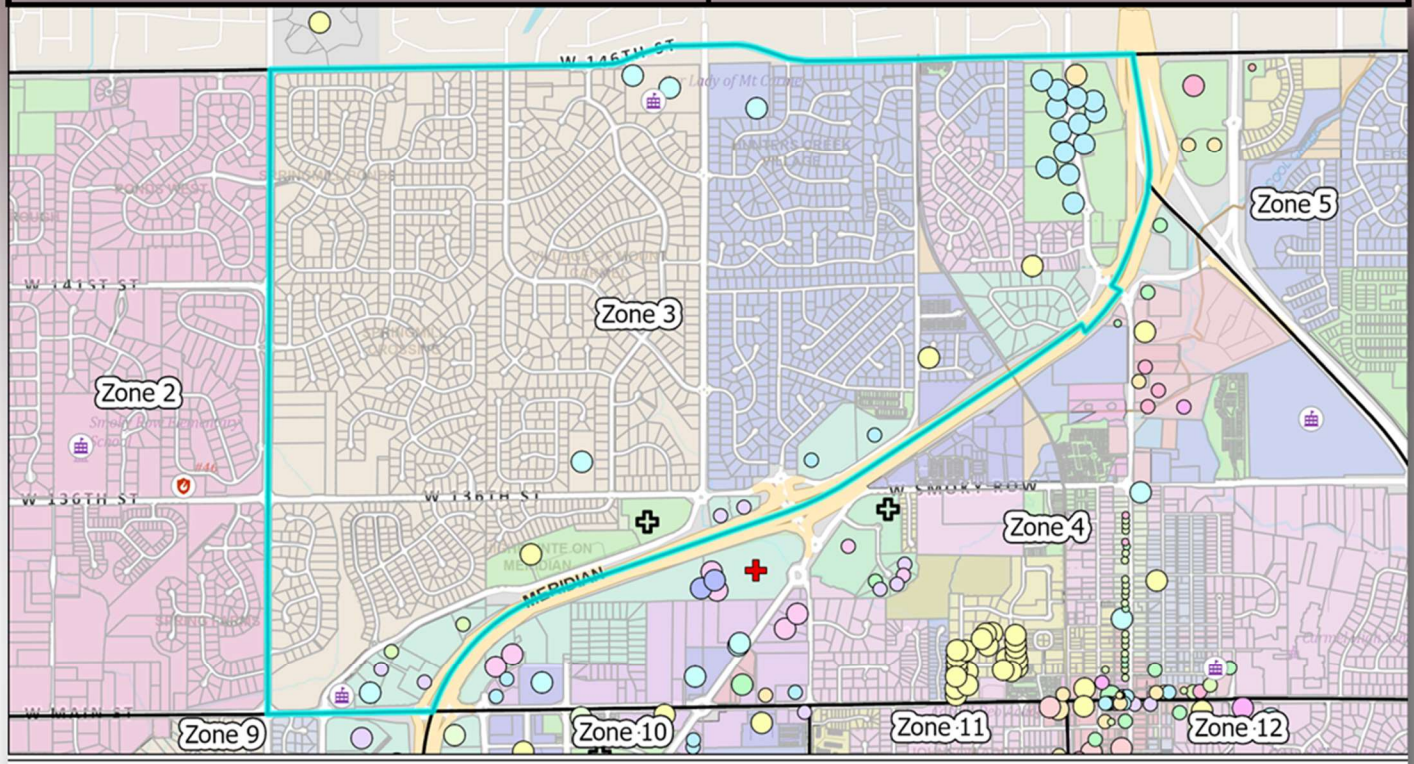
Zone 2		2024-2028 Responses	% Total for Zone	%Total of type for city
Fire	Low	0		
	Moderate	1	0.6%	10.0%
	High	0		
EMS	Low	3	1.7%	1.5%
	Moderate	104	59.1%	2.3%
	High	5	2.8%	2.0%
Hazmat	Low	1	0.6%	6.7%
	Moderate	4	2.3%	3.6%
	High	0		
Tech Rescue	Low	0		
	Moderate	0		
	High	0		
Others		57	32.4%	2.9%
Total Runs		176		2.0%

PLANNING ZONE: 3

PLANNING ZONE RISK LEVEL: MODERATE

THIS ZONE RISK SCORE: 20.45

LOWEST 4.28 HIGHEST 41.85



Zoning Description

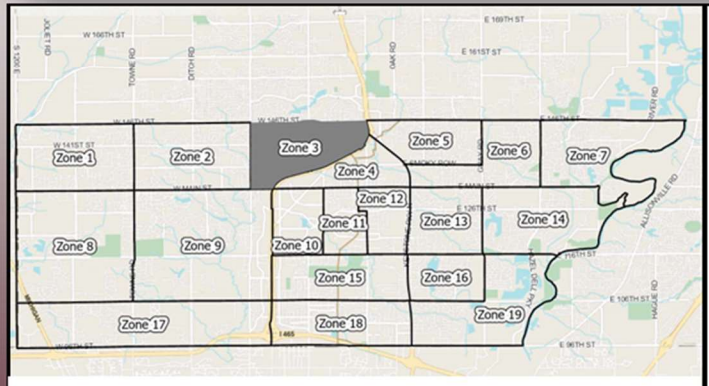
- Heavy Commercial and Office Uses
- High Density Residential
- Light Commercial and Office Uses
- Light Commercial
- Low to Medium Density Residential
- Low to Medium Density Residential
- Low-Density Single Family Residential
- Medium Density Residential
- Meridian Corridor
- Mixed Use
- Office Buildings and General Offices
- Park
- Planned Unit Development
- Single Family Residential, Large Lots
- Urban Core
- Urban Residential
- Commercial and Office
- Industrial, Commercial and Office Uses

BLDG TYPE (Dot size represents risk level)

- <Null>
- APARTMENTS
- BANK
- CHURCH
- CITY OF CARMEL
- COMMERCIAL
- HEALTHCARE
- HOTEL
- MULTI-STORY / MULTI-TENANT
- MULTI-TENANT
- OFFICE
- RESTAURANT
- RETAIL
- STRIP MALL

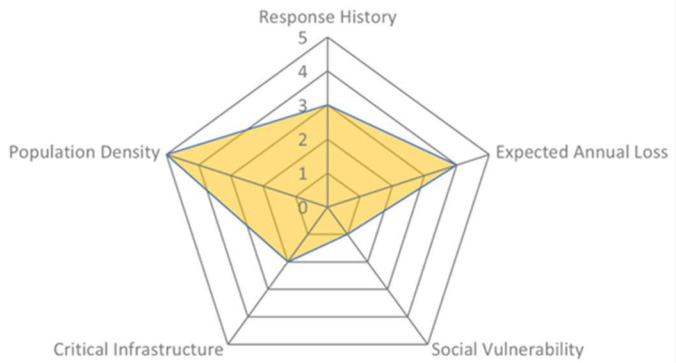
BLDG TYPE

- EXTENDED CARE FACILITY
- FIRE STATION
- HOSPITAL
- SCHOOL



PLANNING ZONE LOCATOR

RISK CATEGORIZATION RADAR CHART [ZONE:3]



PLANNING ZONE: 3

		RANK IN CARMEL (out of 19)
ESTIMATED POPULATION	6,774	5
POPULATION DENSITY (people/sq mile)	3,079	4
HOUSEHOLDS BELOW POVERTY LEVEL	0.9%	14
% of people that speak English less than well	3.2%	5
POPULATION OVER 25 WITHOUT HIGH SCHOOL CREDENTIALS	0.5%	15
HOUSEHOLD MEDIAN INCOME	$123,811	10
PLANNING ZONE LAND AREA (sq mi)	2.2	10
TOTAL PROPERTY VALUE (Billions)	1.47 Billion	9
TOTAL PROPERTY VALUE/ sq mi (Millions)	$669 Million	7
HOUSING UNITS	2,597	4
% OF HOMES BUILT AFTER 2014	9.5%	9
% OF HOMES BUILT AFTER 2000	16.5%	13
MEDIAN HOME VALUE	$280,000	14
HOMES VALUED BELOW $100K	14	10
HOMES VALUED ABOVE $1 MILLION	0	10

Planning Zone 3 is along the northern edge of the city. While the western and northern boundaries consist of older established homes on medium sized lots the curved eastern edge is very different.

The eastern edge of Planning Zone 3 is part of the prestigious Meridian Corridor. The northeast corner of this zone contains the Clay Terrace Mall, an outdoor mall with a variety of merchants. Further south there are two significant businesses with a high number of calls for service. Landmark Recovery located near 136th and Meridian and Independence Village, an extended care facility have significant call volumes.

Additionally, a Marathon underground petroleum pipeline runs diagonally from the northeast corner to the south west corner of the zone. The pipeline carries various petroleum products and is visually inspected by air on a regular basis.

All Incidents - Planning Zone 3 (Response Time Components)						
	Over-all	2024	2025	2026	2027	2028
Call Processing	1:40	1:40				
Turnout	1:33	1:33				
Travel	5:49	5:49				
Dispatch to Arrival	6:54	6:54				
Call to Arrival	7:45	7:45				

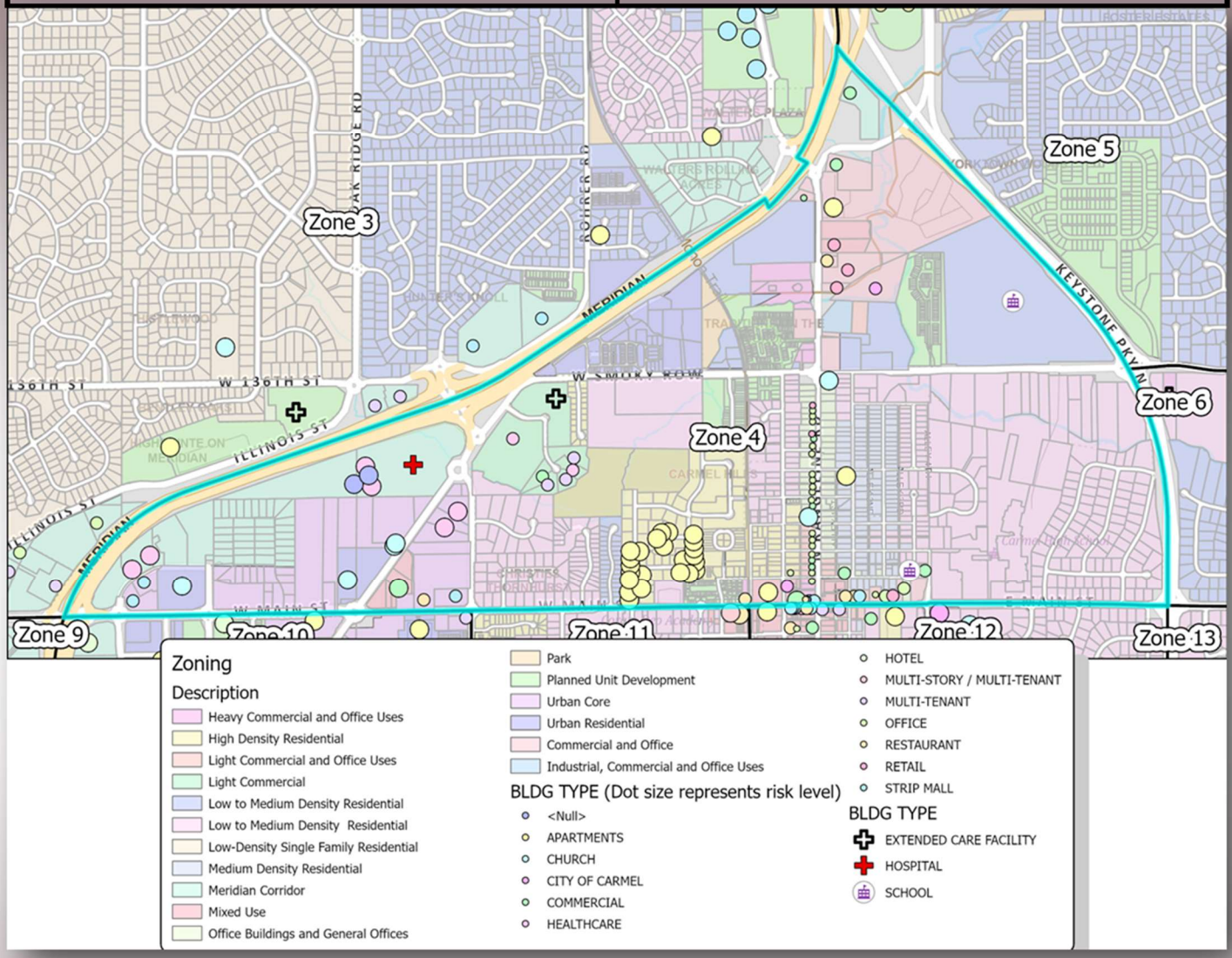
Zone 3		2024-2028 Responses	% Total for Zone	%Total of type for city
Fire	Low	5	1.1%	5.8%
	Moderate	2	0.4%	20.0%
	High	0		
EMS	Low	18	4.0%	9.2%
	Moderate	285	63.3%	6.3%
	High	16	3.6%	6.3%
Hazmat	Low	0		
	Moderate	4	0.9%	3.6%
	High	0		
Tech Res-cue	Low	0		
	Moderate	0		
	High	0		
Others		119	26.4%	6.1%
Total Runs		450		5.0%

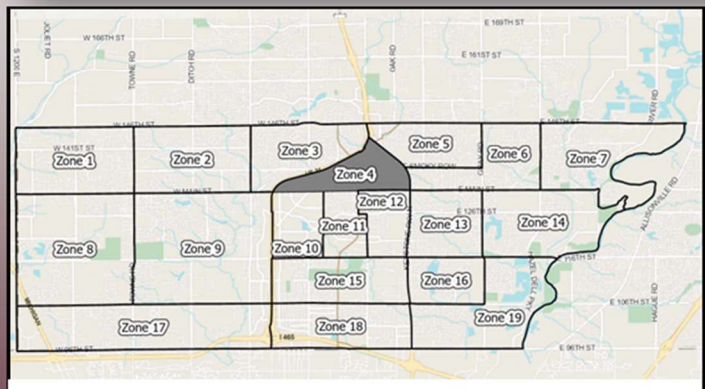
PLANNING ZONE: 4

PLANNING ZONE RISK LEVEL: MODERATE

THIS ZONE RISK SCORE: 19.02

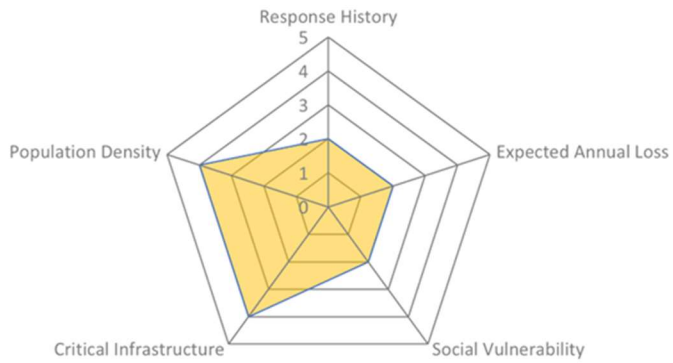
LOWEST 4.28 HIGHEST 41.85





PLANNING ZONE LOCATOR

RISK CATEGORIZATION RADAR CHART [ZONE:4]



PLANNING ZONE: 4

		RANK IN CARMEL (out of 19)
ESTIMATED POPULATION	3,189	17
POPULATION DENSITY (people/sq mile)	2,728	6
HOUSEHOLDS BELOW POVERTY LEVEL	9.1%	2
% of people that speak English less than well	0.4%	16
POPULATION OVER 25 WITHOUT HIGH SCHOOL CREDENTIALS	0.8%	13
HOUSEHOLD MEDIAN INCOME	$68,038	17
PLANNING ZONE LAND AREA (sq mi)	1.4	14
TOTAL PROPERTY VALUE (Billions)	$0.98 Billion	15
TOTAL PROPERTY VALUE/ sq mi (Millions)	$701 Million	6
HOUSING UNITS	2,125	8
% OF HOMES BUILT AFTER 2014	15.7%	4
% OF HOMES BUILT AFTER 2000	38.5%	9
MEDIAN HOME VALUE	$290,100	12
HOMES VALUED BELOW $100K	0	13
HOMES VALUED ABOVE $1 MILLION	0	10

Planning Zone 4 is in the north central part of the city. It contains a wide variety of property types and hazards within its boundaries. Much of the critical infrastructure lies along the southern edge of the zone. In particular the central southern edge which is part of the Arts and Design District. There are a large number of retail shops, restaurants, and mixed use buildings with commercial property on the ground floor and residential property above. Several of these have parking garages below grade.

Almost the entire eastern edge of the zone is consumed by Carmel High School. The high school is the largest in the state and educates 5,200 students in roughly 822,000 square feet.

The central part of this zone is often referred to as Old Town. The intersection of Main Street and Rangeline Road has been center of the town since its founding in the 1800's. As such many of the single family dwellings are older however the recent redevelopment in the area has encouraged many homeowners to renovate and or sell their homes.

All Incidents - Planning Zone 4 (Response Time Components)						
	Overall	2024	2025	2026	2027	2028
Call Processing	1:47	1:47				
Turnout	1:40	1:40				
Travel	5:48	5:48				
Dispatch to Arrival	7:03	7:03				
Call to Arrival	8:03	8:03				

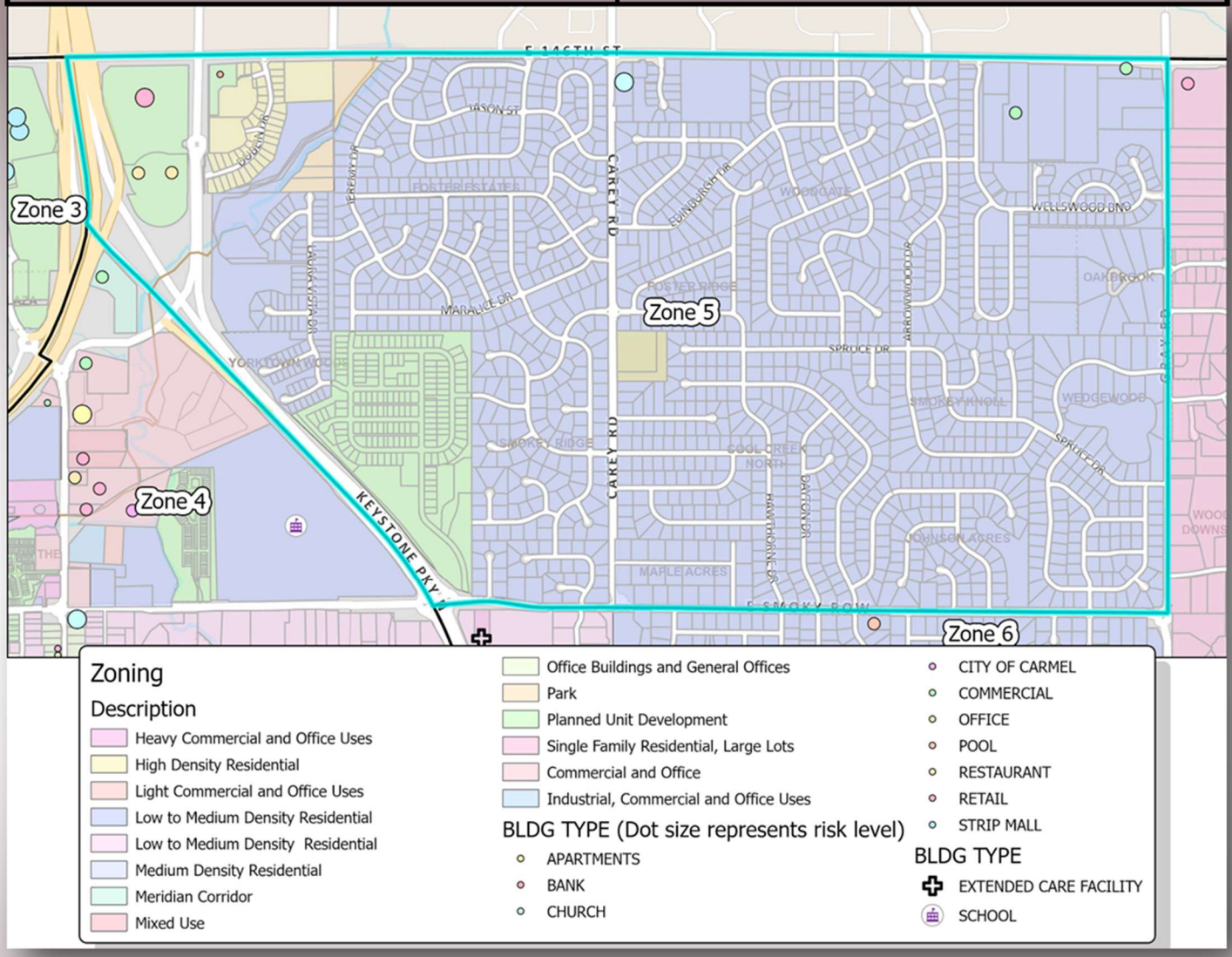
Zone 4		2024-2028	% Total for Zone	%Total of type for city
Fire	Low	3	0.6%	3.5%
	Moderate			
	High	1	0.2%	16.7%
EMS	Low	20	4.3%	10.2%
	Moderate	253	54.5%	5.6%
	High	10	2.2%	4.0%
Hazmat	Low	1	0.2%	6.7%
	Moderate	13	2.8%	11.8%
	High	1	0.2%	8.3%
Tech Rescue	Low	5	1.1%	21.7%
	Moderate	0		
	High	0		
Others		157	33.8%	8.1%
Total Runs		464		5.2%

PLANNING ZONE: 5

PLANNING ZONE RISK LEVEL: LOW

THIS ZONE RISK SCORE: 7.13

LOWEST 4.28 HIGHEST 41.85



Zoning

Description

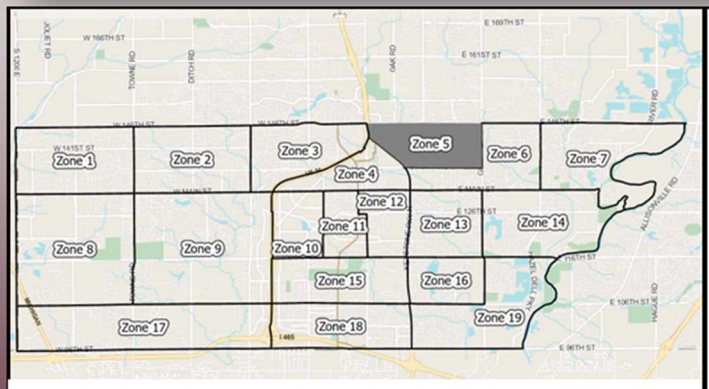
- Heavy Commercial and Office Uses
- High Density Residential
- Light Commercial and Office Uses
- Low to Medium Density Residential
- Low to Medium Density Residential
- Medium Density Residential
- Meridian Corridor
- Mixed Use
- Office Buildings and General Offices
- Park
- Planned Unit Development
- Single Family Residential, Large Lots
- Commercial and Office
- Industrial, Commercial and Office Uses

BLDG TYPE (Dot size represents risk level)

- APARTMENTS
- BANK
- CHURCH
- CITY OF CARMEL
- COMMERCIAL
- OFFICE
- POOL
- RESTAURANT
- RETAIL
- STRIP MALL

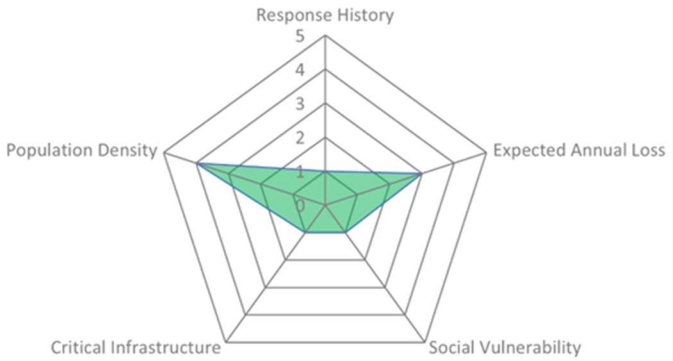
BLDG TYPE

- EXTENDED CARE FACILITY
- SCHOOL



PLANNING ZONE LOCATOR

RISK CATEGORIZATION RADAR CHART [ZONE:5]



PLANNING ZONE: 5

		RANK IN CARMEL (out of 19)
ESTIMATED POPULATION	4,652	11
POPULATION DENSITY (people/sq mile)	2,737	5
HOUSEHOLDS BELOW POVERTY LEVEL	1.0%	12
% of people that speak English less than well	1.9%	7
POPULATION OVER 25 WITHOUT HIGH SCHOOL CREDENTIALS	1.5%	11
HOUSEHOLD MEDIAN INCOME	$163,702	6
PLANNING ZONE LAND AREA (sq mi)	1.7	13
TOTAL PROPERTY VALUE (Billions)	$1.27 Billion	10
TOTAL PROPERTY VALUE/ sq mi (Millions)	$749 Million	4
HOUSING UNITS	1,550	16
% OF HOMES BUILT AFTER 2014	1.2%	14
% OF HOMES BUILT AFTER 2000	15.1%	13
MEDIAN HOME VALUE	$376,300	8
HOMES VALUED BELOW $100K	5	11
HOMES VALUED ABOVE $1 MILLION	9	6

Planning Zone 5 is on the north central edge of the city. It is primarily zoned as low to medium residential with some planned unit development as well. This zone is well established as indicated by the low 15.1% of homes built after 2000.

In the north west corner is a Lowes Home Improvement store with the associated lumber, paint, chemicals, and other hazards. It is fully sprinkled and alarmed.

Along the northern edge of the zone is 146th Street which is 2 lanes in either direction with a 45 mph speed limit. Motor vehicle accidents are a regular occurrence on this heavily travelled street.

This zone is served primarily by CFD Station 344 located in zone 6.

All Incidents - Planning Zone 5 (Response Time Components)						
	Overall	2024	2025	2026	2027	2028
Call Processing	1:47	1:47				
Turnout	1:45	1:45				
Travel	6:44	6:44				
Dispatch to	8:06	8:06				
Call to Arrival	9:12	9:12				

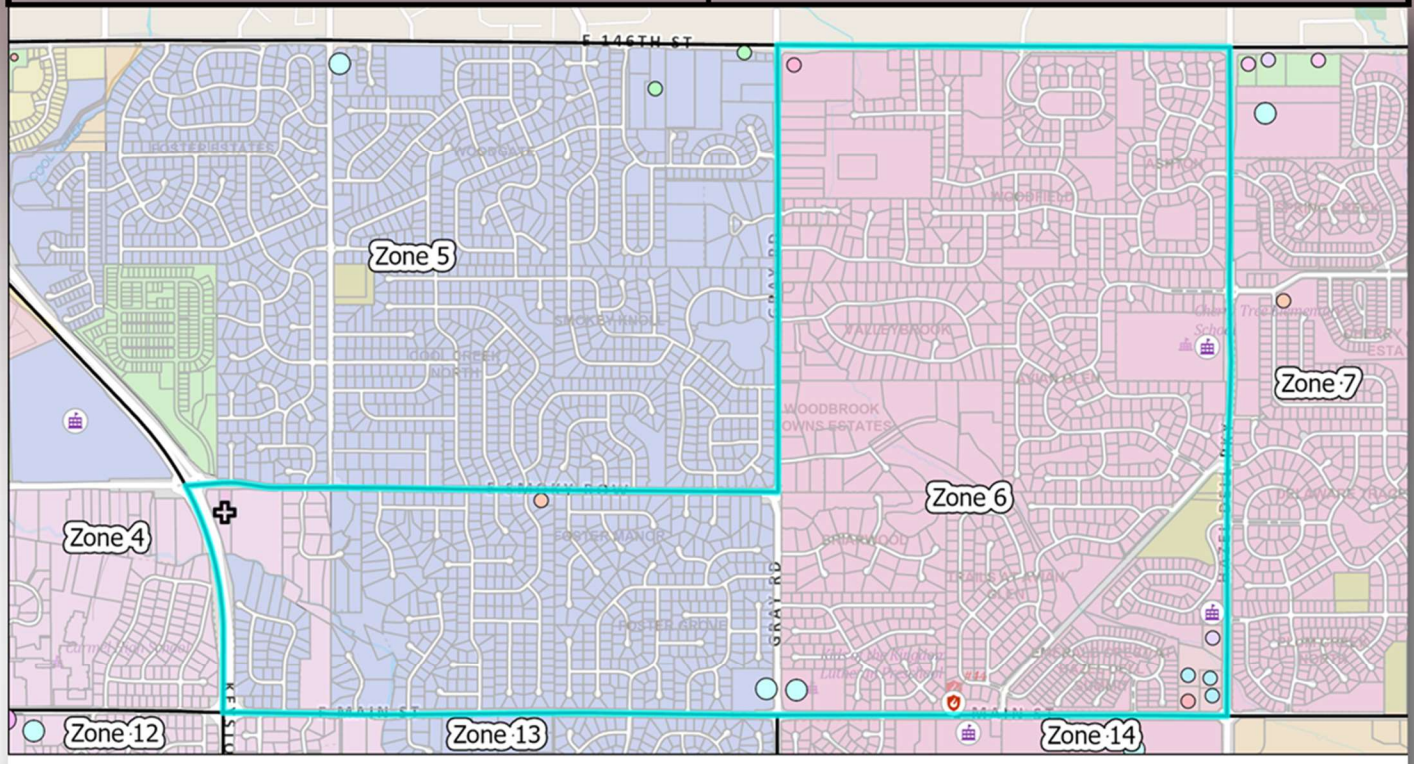
Zone 5		2024-2028	% Total for Zone	%Total of type for city
Fire	Low	0		
	Moderate	0		
	High	0		
EMS	Low	8	3.8%	4.1%
	Moderate	128	60.4%	2.8%
	High	9	4.2%	3.6%
Hazmat	Low	0		
	Moderate	5	2.4%	4.5%
	High	0		
Tech Rescue	Low	0		
	Moderate	0		
	High	0		
Others		62	29.2%	2.4%
Total Runs		212		

PLANNING ZONE: 6

PLANNING ZONE RISK LEVEL: LOW

THIS ZONE RISK SCORE: 7.13

LOWEST 4.28 **HIGHEST** 41.85



Zoning

Description

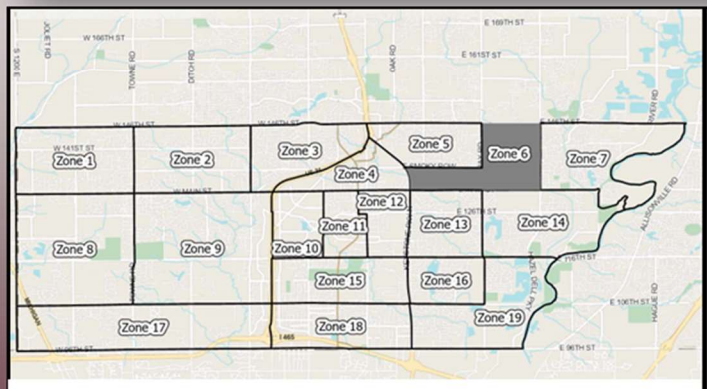
- Heavy Commercial and Office Uses
- High Density Residential
- Low to Medium Density Residential
- Low to Medium Density Residential
- Park
- Planned Unit Development
- Single Family Residential, Large Lots
- Commercial and Office

BLDG TYPE (Dot size represents risk level)

- BANK
- CHURCH
- COMMERCIAL
- HEALTHCARE
- MULTI-TENANT
- POOL
- RETAIL
- STRIP MALL

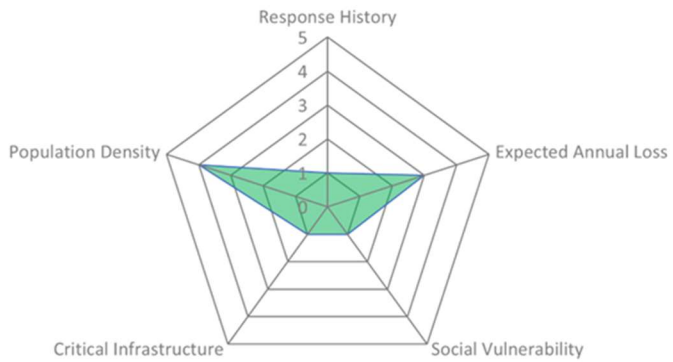
BLDG TYPE

- EXTENDED CARE FACILITY
- FIRE STATION
- SCHOOL



PLANNING ZONE LOCATOR

RISK CATEGORIZATION RADAR CHART [ZONE:6]



PLANNING ZONE: 6

		RANK IN CARMEL (out of 19)
ESTIMATED POPULATION	5,358	9
POPULATION DENSITY (people/sq mile)	2,551	7
HOUSEHOLDS BELOW POVERTY LEVEL	2.9%	7
% of people that speak English less than well	1.4%	9
POPULATION OVER 25 WITHOUT HIGH SCHOOL CREDENTIALS	0.4%	16
HOUSEHOLD MEDIAN INCOME	$156,595	7
PLANNING ZONE LAND AREA (sq mi)	2.1	11
TOTAL PROPERTY VALUE (Billions)	$1.52 Billion	8
TOTAL PROPERTY VALUE/ sq mi (Millions)	$726 Million	5
HOUSING UNITS	2,002	13
% OF HOMES BUILT AFTER 2014	0.8%	18
% OF HOMES BUILT AFTER 2000	13.6%	16
MEDIAN HOME VALUE	$402,600	7
HOMES VALUED BELOW $100K	0	13
HOMES VALUED ABOVE $1 MILLION	0	10

Planning Zone 6 is located on the northern edge of the city with 146th street as its northern boundary. The zone is predominantly medium to low density residential property with a few notable pieces of critical infrastructure.

On the western border near the center is the McGivney House an extended care facility. However, it does not have an exceptionally high call for service volume.

CFD Station 344 is located on the southern border of this planning zone along with 2 moderately large churches and a small strip mall with a variety of restaurants and businesses.

Along the eastern boundary are 2 schools, a day care/early learning center, and an elementary school.

All Incidents - Planning Zone 6 (Response Time Components)						
	Overall	2024	2025	2026	2027	2028
Call Processing	1:50	1:50				
Turnout	1:39	1:39				
Travel	5:13	5:13				
Dispatch to Arrival	6:17	6:17				
Call to Arrival	7:32	7:32				

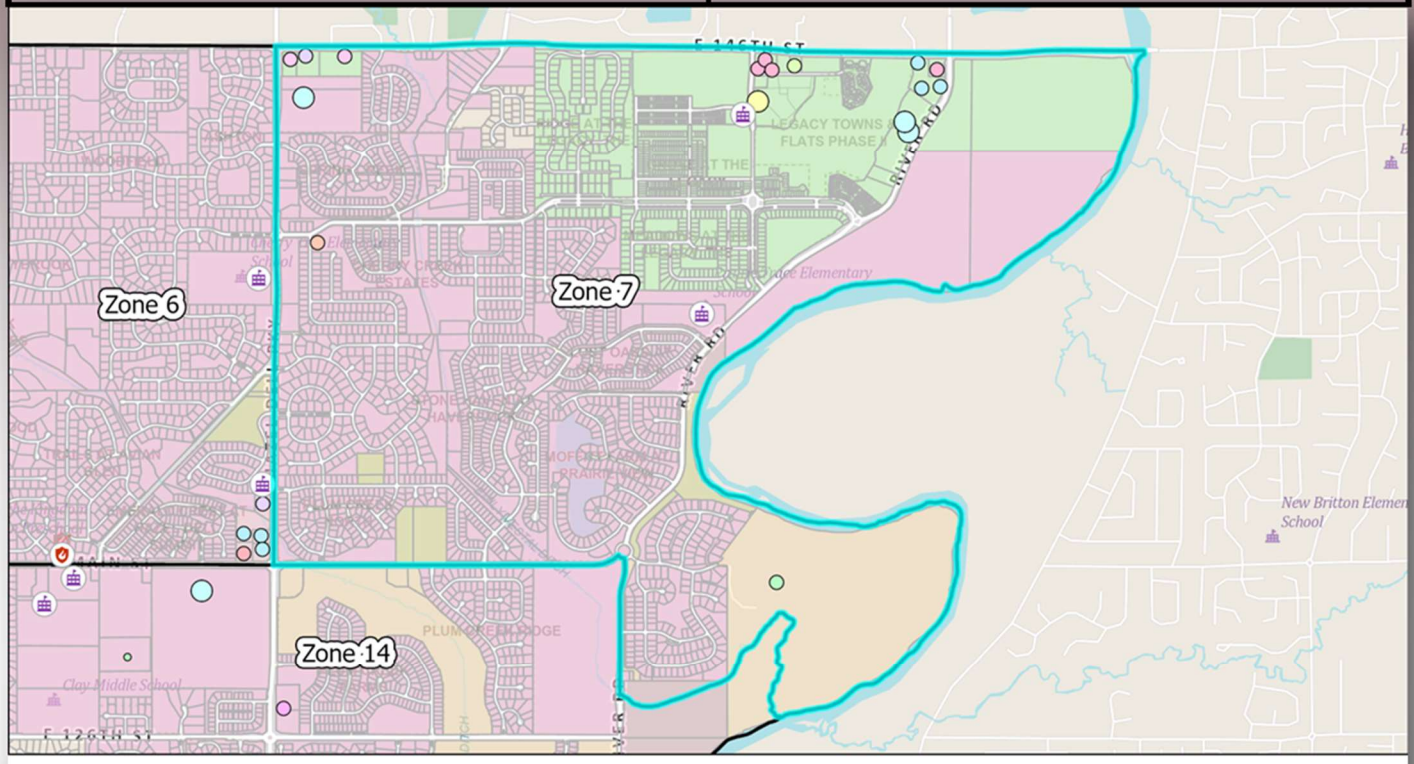
Zone 6		2024-2028	% Total for Zone	%Total of type for city
Fire	Low	7	3.3%	8.1%
	Moderate	0		
	High	0		
EMS	Low	7	3.3%	3.6%
	Moderate	130	61.3%	2.9%
	High	9	4.2%	3.6%
Hazmat	Low	0		
	Moderate	3	1.4%	2.7%
	High	1	0.5%	8.3%
Tech Rescue	Low	0		
	Moderate	0		
	High	0		
Others		51	24.1%	2.6%
Total Runs		212		2.4%

PLANNING ZONE: 7

PLANNING ZONE RISK LEVEL: LOW

THIS ZONE RISK SCORE: 7.13

LOWEST 4.28 HIGHEST 41.85



Zoning

Description

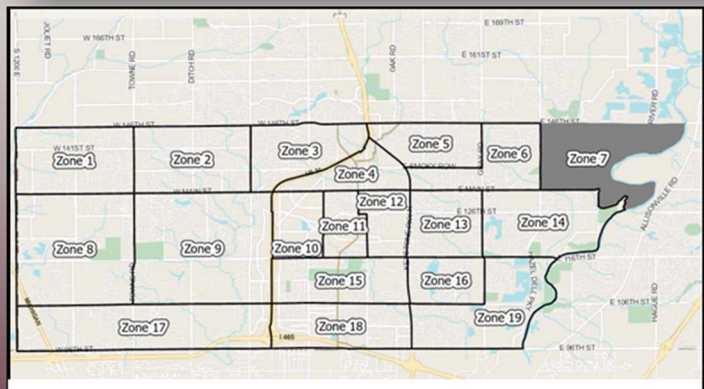
- Low-Density Single Family Residential
- Park
- Planned Unit Development
- Single Family Residential, Large Lots
- Commercial and Office

BLDG TYPE (Dot size represents risk level)

- APARTMENTS
- BANK
- CHURCH
- CITY OF CARMEL
- COMMERCIAL
- HEALTHCARE
- MULTI-TENANT
- OFFICE
- POOL
- RETAIL
- STRIP MALL

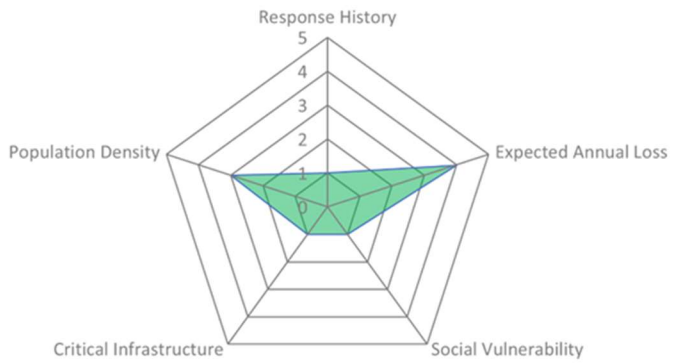
BLDG TYPE

- FIRE STATION
- SCHOOL



PLANNING ZONE LOCATOR

RISK CATEGORIZATION RADAR CHART [ZONE:7]



PLANNING ZONE: 7

		RANK IN CARMEL (out of 19)
ESTIMATED POPULATION	7,308	2
POPULATION DENSITY (people/sq mile)	2,436	9
HOUSEHOLDS BELOW POVERTY LEVEL	0.4%	16
% of people that speak English less than well	4.9%	3
POPULATION OVER 25 WITHOUT HIGH SCHOOL CREDENTIALS	1.4%	12
HOUSEHOLD MEDIAN INCOME	$141,400	9
PLANNING ZONE LAND AREA (sq mi)	3.0	4
TOTAL PROPERTY VALUE (Billions)	$1.81 Billion	6
TOTAL PROPERTY VALUE/ sq mi (Millions)	$602 Million	11
HOUSING UNITS	2,510	5
% OF HOMES BUILT AFTER 2014	22.8%	1
% OF HOMES BUILT AFTER 2000	65.2%	3
MEDIAN HOME VALUE	$408,900	6
HOMES VALUED BELOW $100K	0	13
HOMES VALUED ABOVE $1 MILLION	0	10

Planning Zone 7 is located on the northeast corner of the city. It is bordered on the north by 146th Street and on the east by the White River. 146th Street has one of the three bridges across the White River in the jurisdiction.

The majority of the eastern edge of this zone is occupied by a golf course, a park, and land held by Connor Prairie, a historically accurate village from the 1800's located across the river in Fishers. This land is not currently developed however it is maintained as active farmland.

In the north east corner is a development known as the Legacy. It has a number of mixed use and high density residential buildings along with single family dwellings and multifamily townhomes. This development is the primary driver for the zone's number one ranking in homes built after 2014.

In the northwest corner is a small stand-alone emergency room that is run by the Riverview Health network. There is not a significant call for service generated from here but patients that need emergency medical transport usually go to Noblesville for treatment.

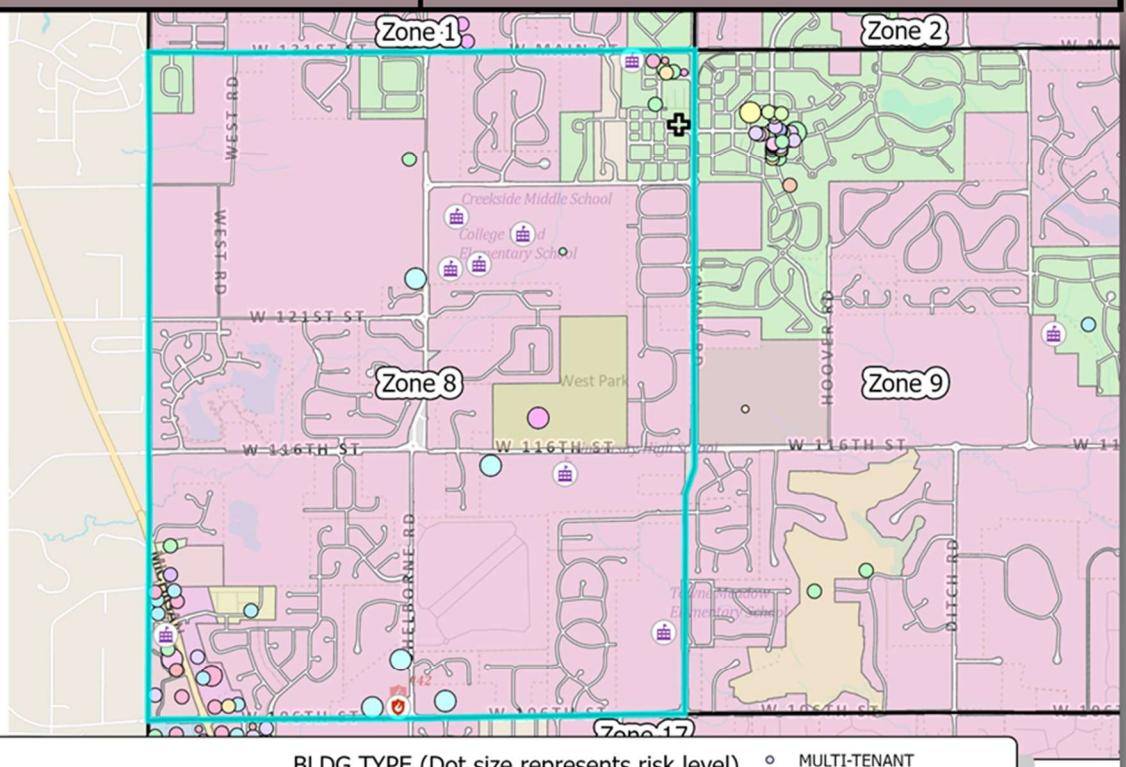
All Incidents - Planning Zone 7 (Response Time Components)						
	Overall	2024	2025	2026	2027	2028
Call Processing	1:53	1:53				
Turnout	1:45	1:45				
Travel	6:18	6:18				
Dispatch to	7:32	7:32				
Call to Arrival	8:49	8:49				

Zone 7		2024-2028	% Total for Zone	%Total of type for city
Fire	Low	5	1.8%	5.8%
	Moderate	0	0.0%	0.0%
	High	1	0.4%	16.7%
EMS	Low	12	4.4%	6.1%
	Moderate	162	58.9%	3.6%
	High	18	6.5%	7.1%
Hazmat	Low	1	0.4%	6.7%
	Moderate	5	1.8%	4.5%
	High	0	0.0%	0.0%
Tech Rescue	Low	0	0.0%	0.0%
	Moderate	1	0.4%	50.0%
	High	0	0.0%	0.0%
Others		70	25.5%	3.6%
Total Runs		275		3.1%

PLANNING ZONE: 8

PLANNING ZONE RISK LEVEL:
LOW

THIS ZONE RISK SCORE: 9.99
LOWEST 4.28 **HIGHEST 41.85**



Zoning

Description

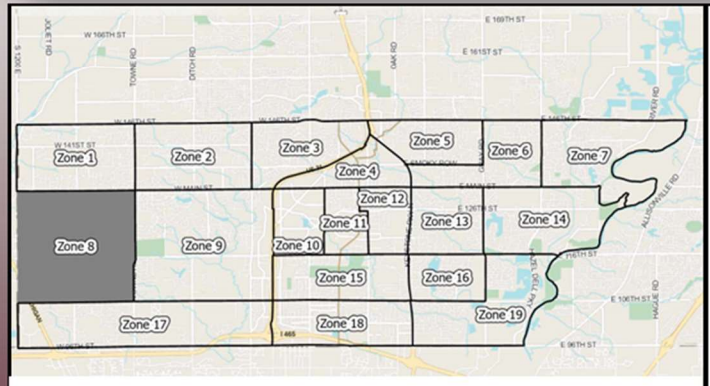
- Heavy Commercial and Office Uses
- High Density Residential
- Low-Density Single Family Residential
- Office Buildings and General Offices
- Park
- Planned Unit Development
- Single Family Residential, Large Lots
- Commercial and Office
- Industrial, Commercial and Office Uses

BLDG TYPE (Dot size represents risk level)

- <Null>
- APARTMENTS
- BANK
- CHURCH
- CITY OF CARMEL
- COMMERCIAL
- HAMILTON COUNTY OWNED
- HEALTHCARE
- MULTI-BLDG
- MULTI-STORY / MULTI-TENANT
- MULTI-TENANT
- OFFICE
- POOL
- RESTAURANT
- RETAIL
- STRIP MALL

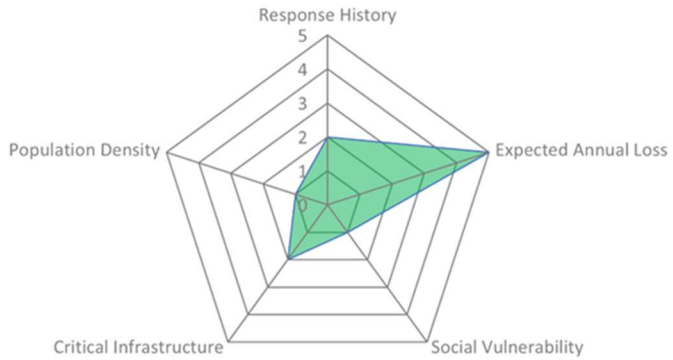
BLDG TYPE

- EXTENDED CARE FACILITY
- FIRE STATION
- SCHOOL



PLANNING ZONE LOCATOR

RISK CATEGORIZATION RADAR CHART [ZONE:8]



PLANNING ZONE: 8

		RANK IN CARMEL (out of 19)
ESTIMATED POPULATION	7,044	3
POPULATION DENSITY (people/sq mile)	1,409	16
HOUSEHOLDS BELOW POVERTY LEVEL	6.2%	5
% of people that speak English less than well	1.5%	8
POPULATION OVER 25 WITHOUT HIGH SCHOOL CREDENTIALS	0.0%	18
HOUSEHOLD MEDIAN INCOME	$198,355	1
PLANNING ZONE LAND AREA (sq mi)	5.0	2
TOTAL PROPERTY VALUE (Billions)	$2.23 Billion	2
TOTAL PROPERTY VALUE/ sq mi (Millions)	$446 Million	17
HOUSING UNITS	2,046	17
% OF HOMES BUILT AFTER 2014	8.0%	9
% OF HOMES BUILT AFTER 2000	60.0%	4
MEDIAN HOME VALUE	$486,600	2
HOMES VALUED BELOW $100K	76	3
HOMES VALUED ABOVE $1 MILLION	68	4

Planning Zone 8 is on the western border of the city. The border follows the county line which abuts Boone County and the Town of Zionsville.

The majority of the zone is low density single family dwelling. However, the southwest corner is occupied by Michigan Road which is a highly commercialized area with a large number of businesses and restaurants along the corridor.

There are 5 moderate to large sized churches scattered throughout the zone and a moderate to high volume extended care facility (The Stratford) located at the northeast corner.

In the north central core is a significant school complex that includes 2 elementary schools and one of the three middle schools in the school district.

Of note is the fact that the northwest corner of this zone is not serviced by city water or sewer services. This is noted in the computer aided dispatch (CAD) software and automatically gets a water supply tanker on all working fires.

All Incidents - Planning Zone 8 (Response Time Components)						
	Overall	2024	2025	2026	2027	2028
Call Processing	1:28	1:28				
Turnout	1:27	1:27				
Travel	6:07	6:07				
Dispatch to Arrival	7:18	7:18				
Call to Arrival	8:20	8:20				

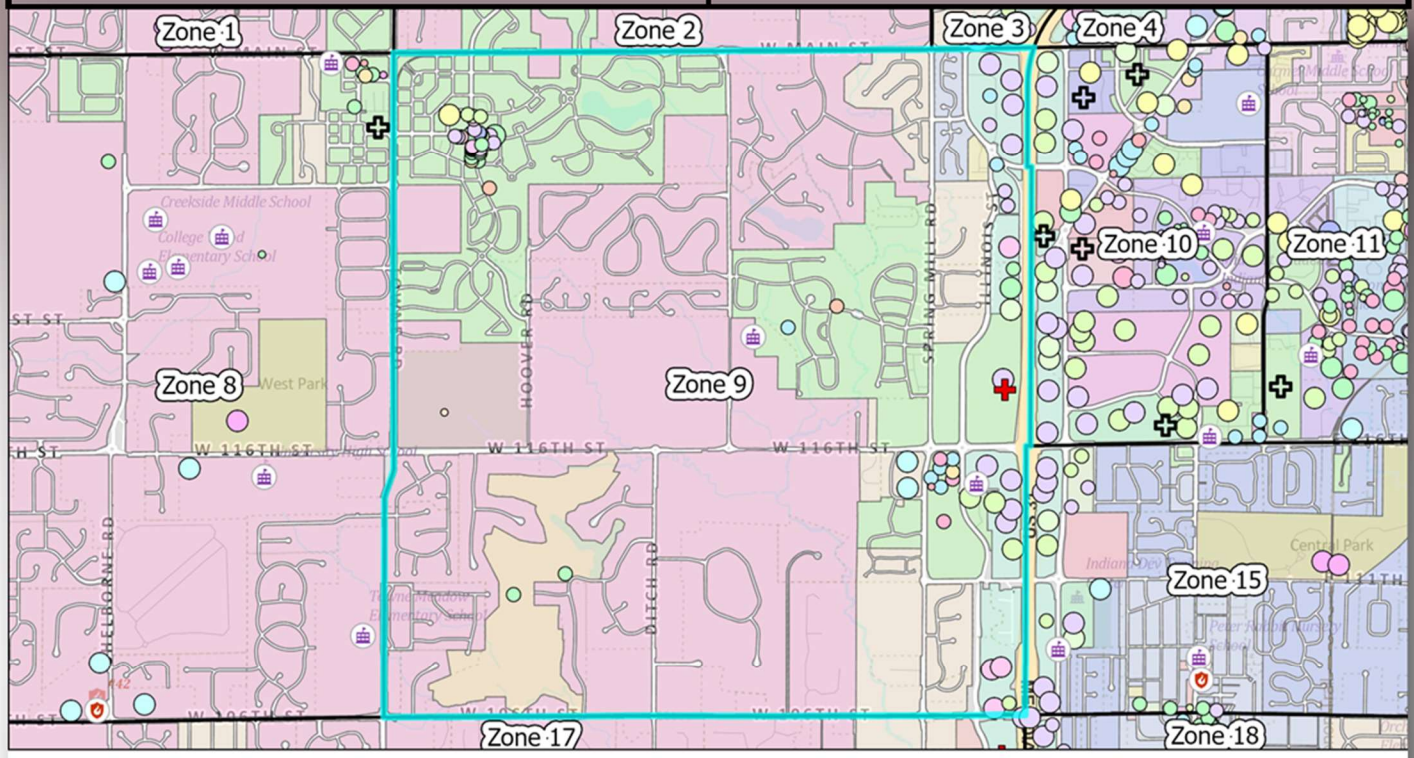
Zone 8		2024-2028	% Total for Zone	%Total of type for city
Fire	Low	0		
	Moderate	0		
	High	0		
EMS	Low	19	4.8%	9.7%
	Moderate	272	69.0%	6.0%
	High	3	0.8%	1.2%
Hazmat	Low	0		
	Moderate	5	1.3%	4.5%
	High	0		
Tech Rescue	Low	0		
	Moderate	0		
	High	0		
Others		95	24.1%	4.9%
Total Runs		394		4.4%

PLANNING ZONE: 9

PLANNING ZONE RISK LEVEL: MODERATE

THIS ZONE RISK SCORE: 13.79

LOWEST 4.28 HIGHEST 41.85



Zoning

Description

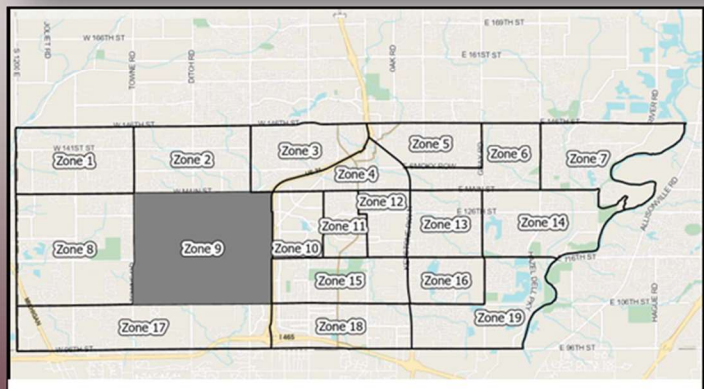
- City Center
- Heavy Commercial and Office Uses
- High Density Residential
- Light Commercial and Office Uses
- Light Commercial
- Low to Medium Density Residential
- Low to Medium Density Residential
- Low-Density Single Family Residential
- Manufacturing Park District
- Medium Density Residential
- Meridian Corridor
- Mixed Use
- Office Buildings and General Offices
- Park
- Planned Unit Development
- Single Family Residential, Large Lots
- Urban Core
- Urban Residential
- Commercial and Office
- Commerical Use
- Industrial, Commercial and Office Uses

BLDG TYPE (Dot size represents risk level)

- <Null>
- APARTMENTS
- BANK
- CHURCH
- CITY OF CARMEL
- COMMERCIAL
- HAMILTON COUNTY OWNED
- HEALTHCARE
- HOTEL
- MULTI-STORY / MULTI-TENANT
- MULTI-TENANT
- OFFICE
- POOL
- RESTAURANT
- RETAIL
- STRIP MALL

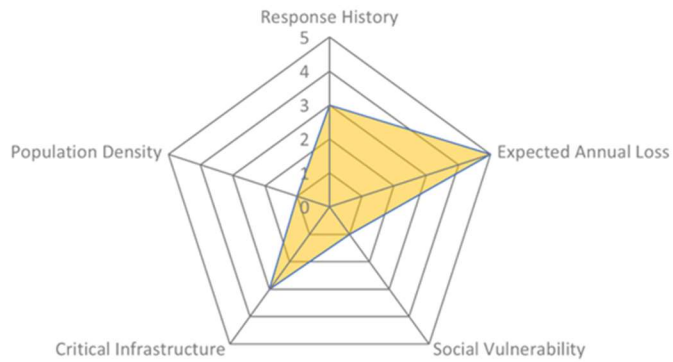
BLDG TYPE

- EXTENDED CARE FACILITY
- FIRE STATION
- HOSPITAL
- SCHOOL



PLANNING ZONE LOCATOR

RISK CATEGORIZATION RADAR CHART [ZONE:9]



PLANNING ZONE: 9

		RANK IN CARMEL (out of 19)
ESTIMATED POPULATION	7,816	1
POPULATION DENSITY (people/sq mile)	1,325	17
HOUSEHOLDS BELOW POVERTY LEVEL	0.0%	19
% of people that speak English less than well	1.1%	11
POPULATION OVER 25 WITHOUT HIGH SCHOOL CREDENTIALS	3.1%	3
HOUSEHOLD MEDIAN INCOME	$189,828	2
PLANNING ZONE LAND AREA (sq mi)	5.9	1
TOTAL PROPERTY VALUE (Billions)	$3.24 Billion	1
TOTAL PROPERTY VALUE/ sq mi (Millions)	$549 Million	12
HOUSING UNITS	2,686	3
% OF HOMES BUILT AFTER 2014	11.0%	7
% OF HOMES BUILT AFTER 2000	49.2%	7
MEDIAN HOME VALUE	$532,300	1
HOMES VALUED BELOW $100K	66	4
HOMES VALUED ABOVE $1 MILLION	316	1

Planning Zone 9 served by CFD Station 342 in the west central part of the city is an area that leads the city in several metrics. It has the highest population but is also the largest area at 5.9 sq mi so its population density is low. It has zero homes below the poverty level and has the highest median home value and the greatest number of homes valued in excess of $1 million. Housing within the zone is predominantly low density single family residential many with large lots.

The northwest corner is the Village of West Clay, a neighborhood designed along the lines of Celebration, FL located near Disney World.

A large private golf course, Crooked Stick, is along the southern border. Many of the million dollar homes are along the edges of this prestigious course that has hosted PGA events.

The eastern border is the Meridian Corridor a highly sought after area of commercial development that features many medical buildings included IU North Hospital. IU North is one of three hospitals within Carmel.

All Incidents - Planning Zone 9 (Response Time Components)						
	Overall	2024	2025	2026	2027	2028
Call Processing	1:53	1:53				
Turnout	1:35	1:35				
Travel	6:16	6:16				
Dispatch to Arrival	7:34	7:34				
Call to Arrival	8:32	8:32				

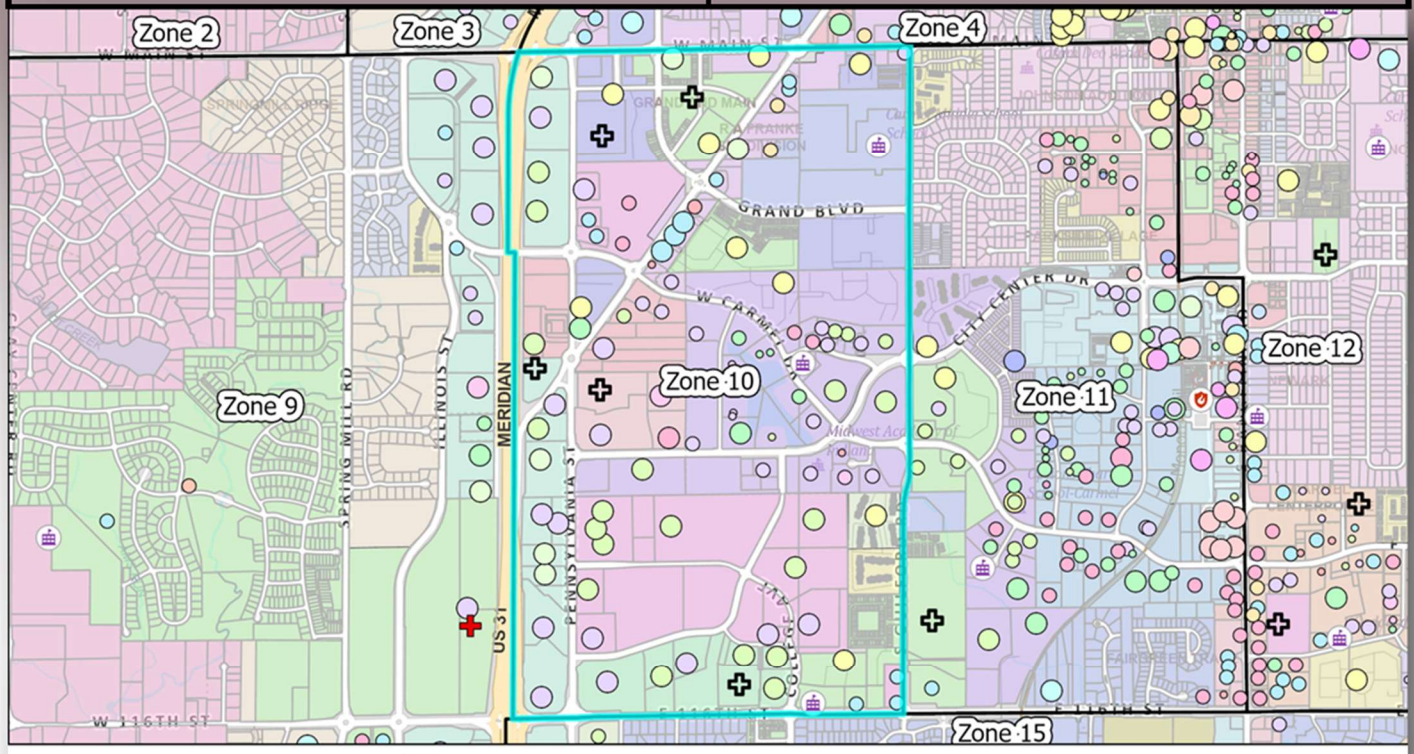
Zone 9		2024-2028	% Total for Zone	%Total of type for city
Fire	Low	8	1.4%	9.3%
	Moderate	1	0.2%	10.0%
	High	0		
EMS	Low	8	1.4%	4.1%
	Moderate	293	50.0%	6.4%
	High	13	2.2%	5.1%
Hazmat	Low	3	0.5%	20.0%
	Moderate	8	1.4%	7.3%
	High	1	0.2%	8.3%
Tech Rescue	Low	3	0.5%	13.0%
	Moderate	1	0.2%	50.0%
	High	0		
Others		247	42.2%	12.8%
Total Runs		586		6.5%

PLANNING ZONE: 10

PLANNING ZONE RISK LEVEL: HIGH

THIS ZONE RISK SCORE: 41.85

LOWEST 4.28 HIGHEST 41.85



Zoning

Description

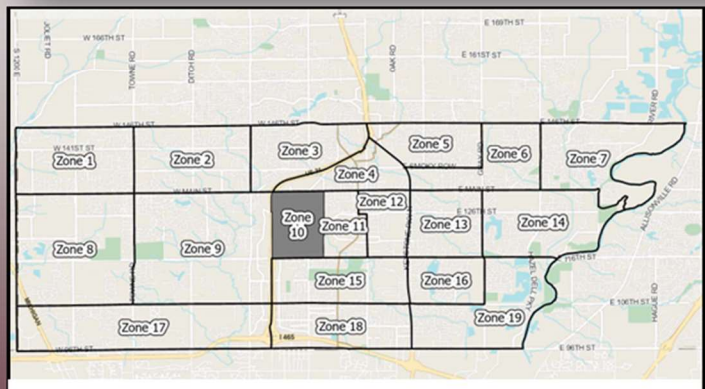
- City Center
- Heavy Commercial and Office Uses
- High Density Residential
- Light Commercial and Office Uses
- Light Commercial
- Low to Medium Density Residential
- Low to Medium Density Residential
- Low-Density Single Family Residential
- Manufacturing Park District
- Medium Density Residential
- Meridian Corridor
- Mixed Use
- Office Buildings and General Offices
- Park
- Planned Unit Development
- Single Family Residential, Large Lots
- Urban Core
- Urban Residential
- Shopping Center
- Commercial and Office
- Commerical Use
- Industrial, Commercial and Office Uses

BLDG TYPE (Dot size represents risk level)

- <Null>
- APARTMENTS
- BANK
- CHURCH
- CITY OF CARMEL
- COMMERCIAL
- HARDWARE
- HEALTHCARE
- HOTEL
- MULTI-STORY / MULTI-TENANT
- MULTI-TENANT
- OFFICE
- PARKING GARAGE
- POOL
- RESTAURANT
- RETAIL
- STRIP MALL

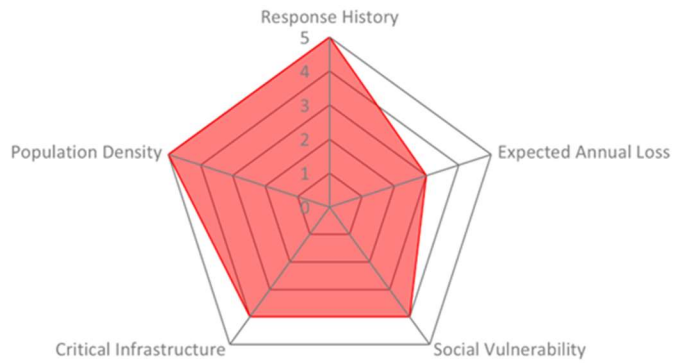
BLDG TYPE

- EXTENDED CARE FACILITY
- FIRE STATION
- HOSPITAL
- SCHOOL



PLANNING ZONE LOCATOR

RISK CATEGORIZATION RADAR CHART [ZONE:10]



PLANNING ZONE: 10

		RANK IN CARMEL (out of 19)
ESTIMATED POPULATION	4,564	12
POPULATION DENSITY (people/sq mile)	3,511	1
HOUSEHOLDS BELOW POVERTY LEVEL	3.2%	6
% of people that speak English less than well	0.0%	18
POPULATION OVER 25 WITHOUT HIGH SCHOOL CREDENTIALS	2.9%	5
HOUSEHOLD MEDIAN INCOME	$64,983	18
PLANNING ZONE LAND AREA (sq mi)	1.3	15
TOTAL PROPERTY VALUE (Billions)	$1.14 Billion	13
TOTAL PROPERTY VALUE/ sq mi (Millions)	$873 Million	2
HOUSING UNITS	2,700	1
% OF HOMES BUILT AFTER 2014	14.7%	5
% OF HOMES BUILT AFTER 2000	60.5%	3
MEDIAN HOME VALUE	$259,200	15
HOMES VALUED BELOW $100K	0	13
HOMES VALUED ABOVE $1 MILLION	0	10

Planning Zone 10 is a mixed use area near the center of Carmel. The population density of this zone is high due to the fact that there are no single family dwellings in the zone. With the exception of one condominium development all other housing in the zone is apartment complexes.

The western border of the zone is the Meridian Corridor which is dominated by commercial property including the newly developed Republic Airways training facility.

The zone is home to 5 high volume extended care facilities (the highest of all zones), Rose Senior Living, Majestic Care, Sunrise Senior Living, Wellbrooke of Carmel, and Crown Point of Carmel. Responses to these five facilities account for 7% of total response volume annually and over 50% of all responses to this zone annually.

Carmel Middle School is in the northeast corner. It is one of the three middle schools in the city.

Zone 10 is served by CFD stations 341, 345, and 346.

All Incidents - Planning Zone 10 (Response Time Components)						
	Overall	2024	2025	2026	2027	2028
Call Processing	1:39	1:39				
Turnout	1:38	1:38				
Travel	4:58	4:58				
Dispatch to Arrival	6:06	6:06				
Call to Arrival	7:05	7:05				

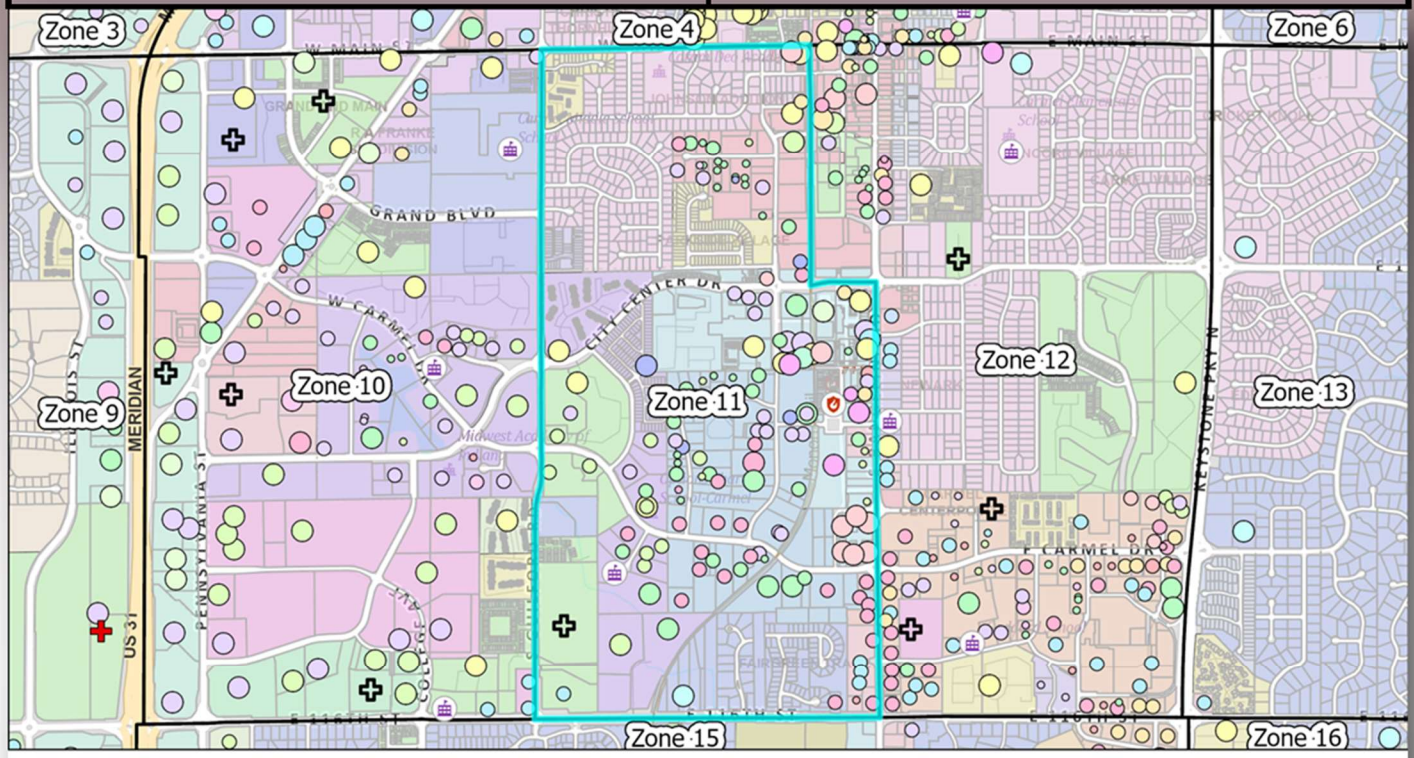
Zone 10		2024-2028	% Total for Zone	%Total of type for city
Fire	Low	5	0.7%	5.8%
	Moderate	0		
	High	0		
EMS	Low	14	1.8%	7.1%
	Moderate	539	70.1%	11.8%
	High	24	3.1%	9.5%
Hazmat	Low	1	0.1%	6.7%
	Moderate	9	1.2%	8.2%
	High	0		
Tech Rescue	Low	0		
	Moderate	0		
	High	0		
Others		177	23.0%	9.1%
Total Runs		769		8.6%

PLANNING ZONE: 11

PLANNING ZONE RISK LEVEL: HIGH

THIS ZONE RISK SCORE: 31.86

LOWEST 4.28 HIGHEST 41.85



Zoning

Description

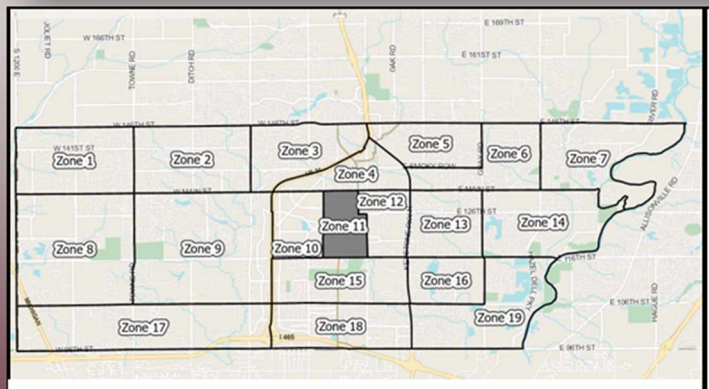
- City Center
- Heavy Commercial and Office Uses
- High Density Residential
- Light Commercial and Office Uses
- Light Commercial
- Low to Medium Density Residential
- Low to Medium Density Residential
- Low-Density Single Family Residential
- Manufacturing Park District
- Medium Density Residential
- Meridian Corridor
- Mixed Use
- Office Buildings and General Offices
- Park
- Planned Unit Development
- Urban Core
- Urban Residential
- Shopping Center
- Commercial and Office
- Commerical Use
- Industrial, Commercial and Office Uses

BLDG TYPE (Dot size represents risk level)

- <Null>
- APARTMENTS
- BANK
- CHURCH
- CITY OF CARMEL
- COMMERCIAL
- HARDWARE
- HEALTHCARE
- HOTEL
- MULTI-STORY / MULTI-TENANT
- MULTI-TENANT
- OFFICE
- PARKING GARAGE
- RESTAURANT
- RETAIL
- STRIP MALL

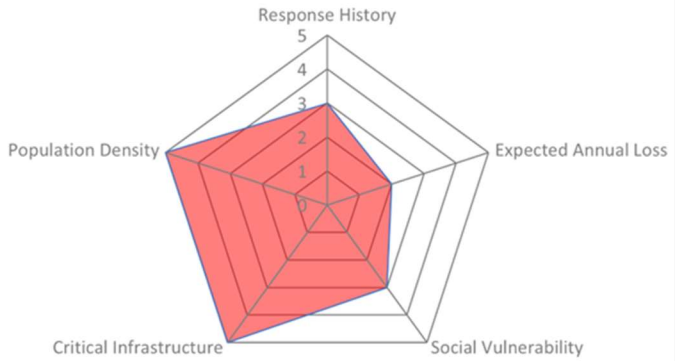
BLDG TYPE

- EXTENDED CARE FACILITY
- FIRE STATION
- HOSPITAL
- SCHOOL



PLANNING ZONE LOCATOR

RISK CATEGORIZATION RADAR CHART [ZONE:11]



PLANNING ZONE: 11

		RANK IN CARMEL (out of 19)
ESTIMATED POPULATION	3,377	18
POPULATION DENSITY (people/sq mile)	3,377	2
HOUSEHOLDS BELOW POVERTY LEVEL	1.0%	12
% of people that speak English less than well	2.1%	6
POPULATION OVER 25 WITHOUT HIGH SCHOOL CREDENTIALS	2.2%	8
HOUSEHOLD MEDIAN INCOME	$62,285	19
PLANNING ZONE LAND AREA (sq mi)	1.0	18
TOTAL PROPERTY VALUE (Billions)	$0.91 Billion	17
TOTAL PROPERTY VALUE/ sq mi (Millions)	$913 Million	1
HOUSING UNITS	2,073	9
% OF HOMES BUILT AFTER 2014	19.0%	3
% OF HOMES BUILT AFTER 2000	55.9%	6
MEDIAN HOME VALUE	$197,300	19
HOMES VALUED BELOW $100K	38	8
HOMES VALUED ABOVE $1 MILLION	7	9

Planning Zone 11 is at the heart of Carmel. It has a broad mix of zoning throughout and includes the popular Monon Trail walking path through the middle.

Fire station 341 is along the central eastern edge and The Barrington extended care facility is in the southwest corner and account for 2% of total call volume annually and 35% for this zone.

This zone includes much of the newly redeveloped mid-town area which is comprised of mixed use buildings with commercial space on the ground floor and multistory living above. Many of these buildings include subterranean parking garages.

Station 341 sits in the middle of a government complex that includes city hall, the police department, and the city courts.

Just north of the government complex is Carter Green, home of the Center for the Performing Arts, the Tarkington Theatre, and the annual Christkindlmarkt and outdoor ice skating rink. In the summer the area hosts many concerts, a weekly farmers market, and the July 4th Carmelfest celebration.

All Incidents - Planning Zone 11 (Response Time Components)						
	Overall	2024	2025	2026	2027	2028
Call Processing	1:40	1:40				
Turnout	1:36	1:36				
Travel	4:20	4:20				
Dispatch to Arrival	5:29	5:29				
Call to Arrival	6:23	6:23				

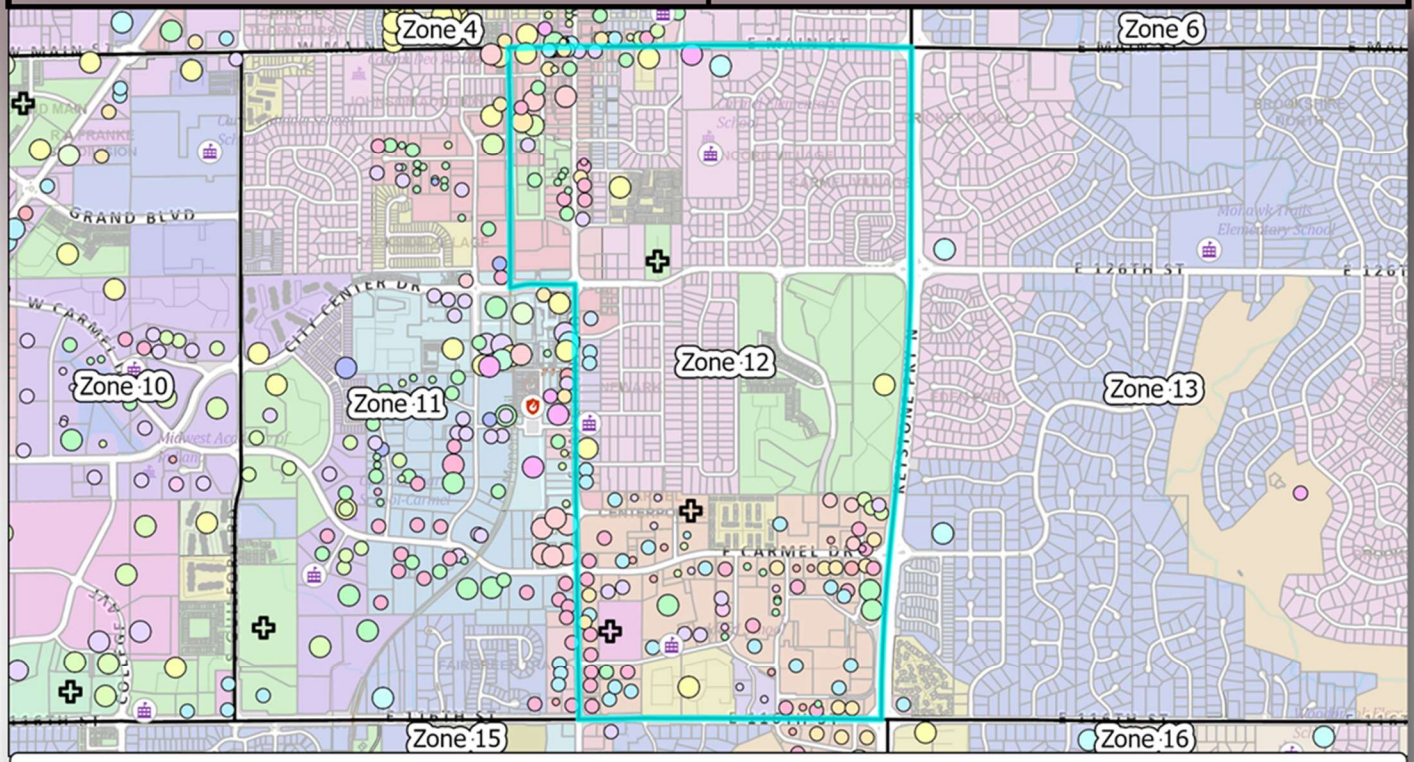
Zone 11		2024-2028	% Total for Zone	%Total of type for city
Fire	Low	3	0.6%	3.5%
	Moderate	0		
	High	0		
EMS	Low	12	2.4%	6.1%
	Moderate	321	65.4%	7.0%
	High	14	2.9%	5.5%
Hazmat	Low	0		
	Moderate	3	0.6%	2.7%
	High	0		
Tech Rescue	Low	13	2.6%	56.5%
	Moderate	0		
	High	0		
Others		125	25.5%	6.5%
Total Runs		491		5.5%

PLANNING ZONE: 12

PLANNING ZONE RISK LEVEL: HIGH

THIS ZONE RISK SCORE: 37.09

LOWEST 4.28 HIGHEST 41.85



Zoning

Description

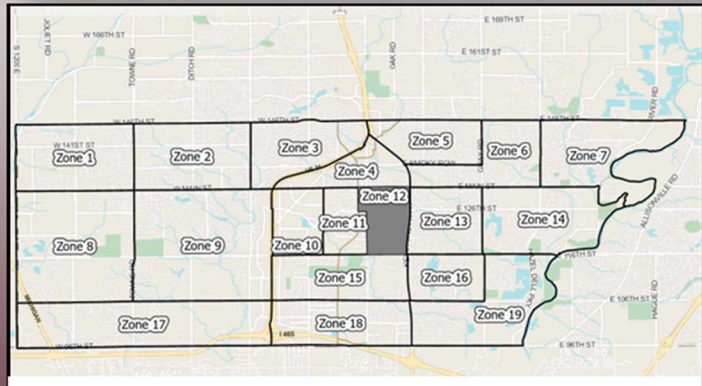
- City Center
- Heavy Commercial and Office Uses
- High Density Residential
- Light Commercial and Office Uses
- Light Commercial
- Low to Medium Density Residential
- Low to Medium Density Residential
- Low-Density Single Family Residential
- Manufacturing Park District
- Medium Density Residential
- Meridian Corridor
- Mixed Use
- Office Buildings and General Offices
- Park
- Planned Unit Development
- Urban Core
- Urban Residential
- Shopping Center
- Commercial and Office
- Commerical Use
- Industrial, Commercial and Office Uses

BLDG TYPE (Dot size represents risk level)

- <Null>
- APARTMENTS
- BANK
- CHURCH
- CITY OF CARMEL
- COMMERCIAL
- HARDWARE
- HEALTHCARE
- HOTEL
- MULTI-STORY / MULTI-TENANT
- MULTI-TENANT
- OFFICE
- PARKING GARAGE
- RESTAURANT
- RETAIL
- STRIP MALL

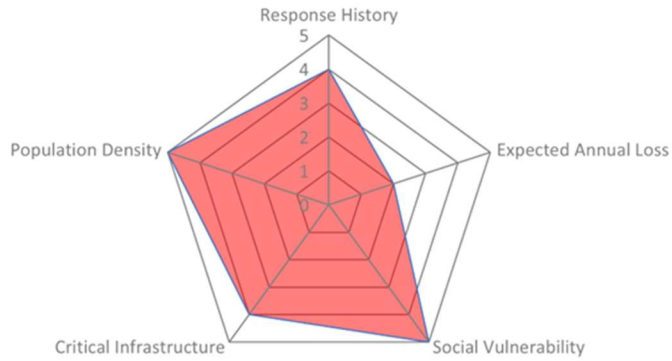
BLDG TYPE

- EXTENDED CARE FACILITY
- FIRE STATION
- SCHOOL



PLANNING ZONE LOCATOR

RISK CATEGORIZATION RADAR CHART [ZONE:12]



PLANNING ZONE: 12

		RANK IN CARMEL (out of 19)
ESTIMATED POPULATION	4,030	14
POPULATION DENSITY (people/sq mile)	3,358	3
HOUSEHOLDS BELOW POVERTY LEVEL	14.7%	1
% of people that speak English less than well	8.9%	1
POPULATION OVER 25 WITHOUT HIGH SCHOOL CREDENTIALS	5.1%	2
HOUSEHOLD MEDIAN INCOME	$71,250	16
PLANNING ZONE LAND AREA (sq mi)	1.2	17
TOTAL PROPERTY VALUE (Billions)	$0.93 Billion	16
TOTAL PROPERTY VALUE/ sq mi (Millions)	$771 Million	3
HOUSING UNITS	1,971	14
% OF HOMES BUILT AFTER 2014	1.2%	14
% OF HOMES BUILT AFTER 2000	8.7%	17
MEDIAN HOME VALUE	$204,800	18
HOMES VALUED BELOW $100K	89	2
HOMES VALUED ABOVE $1 MILLION	8	7

Planning Zone 12 is a mixed use zone in the center of the city. The southern area, the western border, and the northwest corner are all commercial and/or mixed use building in nature. The rest is a mix of single family dwelling and high density apartment buildings.

The zone has three extended care facilities, The Restoracy of Carmel, Brookdale Carmel, and Manor Care Carmel. Responses to these facilities account for 3.5% of total response volume annually and 40% of all calls in this zone.

On the eastern border is the Gramercy Apartment complex. This high density complex is responsible for 8% of the annual response volume for this planning zone.

Approximately 9% of households primarily speak a language other than English. These are split between 50% Spanish, 25% other Indo-European languages, and 25% Asian and Pacific Island languages.

Planning Zone 12 is served primarily by CFD Station 341.

All Incidents - Planning Zone 12 (Response Time Components)						
	Overall	2024	2025	2026	2027	2028
Call Processing	1:29	1:29				
Turnout	1:35	1:35				
Travel	4:10	4:10				
Dispatch to	5:09	5:09				
Call to Arrival	6:12	6:12				

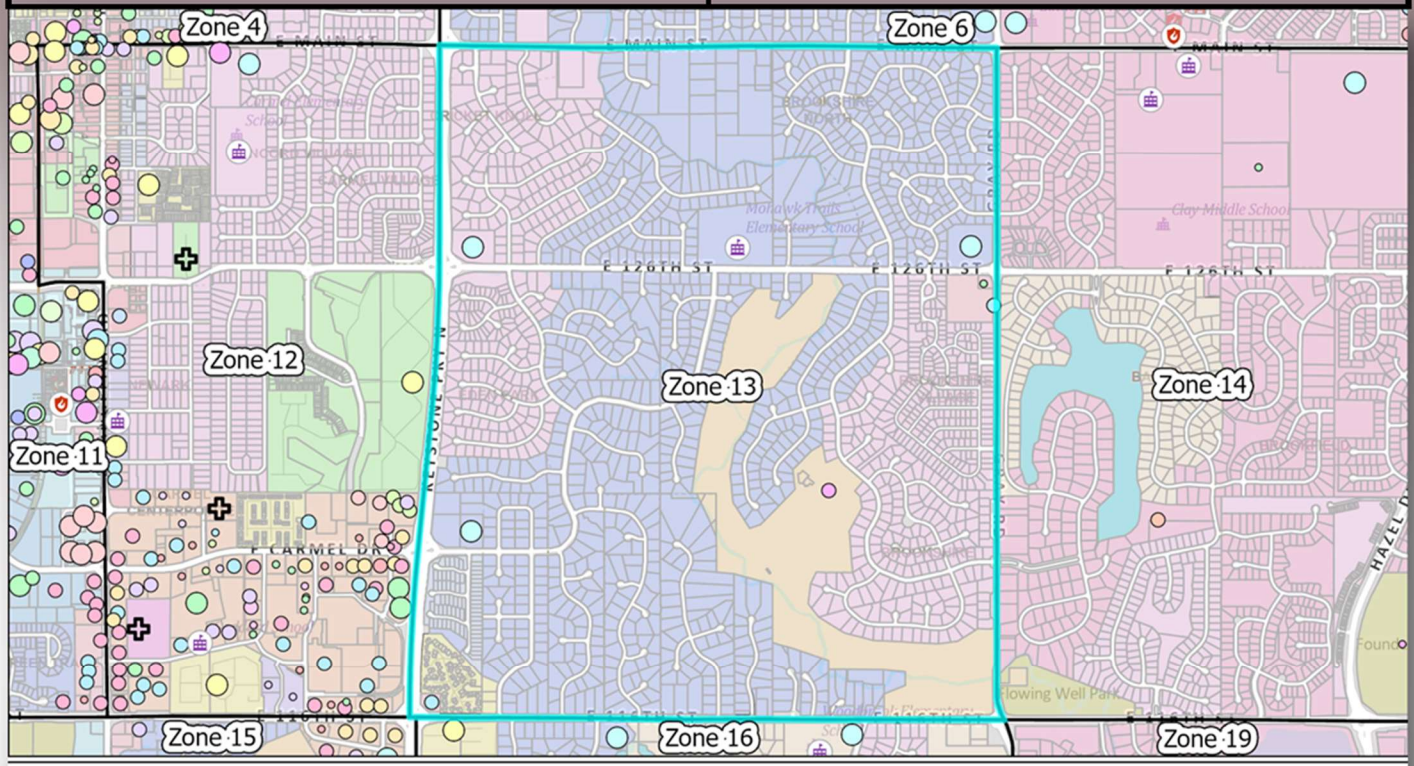
Zone 12		2024-2028	% Total for Zone	%Total of type for
Fire	Low	11	1.3%	12.8%
	Moderate	1	0.1%	10.0%
	High	0		
EMS	Low	11	1.3%	5.6%
	Moderate	631	74.7%	13.8%
	High	38	4.5%	15.0%
Hazmat	Low	1	0.1%	6.7%
	Moderate	10	1.2%	9.1%
	High	5	0.6%	41.7%
Tech Rescue	Low	1	0.1%	4.3%
	Moderate	0		
	High	0		
Others		135	16.0%	7.0%
Total Runs		845		9.4%

PLANNING ZONE: 13

PLANNING ZONE RISK LEVEL: LOW

THIS ZONE RISK SCORE: 6.18

LOWEST 4.28 HIGHEST 41.85



Zoning Description

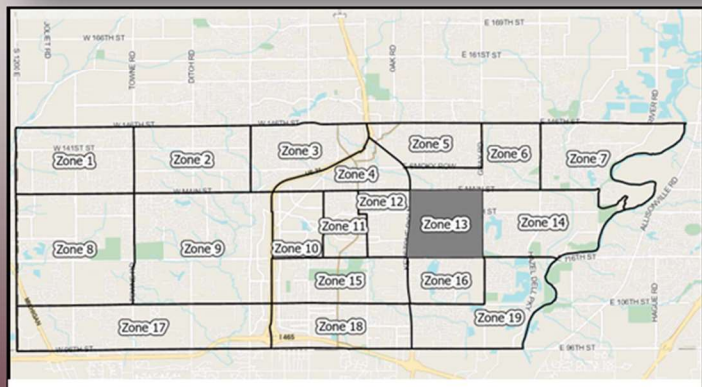
- City Center
- Heavy Commercial and Office Uses
- High Density Residential
- Light Commercial and Office Uses
- Low to Medium Density Residential
- Low to Medium Density Residential
- Low-Density Single Family Residential
- Medium Density Residential
- Mixed Use
- Office Buildings and General Offices
- Park
- Planned Unit Development
- Single Family Residential, Large Lots
- Shopping Center
- Commercial and Office
- Commerical Use
- Industrial, Commercial and Office Uses

BLDG TYPE (Dot size represents risk level)

- <Null>
- APARTMENTS
- BANK
- CHURCH
- CITY OF CARMEL
- COMMERCIAL
- HARDWARE
- HEALTHCARE
- HOTEL
- MULTI-STORY / MULTI-TENANT
- MULTI-TENANT
- OFFICE
- PARKING GARAGE
- POOL
- RESTAURANT
- RETAIL
- STRIP MALL

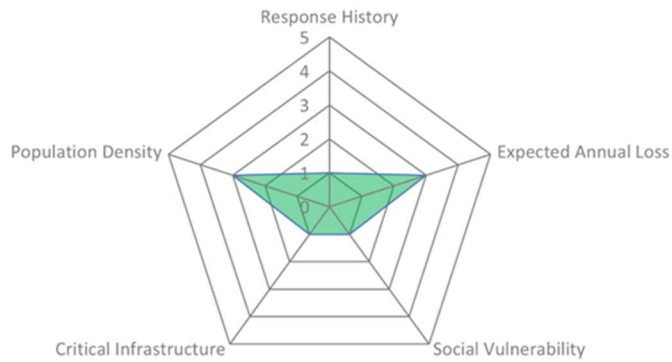
BLDG TYPE

- EXTENDED CARE FACILITY
- FIRE STATION
- SCHOOL



PLANNING ZONE LOCATOR

RISK CATEGORIZATION RADAR CHART [ZONE:13]



PLANNING ZONE: 13

		RANK IN CARMEL (out of 19)
ESTIMATED POPULATION	4,726	10
POPULATION DENSITY (people/sq mile)	2,487	8
HOUSEHOLDS BELOW POVERTY LEVEL	0.3%	18
% of people that speak English less than well	0.0%	18
POPULATION OVER 25 WITHOUT HIGH SCHOOL CREDENTIALS	0.7%	14
HOUSEHOLD MEDIAN INCOME	$122,727	11
PLANNING ZONE LAND AREA (sq mi)	1.9	12
TOTAL PROPERTY VALUE (Billions)	$1.20 Billion	11
TOTAL PROPERTY VALUE/ sq mi (Millions)	$632 Million	9
HOUSING UNITS	2,048	10
% OF HOMES BUILT AFTER 2014	0.5%	17
% OF HOMES BUILT AFTER 2000	0.8%	19
MEDIAN HOME VALUE	$318,500	11
HOMES VALUED BELOW $100K	54	7
HOMES VALUED ABOVE $1 MILLION	8	7

Planning Zone 13 is predominantly low density single family dwellings. It has one higher density area in the southwest corner which is the Maples condominium complex.

A large swath of the zone is occupied by Brookshire Golf Club, a municipally owned and operated golf course that is open to the public.

There are three moderate to large sized churches in the zone and one elementary school.

In the very tip of the southwest corner is a small strip mall with several businesses. Also, at the intersection of 126th Street and Gray Road on the east side is strip mall that has multiple businesses and restaurants.

This zone is primarily served by CFD Station 344 located in Zone 6.

All Incidents - Planning Zone 13 (Response Time Components)						
	Overall	2024	2025	2026	2027	2028
Call Processing	1:27	1:27				
Turnout	1:40	1:40				
Travel	5:06	5:06				
Dispatch to Arrival	6:10	6:10				
Call to Arrival	7:12	7:12				

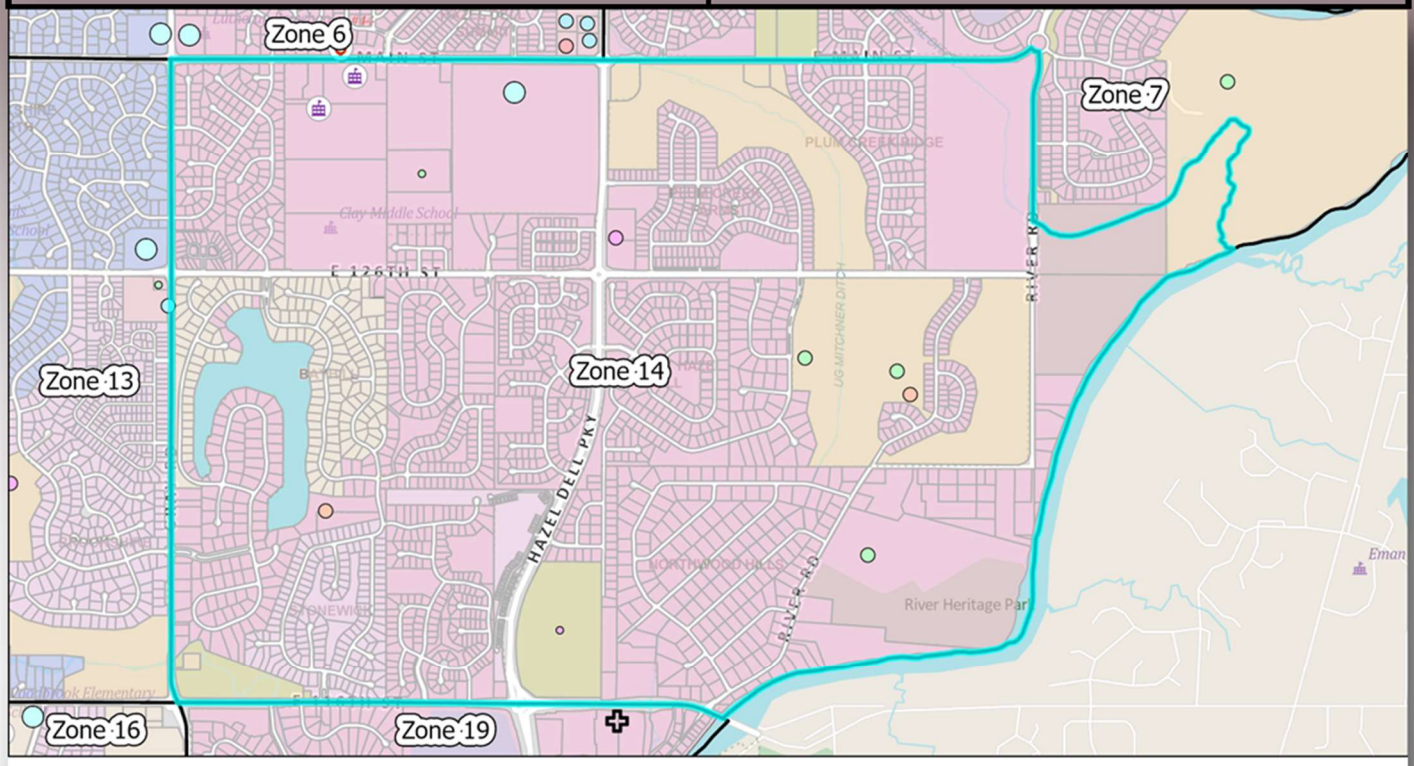
Zone 13		2024-2028	% Total for Zone	%Total of type for city
Fire	Low	4	1.4%	4.7%
	Moderate	0		
	High	0		
EMS	Low	14	4.8%	7.1%
	Moderate	180	61.4%	3.9%
	High	10	3.4%	4.0%
Hazmat	Low	0		
	Moderate	10	3.4%	9.1%
	High	0		
Tech Rescue	Low	0		
	Moderate	0		
	High	0		
Others		75	25.6%	3.9%
Total Runs		293		3.3%

PLANNING ZONE: 14

PLANNING ZONE RISK LEVEL: LOW

THIS ZONE RISK SCORE: 6.18

LOWEST 4.28 **HIGHEST** 41.85



Zoning

Description

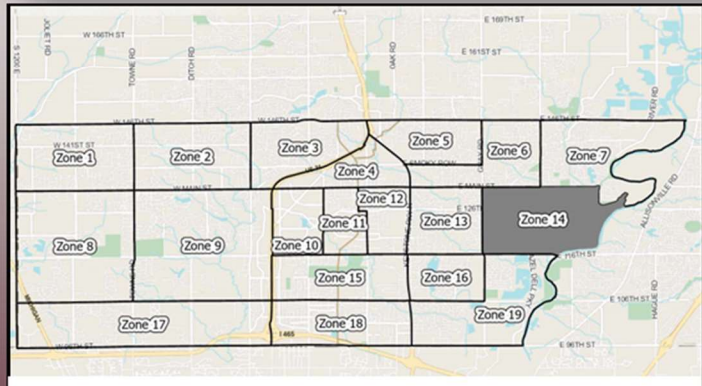
- Low to Medium Density Residential
- Low to Medium Density Residential
- Low-Density Single Family Residential
- Park
- Single Family Residential, Large Lots
- Commercial and Office

BLDG TYPE (Dot size represents risk level)

- BANK
- CHURCH
- CITY OF CARMEL
- COMMERCIAL
- POOL
- STRIP MALL

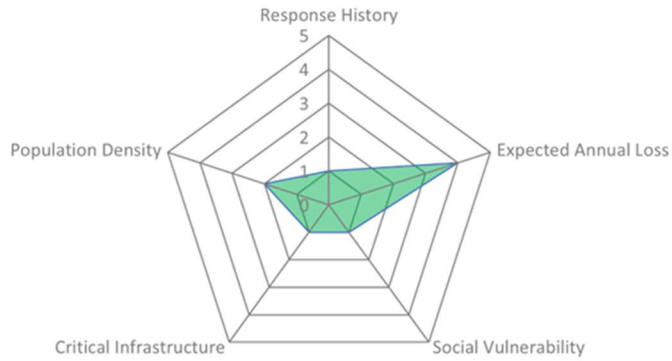
BLDG TYPE

- EXTENDED CARE FACILITY
- FIRE STATION
- SCHOOL



PLANNING ZONE LOCATOR

RISK CATEGORIZATION RADAR CHART [ZONE:14]



PLANNING ZONE: 14

		RANK IN CARMEL (out of 19)
ESTIMATED POPULATION	5,547	7
POPULATION DENSITY (people/sq mile)	1,849	14
HOUSEHOLDS BELOW POVERTY LEVEL	1.2%	11
% of people that speak English less than well	0.5%	14
POPULATION OVER 25 WITHOUT HIGH SCHOOL CREDENTIALS	0.0%	18
HOUSEHOLD MEDIAN INCOME	$151,260	8
PLANNING ZONE LAND AREA (sq mi)	3.0	4
TOTAL PROPERTY VALUE (Billions)	$1.54 Billion	7
TOTAL PROPERTY VALUE/ sq mi (Millions)	$514 Million	14
HOUSING UNITS	2,035	12
% OF HOMES BUILT AFTER 2014	2.6%	12
% OF HOMES BUILT AFTER 2000	40.4%	8
MEDIAN HOME VALUE	$348,800	9
HOMES VALUED BELOW $100K	0	13
HOMES VALUED ABOVE $1 MILLION	0	10

Planning Zone 14 lies along the eastern boundary of the city. Its eastern border is the White River and it abuts the City of Fishers to the east.

The zone is predominantly low density single family dwellings. However, there are a few notable pieces of critical infrastructure within the zone.

Along the northern edge of the zone is the Carmel Clay Schools administration building. Directly to the south of this is Clay Middle School, one of the three middle schools for the district.

Directly to the east of this is a large indoor field house that includes an indoor football field, basketball courts, batting cages, and an indoor track.

Further to the east is Northview Christian Church. Northview is one of the largest churches in the central Indiana area with multiple locations throughout the state. Finally, at the corner of 126th Street and Hazel Dell Parkway is one of the Carmel water treatment plants.

Zone 14 is primarily served by CFD Station 344.

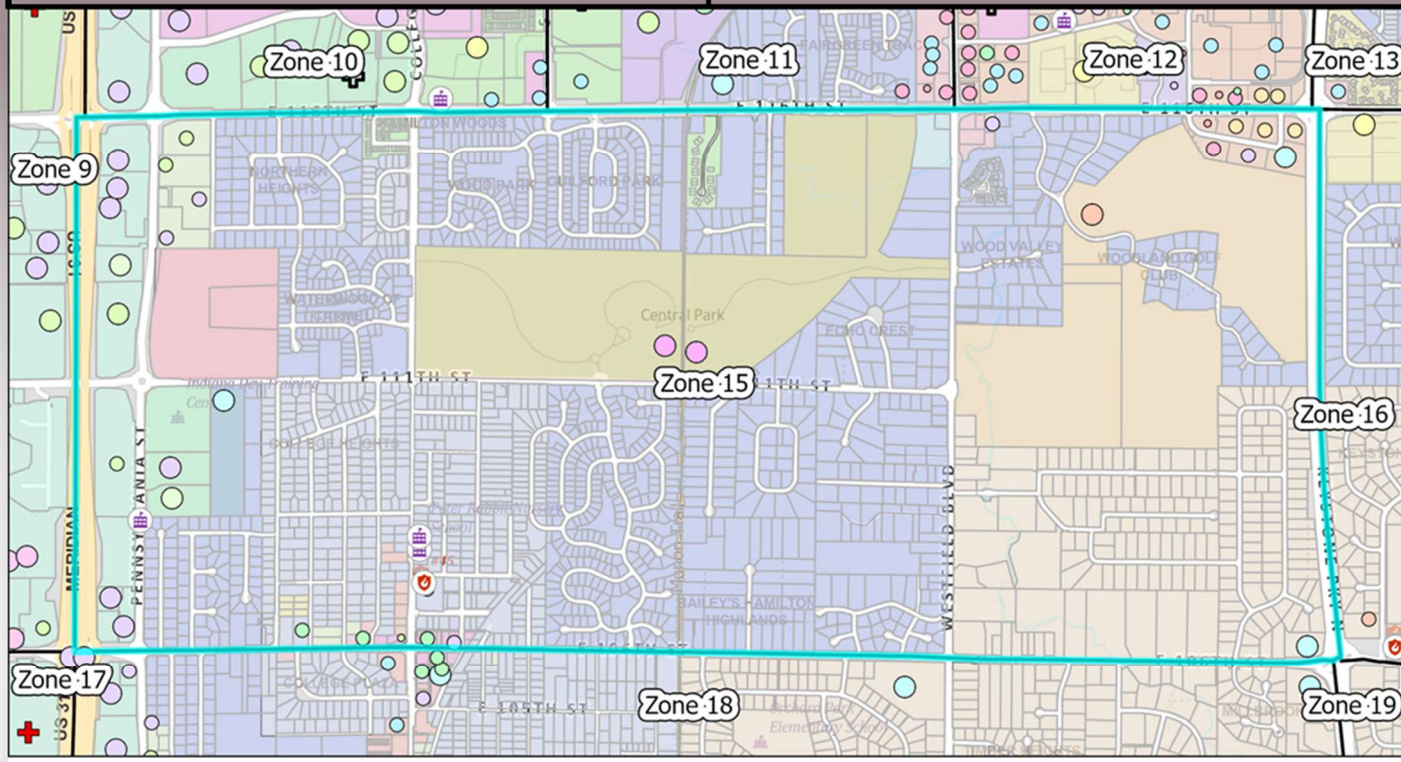
All Incidents - Planning Zone 14 (Response Time Components)						
	Overall	2024	2025	2026	2027	2028
Call Processing	1:35	1:35				
Turnout	1:43	1:43				
Travel	5:38	5:38				
Dispatch to Arrival	6:50	6:50				
Call to Arrival	7:55	7:55				

Zone 14		2024-2028	% Total for Zone	%Total of type for city
Fire	Low	5	1.9%	5.8%
	Moderate	0		
	High	0		
EMS	Low	9	3.4%	4.6%
	Moderate	165	63.2%	3.6%
	High	9	3.4%	3.6%
Hazmat	Low	2	0.8%	13.3%
	Moderate	6	2.3%	5.5%
	High	1	0.4%	8.3%
Tech Rescue	Low	0		
	Moderate	0		
	High	0		
Others		64	24.5%	3.3%
Total Runs		261		2.9%

PLANNING ZONE: 15

PLANNING ZONE RISK LEVEL:
LOW

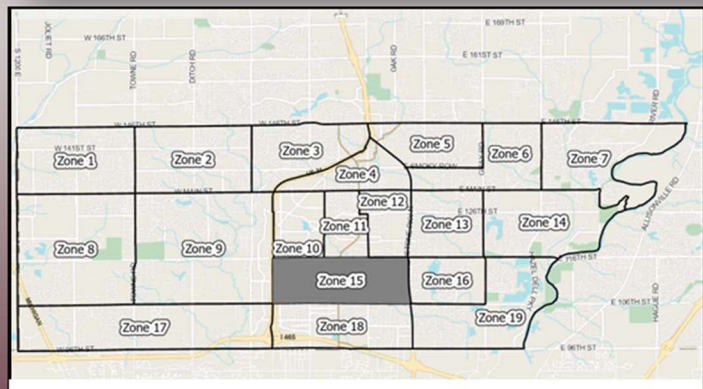
THIS ZONE RISK SCORE: 9.15
LOWEST 4.28 **HIGHEST 41.85**



Zoning
Description
- City Center
- Heavy Commercial and Office Uses
- High Density Residential
- Light Commercial and Office Uses
- Light Commercial
- Low to Medium Density Residential
- Low-Density Single Family Residential
- Manufacturing Park District
- Medium Density Residential
- Meridian Corridor
- Mixed Use
- Office Buildings and General Offices
- Park
- Planned Unit Development
- Shopping Center
- Commercial and Office
- Commerical Use
- Industrial, Commercial and Office Uses

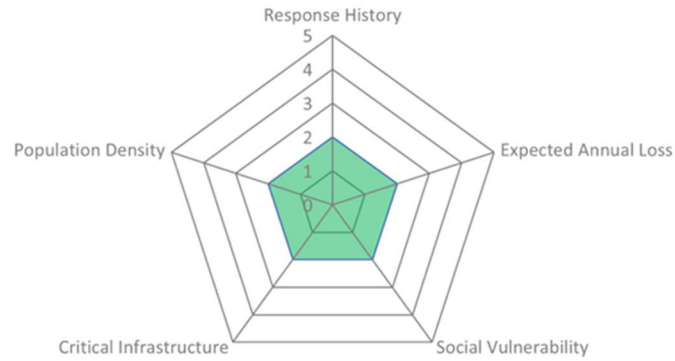
BLDG TYPE (Dot size represents risk level)
- APARTMENTS
- BANK
- CHURCH
- CITY OF CARMEL
- COMMERCIAL
- HEALTHCARE
- HOTEL
- MULTI-TENANT
- OFFICE
- POOL
- RESTAURANT
- RETAIL
- STRIP MALL

BLDG TYPE
- EXTENDED CARE FACILITY
- FIRE STATION
- HOSPITAL
- SCHOOL



PLANNING ZONE LOCATOR

RISK CATEGORIZATION RADAR CHART [ZONE:15]



PLANNING ZONE: 15

		RANK IN CARMEL (out of 19)
ESTIMATED POPULATION	4,171	13
POPULATION DENSITY (people/sq mile)	1,738	15
HOUSEHOLDS BELOW POVERTY LEVEL	8.4%	3
% of people that speak English less than well	7.4%	2
POPULATION OVER 25 WITHOUT HIGH SCHOOL CREDENTIALS	5.3%	1
HOUSEHOLD MEDIAN INCOME	$77,928	14
PLANNING ZONE LAND AREA (sq mi)	2.4	8
TOTAL PROPERTY VALUE (Billions)	$0.80 Billion	18
TOTAL PROPERTY VALUE/ sq mi (Millions)	$333 Million	18
HOUSING UNITS	1,882	15
% OF HOMES BUILT AFTER 2014	1.8%	13
% OF HOMES BUILT AFTER 2000	11.4%	15
MEDIAN HOME VALUE	$228,400	16
HOMES VALUED BELOW $100K	121	1
HOMES VALUED ABOVE $1 MILLION	0	10

Planning Zone 15 is in the south central area of the city and is known as Homeplace . It is bounded by the Meridian Corridor on the west and by Keystone Parkway on the east.

The Meridian Corridor is predominantly commercial property with hotel and many large office buildings.

The north east corner of the zone has a commercial development that includes multiple businesses including restaurants, shops, and a bank.

Dominating the zone are two very large tracts of land. The first is Central Park which is parkland with a large athletic complex, the Monon Center, and an outdoor water park. The second is Woodland Golf Club. A private club that occupies most of the north east corner of the zone.

A large number of homes in this zone are older as they were built in the housing boom of post world war II.

This zone is primarily served by CFD Station 345.

All Incidents - Planning Zone 15 (Response Time Components)						
	Overall	2024	2025	2026	2027	2028
Call Processing	1:43	1:43				
Turnout	1:38	1:38				
Travel	4:37	4:37				
Dispatch to Arrival	5:53	5:53				
Call to Arrival	6:56	6:56				

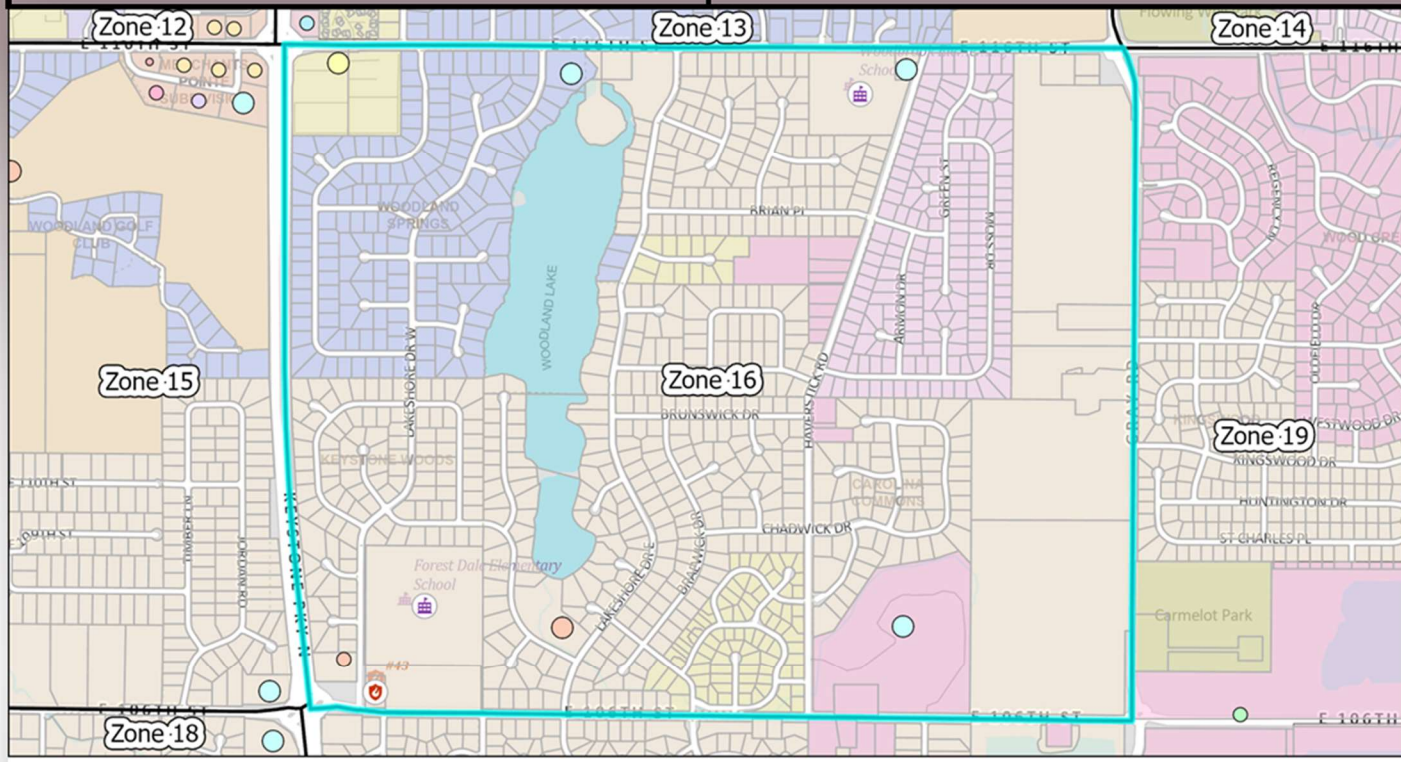
Zone 15		2024-2028	% Total for Zone	%Total of type for city
Fire	Low	4	1.1%	4.7%
	Moderate	2	0.6%	20.0%
	High	0		
EMS	Low	11	3.2%	5.6%
	Moderate	222	63.6%	4.9%
	High	13	3.7%	5.1%
Hazmat	Low	1	0.3%	6.7%
	Moderate	1	0.3%	0.9%
	High	0		
Tech Rescue	Low	1	0.3%	4.3%
	Moderate	0		
	High	0		
Others		94	26.9%	3.3%
Total Runs		349		2.9%

PLANNING ZONE: 16

PLANNING ZONE RISK LEVEL: LOW

THIS ZONE RISK SCORE: 4.28

LOWEST 4.28 HIGHEST 41.85



Zoning

Description

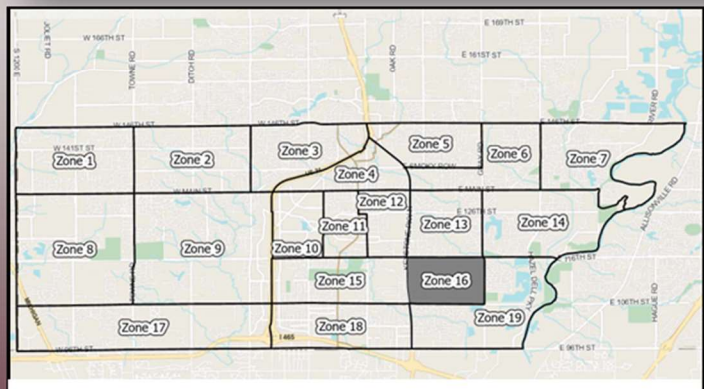
- High Density Residential
- Low to Medium Density Residential
- Low to Medium Density Residential
- Low-Density Single Family Residential
- Park
- Single Family Residential, Large Lots
- Shopping Center
- Commercial and Office
- Commerical Use

BLDG TYPE (Dot size represents risk level)

- APARTMENTS
- BANK
- CHURCH
- COMMERCIAL
- MULTI-TENANT
- POOL
- RESTAURANT
- RETAIL
- STRIP MALL

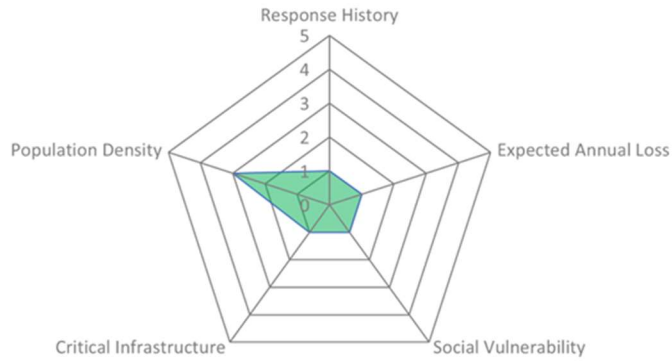
BLDG TYPE

- FIRE STATION
- SCHOOL



PLANNING ZONE LOCATOR

RISK CATEGORIZATION RADAR CHART [ZONE:16]



PLANNING ZONE: 16

		RANK IN CARMEL (out of 19)
ESTIMATED POPULATION	3,014	19
POPULATION DENSITY (people/sq mile)	2,319	11
HOUSEHOLDS BELOW POVERTY LEVEL	2.4%	10
% of people that speak English less than well	0.5%	14
POPULATION OVER 25 WITHOUT HIGH SCHOOL CREDENTIALS	0.4%	16
HOUSEHOLD MEDIAN INCOME	$112,619	12
PLANNING ZONE LAND AREA (sq mi)	1.3	15
TOTAL PROPERTY VALUE (Billions)	$0.67 Billion	19
TOTAL PROPERTY VALUE/ sq mi (Millions)	$518 Million	13
HOUSING UNITS	1,315	19
% OF HOMES BUILT AFTER 2014	0.0%	18
% OF HOMES BUILT AFTER 2000	5.9%	18
MEDIAN HOME VALUE	$282,900	13
HOMES VALUED BELOW $100K	0	13
HOMES VALUED ABOVE $1 MILLION	0	10

Planning Zone 16 located in the south east central area is dominated by low density single family dwellings. The zone is well established and has seen little growth in recent years.

Woodland Lake occupies a large swath of the zone stretching nearly a mile from 106th to 116th streets.

There are a few notable pieces of critical infrastructure within the zone. The first is St Elizabeth Seton, one of two large Catholic churches in the jurisdiction. It lies near the southeast corner. Another is the Woodland Springs Apartments. This is the only apartment complex in the zone. Additionally, there are two elementary schools in the zone.

Along the eastern boundary are some of the only remaining acres of farmland in the jurisdiction.

Along the southern border is CFD Station 343 which serves this planning zone.

All Incidents - Planning Zone 16 (Response Time Components)						
	Overall	2024	2025	2026	2027	2028
Call Processing	1:32	1:32				
Turnout	1:26	1:26				
Travel	4:49	4:49				
Dispatch to Arrival	5:33	5:33				
Call to Arrival	6:25	6:25				

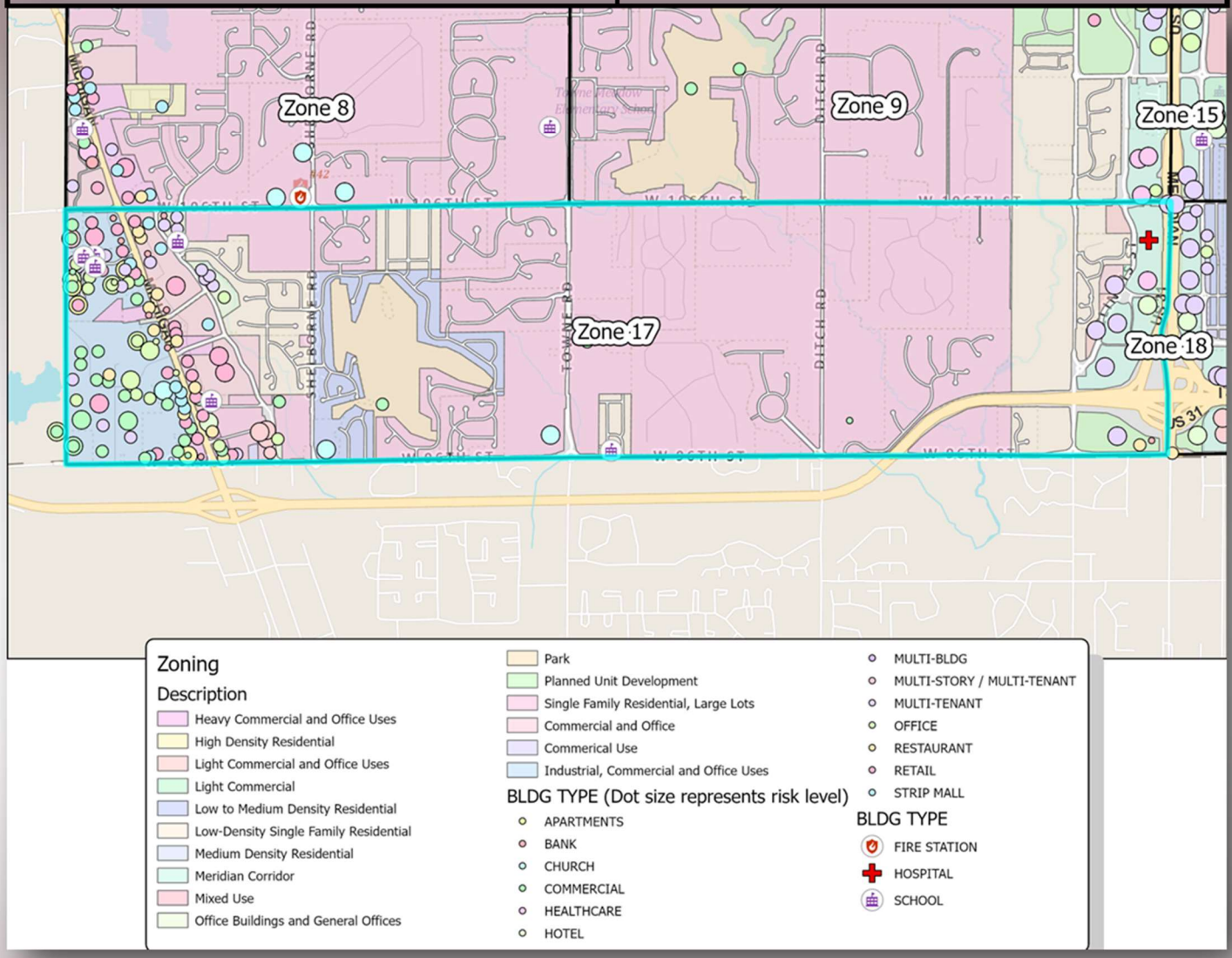
Zone 16		2024-2028	% Total for Zone	%Total of type for city
Fire	Low	1	0.6%	1.2%
	Moderate	0		
	High	0		
EMS	Low	8	5.0%	4.1%
	Moderate	112	70.4%	2.5%
	High	7	4.4%	2.8%
Hazmat	Low	1	0.6%	6.7%
	Moderate	7	4.4%	6.4%
	High	0		
Tech Rescue	Low	0		
	Moderate	0		
	High	0		
Others		23	14.5%	1.2%
Total Runs		159		1.8%

PLANNING ZONE: 17

PLANNING ZONE RISK LEVEL: LOW

THIS ZONE RISK SCORE: 11.41

LOWEST 4.28 HIGHEST 41.85



Zoning

Description

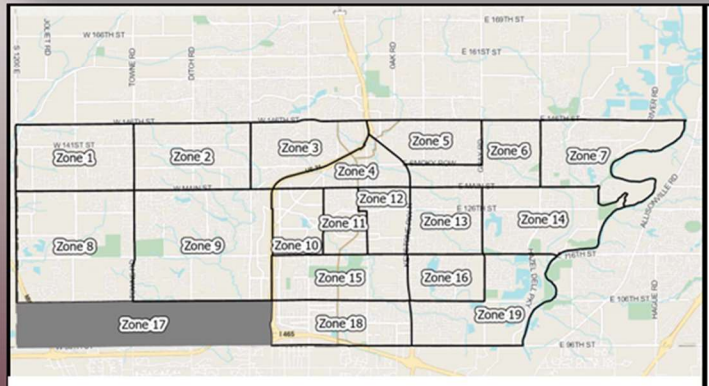
- Heavy Commercial and Office Uses
- High Density Residential
- Light Commercial and Office Uses
- Light Commercial
- Low to Medium Density Residential
- Low-Density Single Family Residential
- Medium Density Residential
- Meridian Corridor
- Mixed Use
- Office Buildings and General Offices
- Park
- Planned Unit Development
- Single Family Residential, Large Lots
- Commercial and Office
- Commerical Use
- Industrial, Commercial and Office Uses

BLDG TYPE (Dot size represents risk level)

- APARTMENTS
- BANK
- CHURCH
- COMMERCIAL
- HEALTHCARE
- HOTEL
- MULTI-BLDG
- MULTI-STORY / MULTI-TENANT
- MULTI-TENANT
- OFFICE
- RESTAURANT
- RETAIL
- STRIP MALL

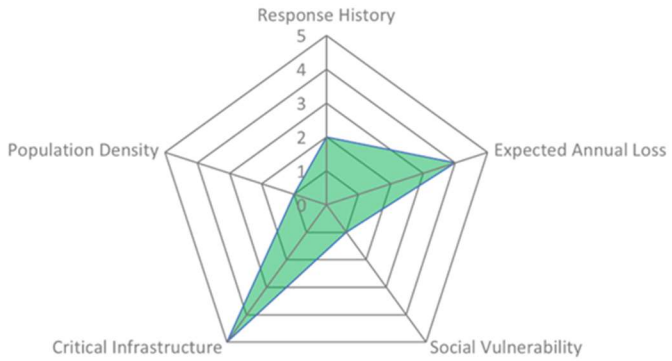
BLDG TYPE

- FIRE STATION
- HOSPITAL
- SCHOOL



PLANNING ZONE LOCATOR

RISK CATEGORIZATION RADAR CHART [ZONE:17]



PLANNING ZONE: 17

		RANK IN CARMEL (out of 19)
ESTIMATED POPULATION	4,013	15
POPULATION DENSITY (people/sq mile)	912	19
HOUSEHOLDS BELOW POVERTY LEVEL	0.9%	14
% of people that speak English less than well	0.8%	13
POPULATION OVER 25 WITHOUT HIGH SCHOOL CREDENTIALS	2.6%	6
HOUSEHOLD MEDIAN INCOME	$173,125	5
PLANNING ZONE LAND AREA (sq mi)	4.4	3
TOTAL PROPERTY VALUE (Billions)	$2.04 Billion	3
TOTAL PROPERTY VALUE/ sq mi (Millions)	$464 Million	16
HOUSING UNITS	1,348	18
% OF HOMES BUILT AFTER 2014	0.0%	18
% OF HOMES BUILT AFTER 2000	25.5%	10
MEDIAN HOME VALUE	$430,200	5
HOMES VALUED BELOW $100K	64	5
HOMES VALUED ABOVE $1 MILLION	272	2

Planning Zone 17 is in the southwest corner of Carmel. It is bounded on the east and west by the commercial Michigan Road Corridor and the Meridian Street Corridor.

The Michigan Road Corridor includes both commercial and light industrial zones and is home to many retail establishments and restaurants.

This section of the Meridian Street Corridor has several large businesses including a Geico Insurance call center, a medical office and surgical center, and one of the three hospitals in Carmel.

The Ascension Heart Center is located at 106th street and Meridian. It is a specialty hospital for cardiac patients only.

The rest of the zone is predominantly low density residential.

There are 2 moderate to large churches and several early childhood development centers in the zone. Twin Lakes Golf Club, a private club, is located along the southern edge of the zone.

Planning Zone 17 is served by CFD stations 342 and 345.

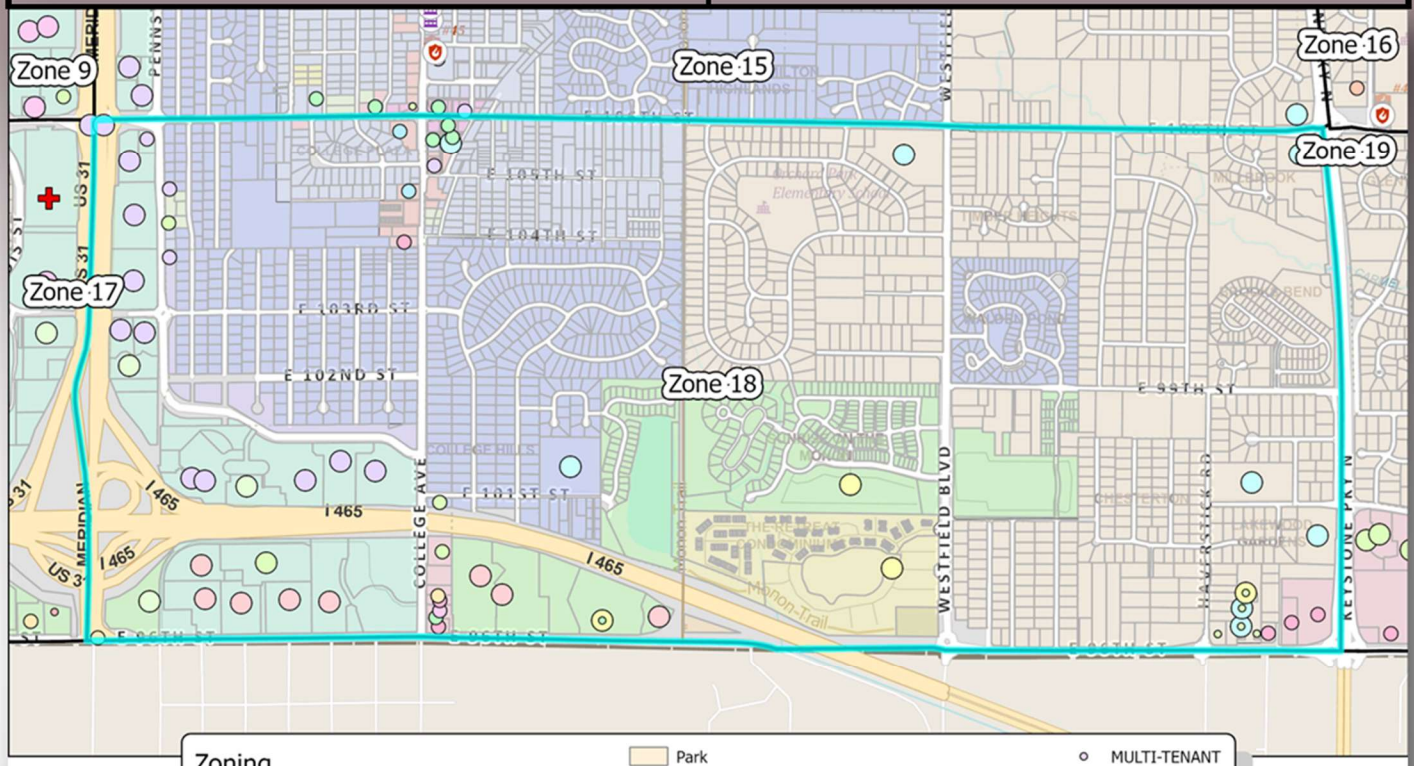
All Incidents - Planning Zone 17 (Response Time Components)						
	Overall	2024	2025	2026	2027	2028
Call Processing	1:44	1:44				
Turnout	1:34	1:34				
Travel	6:10	6:10				
Dispatch to Arrival	7:30	7:30				
Call to Arrival	8:36	8:36				

Zone 17		2024-2028	% Total for Zone	%Total of type for city
Fire	Low	7	1.6%	8.1%
	Moderate	0		
	High	2	0.4%	33.3%
EMS	Low	8	1.8%	4.1%
	Moderate	248	55.5%	5.4%
	High	18	4.0%	7.1%
Hazmat	Low	1	0.2%	6.7%
	Moderate	7	1.6%	6.4%
	High	2	0.4%	16.7%
Tech Rescue	Low	0		
	Moderate	0		
	High	0		
Others		154	34.5%	8.0%
Total Runs		447		5.0%

PLANNING ZONE: 18

PLANNING ZONE RISK LEVEL:
MODERATE

THIS ZONE RISK SCORE: 18.55
LOWEST 4.28 **HIGHEST 41.85**



Zoning

Description

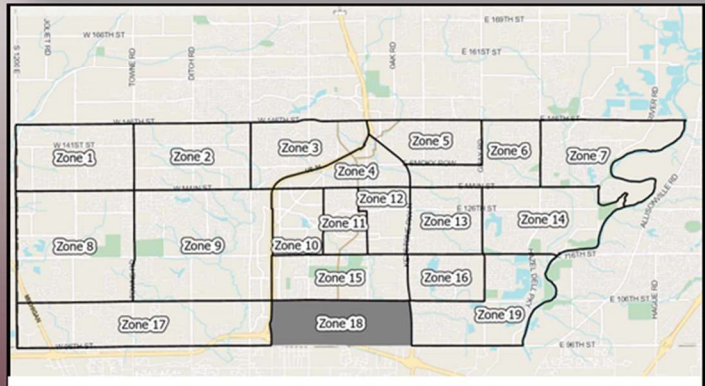
- Heavy Commercial and Office Uses
- High Density Residential
- Light Commercial and Office Uses
- Light Commercial
- Low to Medium Density Residential
- Low-Density Single Family Residential
- Medium Density Residential
- Meridian Corridor
- Office Buildings and General Offices
- Park
- Planned Unit Development
- Commercial and Office
- Commerical Use

BLDG TYPE (Dot size represents risk level)

- APARTMENTS
- BANK
- CHURCH
- COMMERCIAL
- HEALTHCARE
- HOTEL
- MULTI-STORY / MULTI-TENANT
- MULTI-TENANT
- OFFICE
- POOL
- RESTAURANT
- RETAIL
- STRIP MALL

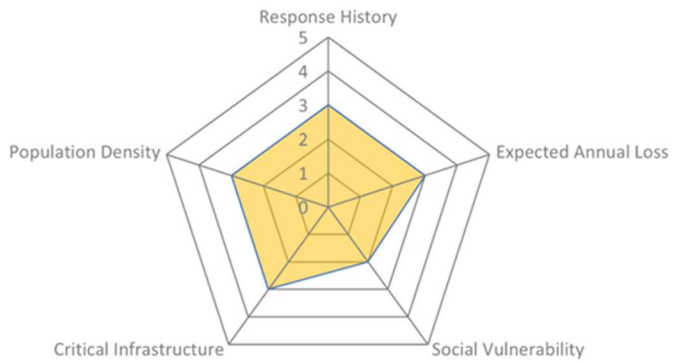
BLDG TYPE

- FIRE STATION
- HOSPITAL
- SCHOOL



PLANNING ZONE LOCATOR

RISK CATEGORIZATION RADAR CHART [ZONE:18]



PLANNING ZONE: 18

		RANK IN CARMEL (out of 19)
ESTIMATED POPULATION	5,520	8
POPULATION DENSITY (people/sq mile)	2,300	12
HOUSEHOLDS BELOW POVERTY LEVEL	6.4%	4
% of people that speak English less than well	0.4%	16
POPULATION OVER 25 WITHOUT HIGH SCHOOL CREDENTIALS	2.0%	9
HOUSEHOLD MEDIAN INCOME	$71,859	15
PLANNING ZONE LAND AREA (sq mi)	2.4	8
TOTAL PROPERTY VALUE (Billions)	$1.17 Billion	12
TOTAL PROPERTY VALUE/ sq mi (Millions)	$486 Million	15
HOUSING UNITS	2,694	2
% OF HOMES BUILT AFTER 2014	14.7%	5
% OF HOMES BUILT AFTER 2000	23.1%	11
MEDIAN HOME VALUE	$207,700	17
HOMES VALUED BELOW $100K	59	6
HOMES VALUED ABOVE $1 MILLION	0	10

Planning Zone 18 is bounded by the Meridian Corridor on the west and Keystone Parkway on the east. It is predominantly low density single family dwellings. Many of the homes in the Homeplace area around College Ave and 106th were built in the early 1950's while many of the homes on the eastern edge are much more recent. Two large areas near 96th street and Westfield Blvd were built out over the last decade as the previous golf course was sold off to developers. The Retreat Condominium complex is one of these developments.

Along the southern border is I-465, a heavily traveled corridor that has the potential for motor vehicle accidents including trucks carrying hazardous materials around Indianapolis.

In the southwest corner is a high rise hotel, the Drury Inn, as well as several high rise office buildings stretching all the way past College Ave.

In the southeast corner are several commercial establishments including a car dealership.

This zone is served by CFD stations 345 and 343.

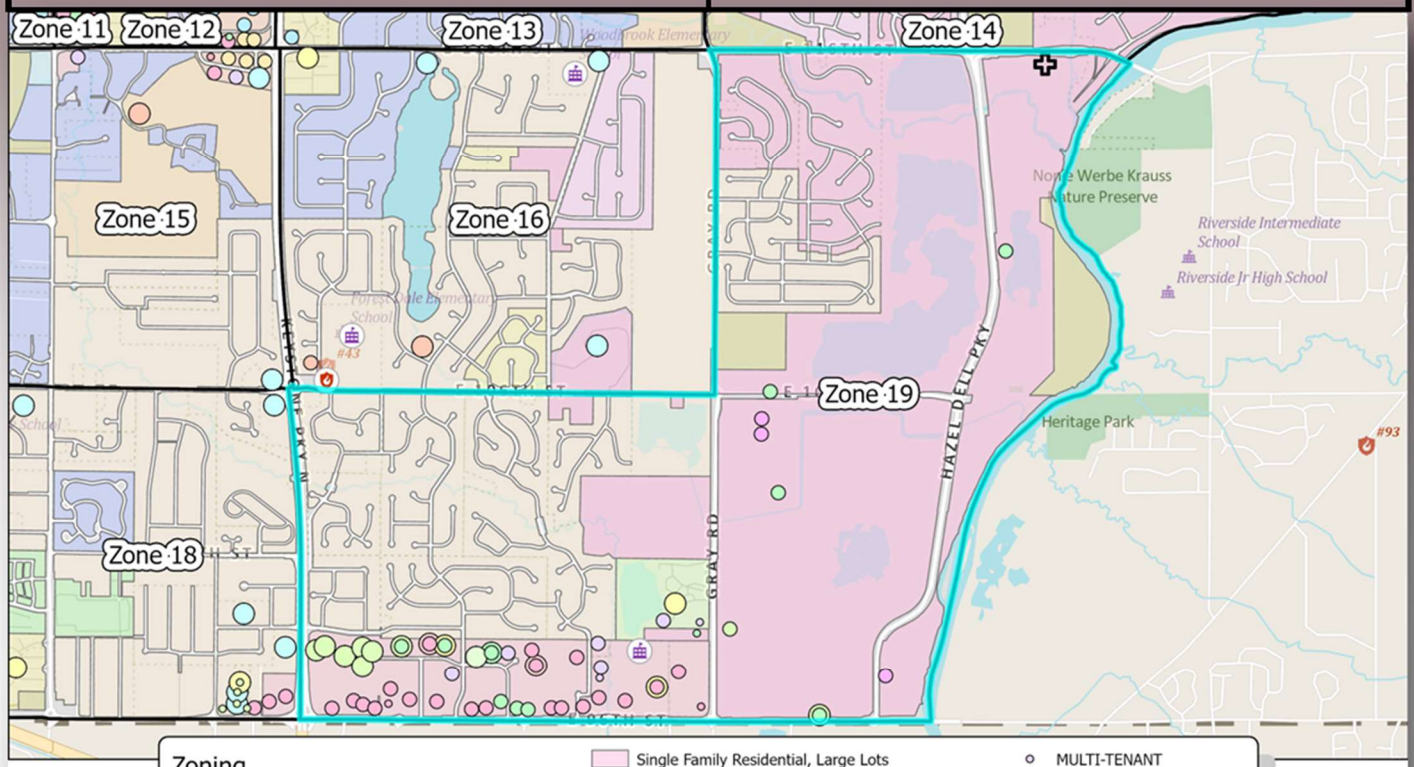
All Incidents - Planning Zone 18 (Response Time Components)						
	Overall	2024	2025	2026	2027	2028
Call Processing	1:52	1:52				
Turnout	1:35	1:35				
Travel	4:54	4:54				
Dispatch to	5:56	5:56				
Call to Arrival	7:08	7:08				

Zone 18		2024-2028	% Total for Zone	%Total of type for city
Fire	Low	10	2.4%	11.6%
	Moderate	0		
	High	2	0.5%	33.3%
EMS	Low	6	1.5%	3.1%
	Moderate	262	63.6%	5.7%
	High	22	5.3%	8.7%
Hazmat	Low	2	0.5%	13.3%
	Moderate	4	1.0%	3.6%
	High	0		
Tech Rescue	Low	0		
	Moderate	0		
	High	0		
Others		104	25.2%	5.4%
Total Runs		412		4.6%

PLANNING ZONE: 19

PLANNING ZONE RISK LEVEL:
LOW

THIS ZONE RISK SCORE: 5.23
LOWEST 4.28 **HIGHEST 41.85**



Zoning

Description

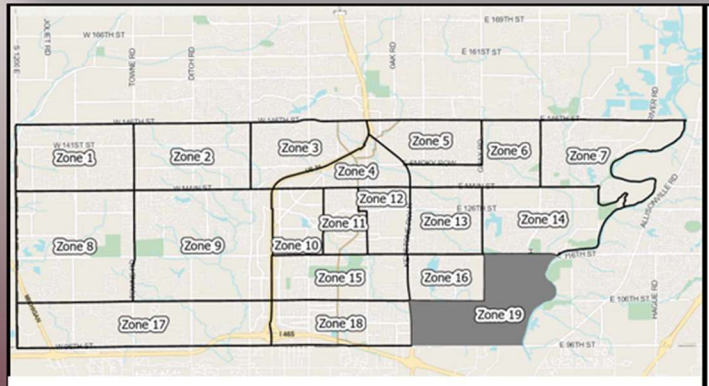
- City Center
- High Density Residential
- Low to Medium Density Residential
- Low to Medium Density Residential
- Low-Density Single Family Residential
- Medium Density Residential
- Mixed Residential Supporting Commerical Uses
- Office Buildings and General Offices
- Park
- Planned Unit Development
- Single Family Residential, Large Lots
- Shopping Center
- Commercial and Office
- Commerical Use

BLDG TYPE (Dot size represents risk level)

- APARTMENTS
- BANK
- CHURCH
- CITY OF CARMEL
- COMMERCIAL
- HOTEL
- MULTI-STORY / MULTI-TENANT
- MULTI-TENANT
- OFFICE
- POOL
- RESTAURANT
- RETAIL
- STRIP MALL

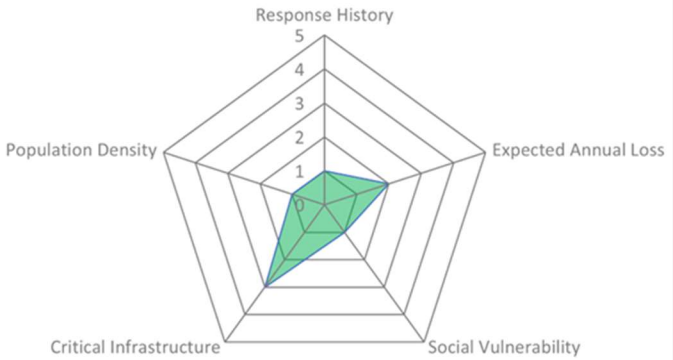
BLDG TYPE

- EXTENDED CARE FACILITY
- FIRE STATION
- SCHOOL



PLANNING ZONE LOCATOR

RISK CATEGORIZATION RADAR CHART [ZONE:19]



PLANNING ZONE: 19

		RANK IN CARMEL (out of 19)
ESTIMATED POPULATION	3,852	16
POPULATION DENSITY (people/sq mile)	1,284	18
HOUSEHOLDS BELOW POVERTY LEVEL	2.6%	9
% of people that speak English less than well	1.4%	9
POPULATION OVER 25 WITHOUT HIGH SCHOOL CREDENTIALS	1.9%	10
HOUSEHOLD MEDIAN INCOME	$103,207	13
PLANNING ZONE LAND AREA (sq mi)	3.0	4
TOTAL PROPERTY VALUE (Billions)	$0.98 Billion	14
TOTAL PROPERTY VALUE/ sq mi (Millions)	$328 Million	19
HOUSING UNITS	1,482	17
% OF HOMES BUILT AFTER 2014	4.2%	11
% OF HOMES BUILT AFTER 2000	11.1%	16
MEDIAN HOME VALUE	$334,000	10
HOMES VALUED BELOW $100K	17	9
HOMES VALUED ABOVE $1 MILLION	0	10

Planning Zone 19 encompasses the southeast corner of the city from Keystone Parkway and Gray Road on the west to the White River on the East. The residential areas in this zone are predominantly low density single family dwelling with the exception a the North Haven Apartment complex is located on Gray Road near 96th street. This zone is served by CFD Station 343.

The southern border of the zone is 96th street and it abuts Indianapolis. This area is all commercial and features a large number of car dealerships.

There is one low volume extended care facility, Bickford Senior Living, located in the northeast corner.

The majority of this zone is dominated by Martin Marietta's aggregate mining operation. The mine stretches 2 miles from 96th street on the south to 116th street on the north all along Hazel Dell Parkway.

Directly across from the mine is the Carmel waste water treatment plant which includes the Carmel Police firing range and an access point to the White River.

All Incidents - Planning Zone 19 (Response Time Components)						
	Overall	2024	2025	2026	2027	2028
Call Processing	1:52	1:52				
Turnout	1:29	1:29				
Travel	4:49	4:49				
Dispatch to Arrival	5:33	5:33				
Call to Arrival	6:25	6:25				

Zone 19		2024-2028	% Total for Zone	%Total of type for city
Fire	Low	4	1.6%	4.7%
	Moderate	1	0.4%	10.0%
	High	0		
EMS	Low	8	3.2%	4.1%
	Moderate	149	59.6%	3.3%
	High	11	4.4%	4.3%
Hazmat	Low	0		
	Moderate	5	2.0%	4.5%
	High	1	0.4%	8.3%
Tech Rescue	Low	0		
	Moderate	0		
	High	0		
Others		71	28.4%	3.7%
Total Runs		250		2.8%