The Joplin Police Department Investigations Bureau is made up of a lieutenant, two sergeants, two corporals, 17 investigators, a civilian investigation assistant, a civilian evidence technician, and a civilian Heart Land Crime Stoppers coordinator. One corporal and two investigators are attached to the Jasper County Drug Task Force and report directly to the lieutenant of the bureau. Additionally, two investigators are attached to the Southwest Missouri Cyber Crimes Task Force and one corporal to an FBI task force. Detectives are also members of the Tri-State Major Case Squad. The squad is comprised of numerous investigators from Missouri, Oklahoma, and Kansas. When the squad is activated, investigators combine their efforts to solve major cases within their respective agencies.

The Investigations Bureau is primarily responsible for the investigation of major felony crimes such as homicide, aggravated assault, sexual assault, burglary, robbery, forgery, and fraud. Investigators in this bureau also look into child abuse and neglect hotline calls, vehicle thefts, thefts from vehicles, larcenies, domestic violence, and drug violations. Additionally, in 2009, one investigator was added through a grant to the Investigations Bureau to investigate cyber crimes with a focus on exploited children. The investigators assigned to these crimes have developed advanced levels of expertise through specialized training and years of experience working on complex cases with colleagues at the federal, state, and local levels.

Investigating complex major crimes requires the dedication, cooperation, and assistance of a variety of individuals and units. Investigators work closely with patrol officers to identify witnesses, preserve major crime scenes, gather critical information, and develop leads. They also work closely with officials from other agencies to solve crime that inevitably crosses jurisdictional lines.

During 2011, the Investigations Bureau was involved in several events and activities outside the scope of their normal investigative duties. These include fraud and crime prevention presentations, mock robbery trainings, monthly fraud meetings with local businesses, monthly criminal investigation meetings with other local law enforcement agencies, and informational training and mock crime scene exercises for the Joplin Police Department's Citizens Police Academy. Members of the Investigations Bureau are also involved in other specialized units within the Joplin Police Department. These include the SWAT, Awards Committee, Chief's Advisory Committee, Hazardous Driving Instructor, and Defensive Tactics Instructor.

In September, the Investigations Bureau instituted new guidelines for Joplin Police Department regarding the investigative case screening process. This process is used as a means for determining case solvability and guiding decisions about resource allocation. It has always been the policy of the Joplin Police Department to investigate crimes to the extent practical. The decision to continue or discontinue investigating a case is based on available information and now may be based, in part, on the desire and willingness of the victim to pursue the case and the existence of any suspects. We now use a system that relies on the existence of sufficient solvability factors obtained through the initial investigation. Criteria used as a guide to determine whether a case will receive follow-up investigation include, but are not limited to, the following:

- Suspect named (0-9)
- Suspect identified (0-5)
- Suspect vehicle identified (0-4)
- Witness to offense (0-3)
- Stolen property traceable (0-2)
- Physical evidence collected (0-2)

- Fingerprints lifted (0-2)
- DNA collected (0-2)
- Impact on community (0-5)
- Supervisor priority (0-5)

Each factor is assigned a numerical value and a total is accumulated for each case, with the highest possible value of 40. Depending on the value of the solvability factor, one of three possibilities exists. If the solvability factor is equal to or less than seven, the case is closed and a letter of case closure is mailed to the victim. If the solvability factor equals eight to 15, the case is assigned to a detective for follow-up investigations. And finally, if the solvability factor is greater than 15, the case is flagged for immediate follow-up by a detective. It is the responsibility of the detective supervisor to notify the detective by e-mail when these cases exist.

This new process has reduced the amount of cases each detective is assigned to investigate so they are able to devote more time to each case, produce higher quality investigations, and increase clearance rates. There were 5,177 cases assigned to the Investigations Bureau during 2011, which was a 24% decrease from 2010. This amounted to 431 cases per month for the entire bureau and 36 cases per month per investigator. The Investigations Bureau clearance rate for 2011, defined as cases cleared by arrest or exceptionally cleared, was 38%. The following is a breakdown of cases cleared in 2011:

- Cleared by arrest 1,318
- Exceptionally cleared 522
- Case completed 351
- Inactivated 1,349
- Unfounded 150
- Forwarded as information 555

In 2011, detectives with the Joplin Police Department submitted 294 felony charges to the Jasper County and Newton County prosecutors. Of the 294 charges that were submitted, 254 (86%) of them were filed by the prosecutor, meaning that warrants were issued for arrests.