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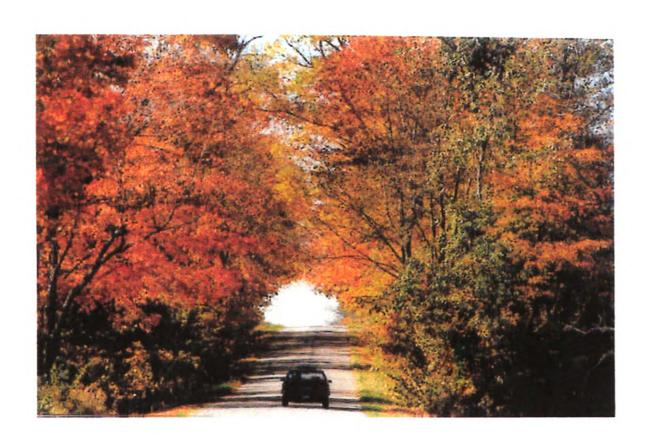
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Plan B Paper

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Planning for Congestion Mitigation: Methods for Reducing Travel Time and Increasing Roadway Efficiency

Sandy Beadle August 2007



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Introduction

Most of the roads in America today are crowded and congested, and the number of new vehicles being added to public roadways continues to increase. With automobiles being the primary source of transportation in this country, the need to get motorists and goods safely and efficiently from one place to another is of paramount importance. According to the Texas Transportation Institute, during the past 20 years traffic has increased by 200 percent. The average commuter now spends approximately 46 hours per year stuck on slow moving overly crowded roadways. There are a number of methods currently in use to reduce congestion. There are also innovative techniques in various stages of development to help reduce congestion in the future.

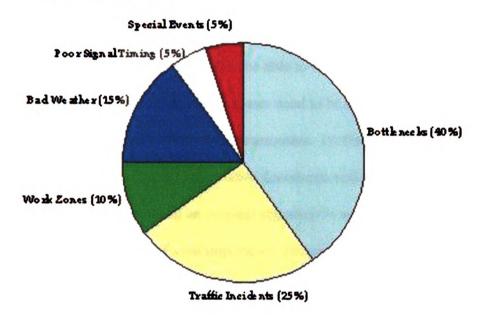
Roadway congestion occurs when the flow of traffic is obstructed. This can happen for a variety of reasons and is categorized into two types, recurring and non-recurring. Simply put, recurring congestion occurs when the number of users of a particular roadway approaches or exceeds the amount of capacity that is currently available. Although some roadways may indeed always be marked by congestion, that is not the case for all. Roadways that experience recurring congestion may still see periods when traffic demands vary, slightly too significantly, depending on the time of day, day of the week, or time of year. Roughly half of the congestion experienced by motorists is recurring.

Non-recurring congestion, however, occurs due to a decrease or disruption in roadway capacity that is usually temporary and often unforeseen. The four major categories of this type of congestion include: traffic accidents and stalled or broken down vehicles, road construction or work zones, weather and special events. Non-recurring congestion not only reduces the amount of available capacity, but can also have an impact on the entire transportation network. People

and businesses that run on tight schedules can be especially affected by this type of congestion.

Drivers can run into traffic entering or exiting a special event they were unaware of or come upon an accident they did not know had occurred and then are stuck, along with everyone else, with no available alternatives.²

Causes of Congestion³



Context

Everyone's lives are affected by transportation in some way or another. Everyday people leave their homes to go to jobs, schools, recreational activities, stores, restaurants, a friend's house, etc., and they need a way to get there. Whether it is by private car, bus or rail, people are always on the move and a congested, inefficient transportation system will do nothing more than slow them down. The costs society pays for congestion are numerous and those costs are paid by individuals and businesses alike. The most obvious and easy to calculate are wasted time spent in traffic, wasted fuel from idling cars, and money lost from missed appointments.

Significance

"A competitive, growing economy requires a transportation system that can move people, goods, and services quickly and efficiently. To meet this challenge, each transport sector must work effectively both by itself and as part of a larger, interconnected whole." Having an efficient transportation network is vital not only for moving people, but also for moving the economy. Everyday American businesses rely on some form of transportation to help keep their operation moving. Manufacturers need to be able to receive raw material and ship their finished products. Distribution centers and warehouses need to be able to ship and receive durable goods. Service providers need to be able to reach customers. Professional firms, financial and legal for example, need to be able to send and receive documents and reports in a timely fashion. For a number of reasons, such as when an original signature is required, it is not always possible to do this electronically. It is also of vital importance that emergency services to be able to reach those who need it.

"The extra time spent in congestion causes service providers to make fewer calls per day, leading to higher prices for consumers; this is particularly important for emergency medical, fire, and police services which may be unnecessarily delayed from attending to medical, crime, and disaster situations. Companies with production schedules timed to take advantage of trucks delivering components to an assembly line as they are needed must instead plan for items to arrive early. This consumes space and inventory, expending resources that could otherwise be spent on productive activity."

There are a number of companies, Federal Express and Airborne for example, that stay in business by promising to get packages to people quickly. They promise delivery by specific times each day. This is known as just in time delivery and it is becoming more and more popular. An efficient transportation system makes just in time delivery is possible. This reduces the need for businesses to carry large quantities of inventory, thereby saving revenue. Reducing congestion on roadways means that freight hauling trucks can reach their destination more quickly and service providers can make more calls per day which can, in turn, keep prices down.

Relevance

Congestion mitigation is one important aspect of transportation planning. Transportation planning, in turn, is an important aspect of urban planning, since an efficient, flowing, multimodal transportation system is necessary to keep people and the economy moving.

Transportation planning is handled by various government agencies, at the national, state and local levels. Land use planning is primarily a local function and can be done by public agencies or private firms. Municipalities function better when transportation and land planners work together. When developing land it is necessary to keep in mind how people and freight will move in and out of the area. At the same time, when planning transportation systems or system improvements it is necessary to take into account the surrounding land uses and what the effect will be.

Nature of the Problem

In 2002, commuters in the 85 largest urban areas, those with a population of 500,000 or more, experienced 3.5 billion hours of delays due to traffic congestion. Fifty-four percent of highways in these areas are classified as heavily, severely, or extremely congested. In addition, drivers sitting on congested roads waste 5.7 billion gallons of fuel.⁶ In 1982, a 20-minute, midday (non-peak hour) trip would take 23 minutes during the peak commuting times. By 2001, the amount of time that same 20-minute, midday trip would take during peak commuting time had risen to 28 minutes. The amount of time that use to be considered "rush hour", i.e. AM and PM travel to and from work, lasted three to four hours per day. Over the last 20 years, that has increased to 6 to 8 hours per day. Large urban areas, such as Los Angeles, CA, see little let up in daytime traffic. Traffic congestion exists virtually from morning until evening.⁸ It is also expected that population and employment in America's largest cities will continue to grow

approximately 2 percent each year. This will cause even greater delays on all ready overloaded urban highways.

Congestion is a problem for society as a whole because the costs of congestion are numerous and it is not just drivers who "pay the price". Slow moving vehicles consume more fuel and release more emissions causing increases in air and water pollution. Time spent sitting in congestion is simply time lost, which could be better spent on almost anything else, family, work or in recreational pursuits, just to name a few.

What Can Be Done

There are a variety of techniques which can be implemented to help reduce traffic congestion. These methods differ depending on whether the congestion problem is recurring or non-recurring in nature. A discussion of each of the various methods will follow. For recurring congestion, they include:

- ❖ Arterial Management, which includes Access Management and Traffic Signal Timing
- Freeway Management and Traffic Operations
- **❖** Travel Demand Management

Mitigation techniques that will be discussed for non-recurring congestion include:

- **❖** Traffic Incident Management
- Work Zone Management
- Road Weather Management
- Planned Special Event Management

Access Management

Arterials are major roadways that are generally heavily traveled but not part of the interstate system. With an ever increasing number of vehicles clogging American roadways, the

need to manage how cars will enter and exit those roads has become a critical issue. When a driver turns off of a street with fast moving traffic the possibility for an accident exists. The car turning must slow down to complete the turn, thereby causing the driver behind to also have to slow down. This process continues with all of the cars that are in the affected lane needing to slow down until the existing driver has completed the turn. If even one driver in the chain is not paying enough attention or is too slow in reacting, a rear-end collision is possible. The chances for collision increase even more when a driver is entering a busy street. They have to go from standing still to whatever speed traffic is flowing in a very short time. Again the cars already in the traffic lane may need to slow down or change lanes quickly to avoid hitting the entering vehicle. This can be especially problematic if the entering vehicle is slow getting up to traffic flow speed or the driver simply chooses to continue at a slower speed. Often times multiple vehicles are entering or exiting a street at once. This slows down traffic, increasing congestion and travel time. One way to deal with this problem is access management. One definition of access management is "a set of proven techniques that can help reduce traffic congestion, preserve the flow of traffic, improve traffic safety, prevent crashes, preserve existing road capacity and preserve investment in roads by managing the location, design and type of access to property."10 Access management plans are formal and structured ways to coordinate and maintain safe and efficient uses of roadways, while at the same time providing access to the adjoining lands. This applies primarily to major arterials and includes both access from intersecting streets and private driveways. Access management utilizes long-range, system-wide approaches instead of piecemeal or case-by-case plans. 11 Another benefit of implementing access management techniques is that they can make roadways safer as well.

Failing to implement proper access management plans can not only increase traffic congestion, but also have adverse effects on the economy and the environment. The following are common impacts felt when access management issues are ignored:¹²

- More motor vehicle accidents, not just car to car, but also involving pedestrians and bicyclists.
- Roadways becoming less and less efficient.
- More cars will cut-through residential neighborhoods in an attempt to avoid congested arterial roads.
- ♦ Home and business owners are adversely affected by the continuous widening of streets in order to reduce congestion.
- Commute times, fuel consumption, and motor vehicle emissions are increased due to the rising number of driveways and traffic signals, which delay vehicle movement along roadways.

Businesses can be affected because when roads become overly congested, and turning into and out of their parking lots is difficult, patrons will tend to find a place with easier access. Also entrances and exits to businesses can be blocked by traffic, especially when they are located to close to an intersection. Drivers often have tunnel vision, in that they are paying primary attention to where they need to go and what may be going on inside their own vehicle, especially when they are traveling with other people, talking on a cell phone, or listening to the radio. They often do not notice, or even do not care that a car is sitting in an adjacent lane waiting to make a turn into a business and pull up in front of the driveway entrance. This can be especially frustrating when they are just sitting at a red light and traffic is stopped. If traffic builds up behind the vehicle blocking the business entrance and enough time to complete the turn is not allowed when the light is green and it turns red again, the whole process could start over. Added problems would exist if the car waiting to make the turn is causing a traffic backup by blocking through traffic because no left turn lane exists or oncoming traffic is unable to use the existing left turn lane because the person waiting to turn off of the street is unable to move. If driver frustration builds enough at not being able to turn into a particular business easily, they are more

likely to patronize a competing business with easier accessibility, if it is at all possible. The opposite can also happen when attempting to exit a business and get back onto a street, especially if the driveway is located close to an intersection, which also increases the likelihood of a vehicle crash occurring.

The goals of access management include limiting and consolidating access points along major roadways, making them safer for motorists and pedestrians by promoting unified access points, supporting street and circulation systems for the surrounding land development, and reducing traffic congestion. One of the important principles to remember regarding access management is to acknowledge that a roadway hierarchy must exist. Freeways and expressways are the fastest moving of all roadways, with direct access being fully controlled. Below them exists a grid of arterials, collectors and local roads, with either some or no access control systems in place. Each roadway has a specific purpose, arterials are busier and often carry high volumes of motor vehicles at once, and their function is primarily to move traffic at higher speeds. It is the job of collector and local roads, which typically carry less traffic and move at slower speeds, to provide access to the adjoining land uses. Expecting every road to fulfill every need will not work. Following are some principles that, if followed, can help government officials and transportation policy makers to accomplish access management goals: 14

- ♣ <u>Limit Direct Access to Major Roadways</u> by limiting direct access to major arterials, especially roads that drivers often use as through streets when traveling in a large metropolitan region, the flow of traffic will be preserved and travel times increased.
- ◆ Promote Intersection Hierarchy provide an appropriate transition from one type of roadway to another. For example, when a driver exits a freeway, they typically go through an interchange that is designed for the transition from high speed freeway to slower speed arterial. This same principle could be applied to other road classifications as well.
- ♦ <u>Use Nontraversable Medians to Manage Left-Turn Movements</u> research has shown that left turns account for the majority of crashes related to access management. By using nontraversable medians and other measures that

- minimize that ability of drivers to make left turns, roadway safety is improved.
- ♠ Remove Turning Vehicles from through Traffic Lanes providing right and left turn lanes will allow a car to get out of the through traffic lane and make their slow deceleration in preparation for turning in a more protected area where they are less likely to be rear-ended by through traffic. This also allows through lanes to keep moving at higher speeds and reduces delays and congestion.

Poorly planned and designed roadway and access systems lead to crashes, congestion, economic losses, and loss of life. Insurance companies pay millions of dollars each year in claims for property damage and medical costs. They, in turn, raise premiums on policies for all customers, even those who have never filed a claim. In order for roadways to be safe and efficient, road officials, local bureaucrats, and land developers must work together, and access management techniques must be implemented. All too often stakeholders end up working against each other. Development plans are submitted to local planning agencies and after approval has been obtained, they go to state road authorities for access permits. The problem is that commercial developers generally want a large number of driveways and road officials want to restrict that number. This is where access management principles and techniques come into play. Roads are controlled by state Departments of Transportation (DOTs), local governments, and county road commissions. Land use planning is controlled by different departments within various cities, counties, townships, and municipalities, each with the power to create zoning ordinances. The same agencies do not control both, which is why conflicts often occur. In Michigan there are over 1800 individual local government units. Zoning ordinances are not uniform through out the state, meaning that a land use that is permissible in one town may not be allowed in the neighboring town. Land uses have a direct impact on the roads that pass by them. The bigger the land use (attraction), the more vehicle trips it will produce, leading to road congestion. All relevant parties need to be a part of the process from the beginning. A local

road commissioner or qualified transportation planner should be involved in land development planning so that proper access management techniques can be applied from the beginning. This is the only way that existing road capacity will be maintained and able to handle new and expanding development at the same time. Stakeholders must work together if access management techniques are to be implemented successful, injuries avoided, lives saved, traffic congestion decreased and economic development increased.

Case Study: Okemos Road

An example of using access management principles to mitigate congestion and increase safety is found in the Okemos Road project.

Okemos road is a north-south arterial road that runs from the city of Mason to Meridian Township in south-central Michigan. A two mile section of that road, lying between Jolly road to the south and Mt. Hope road to the north, was the subject of a great deal of controversy in 2005. That particular section of Okemos road is home to both commercial and residential real estate was well as a middle school, elementary school and a church. There is a rail road track that runs across the road, as well as seventeen separate intersections that traverse Okemos the road as well. The speed limit is 45 miles per hour on this section of the road. At the time, Okemos road was two lanes in each direction, with no middle turn lane existing. Just south of the Jolly road intersection, there is a freeway exit off of Interstate 96, a busy east-west freeway. This freeway off ramp, exit 110, is used by Okemos residents, as well as for people heading to Michigan State University, the Meridian Mall shopping area and smaller surrounding communities. This stretch of road carries approximately 27,000 vehicles per day. That number is expected to increase to approximately 40,000 per day by 2025. Having such a high volume of traffic also means that accidents are bound to occur.

In early 2005 plans were put in place to widen the road and add a left turn lane to help alleviate congestion and reduce traffic accidents. In 2003, there were 59 vehicle crashes on this two mile section of road. Eight of those crashes involved injuries to drivers or passengers. The number of crashes increased significantly in 2004, to 121, with 39 injuries. That number dropped in 2005 to 71 total crashes with, 8 injuries occurring, the same number as in 2003. The majority of the 2005 crashes were in the first 7 months of the year, before construction began. There were 20 crashes, with 2 injuries, during the 4 months construction was taking place, when lanes were reduced. Eight accidents occurred during December of 2005. No injuries were reported in any of those crashes. ¹⁶ (See Appendix A for Complete Crash Report).

The project, which should have been a straight-forward lane addition, beneficial not only local residents, but also commuters, was controversial from the beginning. Local residents objected to the Ingham County Road Commission's decision to take the needed land for the road widening from the east side of the road, which has far more residential units than the west side, which is largely commercial. The Road Commission argued that that would cost more money, as commercial property is generally more expensive. Residents than went on to argue that the Road Commission was ignoring their concerns and the case ended up in court. An Ingham county circuit judge ruled that the Road Commission violated the State of Michigan Open Meetings Act by not allowing the residents to voice their ideas and concerns before the final decision was made. A thirty day moratorium was put on the project and two public meetings were scheduled for residents to meet with Road Commission members to express their concerns and share their ideas.

After the court ordered delay and public meetings, the project went forward as originally planned. Construction began on July 28, 2005 and was concluded on November 30 that same

year. The road was widened and a left turn lane was added to the entire two mile section of the road.

What is the outcome of the lane addition? Removing drivers who are turning from through lanes helps to reduce back-ups and decrease travel times. The second perceived benefit of adding a dedicated left turn lane is to reduce vehicle accidents. In the first year after the lane addition, 2006, the number of vehicle crashes went down by only three from 2005 numbers. But a comparison to 2004 statistics shows 53 fewer accidents. There were 68 total vehicle crashes; nineteen of which included injuries. Thirty-six of those crashes were the result of one vehicle rear-ending another. That number is down from 47 rear-end collisions in 2005. Twenty-five crashes were the result of icy, wet or snowy pavement; that is up by 1 from last year.

One year later it would seem that the addition of the new lane did not do much to reduce the number of vehicle crashes. One year is probably not long enough to determine whether or not the lane addition was successful in reducing vehicle crashes. Other factors, such as vehicles driving too fast for traffic and road conditions, or drivers who are not paying attention to the road, could also be the cause of crashes. No amount of road improvements can compensate for careless or inept drivers. There was a large spike in vehicle crashes in 2004, even though the road, speed limit or number of lanes had not changed from the year before. Time will tell whether the addition of the turn lane will aid in reducing vehicle crashes.

Traffic Signal Timing

There are over 330,000 traffic signals operational throughout the United States today. Of that number, it is estimated that more than 75 percent of these are operating at less than peak efficiency.¹⁷ Traffic signals that are poorly timed cause not only driver frustration, but also add

to traffic congestion. Travel times are increased, more fuel is wasted, and more emissions are released into the air. It is frustrating for drivers, moving at a constant rate of speed, to suddenly have to stop because of a red traffic light. That frustration is increased when the driver is stopped at an empty intersection, with no vehicles crossing the intersection. Frustration elevates to greater heights when the red light lasts, or feels to the driver as if it lasts, for a long time. If one roadway has consistently more traffic than the street that intersects it, the light may favor one road over another. The green light for street A (which carries more traffic) is longer than the green light for street B. Thus the driver sitting at a red light on street B will have to wait longer. This may help to alleviate congestion and reduce travel times during heavy or peak usage times, but may cause the opposite when road demand has decreased. The person sitting at the long red light on street B is now seeing an increase to their travel time when there is no need for it. In addition to having the driver setting needlessly at the red light, fuel is being wasted and vehicle emissions are adding to air pollution.

Poorly timed traffic signals are estimated to cause approximately 300 million vehicle-hours of delay on major roadways. This is approximately 5 to 10 percent of all traffic congestion. Currently, only 30 percent of all roadways are arterials and collectors, yet they carry 56 percent of the total vehicle miles driven. Having poorly timed traffic signals only serves to make things worse. In August of 2004 a national assessment of traffic signal operations was conducted to develop the National Traffic Signal Report Card, a first of its kind report designed to gauge how traffic signals are performing. The voluntary Traffic Signal Operation Self Assessment was completed by 378 agencies in 49 states and represents about one-third of all traffic signals in the United States. The assessment included 5 sections: Proactive Management, Signal Operation in Coordinated Systems, Signal Operation at Individual

Intersections, Detection Systems and Maintenance. The overall score was a D-. This means that traffic signals are not functioning any where near as efficiently as they should be. This only serves to add to the amount of delay traveler's experience on arterial and collector roads.²⁰

There are a number of aspects that contribute to poor signal timing. They include things such as malfunctioning equipment, out-of-date traffic analysis, and not enough or poorly trained personnel. Bigger factors however, consist of such things as a lack of funding and not enough attention being paid to traffic signals by officials. Most traffic signals in operation prior to the 1950's were preprogrammed electromechanical devices that were configured manually and could have up to three timing phases each day. They were usually programmed with a morning peak travel time, off peak time and afternoon peak travel time. Given that these signals have to be programmed by hand, they are not easily controlled. They cannot respond easily to increasing or changing traffic patterns. Some of these traffic signals are still in use today. This is a testament to the durability of the equipment, but is a major cause of inefficiency and adds to congestion. Even many of the more modern traffic signals used at intersections today operate in a pre-set mode that does not detect the presence or absence of vehicles. Lights may turn red and stop traffic even when there are no cars on the intersecting roadway.²¹ Drivers who become frustrated by these types of delays may then engage in unsafe driving behaviors such as, accelerating at yellow lights to get through before the light turns red, cutting through residential neighborhoods or a business parking lot or driveway to avoid a red light or simply run the red light. This can be dangerous to not only other vehicles, but also to parked cars and pedestrians.

There are a number of things that can be done to help reduce congestion because of inefficient traffic signals. Signals need to be retimed regularly, based on changes in travel patterns and levels of traffic. Technological advances have also provided solutions to assist

traffic planners in making signals more efficient. There are a number of software packages that exist today, available from both the public and private sectors that have been developed to analyze and optimize traffic signal timing. Using models, computers examine simulated traffic scenarios and then evaluate signal operations.²² One such software is called ACS Lite. This program is designed to operate in a closed loop arterial traffic signal system; which is what approximately 90 percent of traffic signal systems in the United States are. ACS Lite software works together with an intersection controller to identify traffic flow patterns and signal timing parameters. It can then provide updated information regarding traffic to signals.²³

Locating signals to favor through traffic is another solution. It is much easier to coordinate the timing of traffic lights on major roadways, there by ensuring the continuous flow of traffic at posted speeds, if the intersections and signals are placed uniformly and with long distances between them. Poor placement of traffic signals and failure to take into account the placement of connectors or median openings, which as traffic increases may become signalized in the future, can lead to delays that computerized signal timing systems are not able to overcome. The result will be more congestion. In addition, one national study on street grids with poorly timed and inadequately spaced signals concluded that 40 percent of all motor fuel consumption was attributed to time spent idling at red lights.²⁴

The cost of retiming traffic signals varies from between \$500 and \$3000 per intersection. The benefit-to-cost ratio however, is approximately 40 to 1. This means that the benefits to drivers and municipalities greatly out way the costs. Benefits such as reduced congestion, less time and fuel wasted, less emissions released into the air, and fewer vehicle crashes results in greater road efficiency and also time, money and lives saved.²⁵

Freeway Management and Operations

Freeways located in urban areas account for less than 2.4 percent of all highway mileage but they carry approximately 20 percent of all traffic nationwide. Demand for access to highways only continues to grow. There are three basic component parts involved in providing efficient highway based transportation. They are: 1) building the necessary infrastructure; 2) preserving existing infrastructure; 3) preserving its operating capacity by managing operations on a day-to-day basis.²⁶

The era of major highway building is largely over. The emphasis today is on preserving existing roadways and making them as efficient as possible for the ever increasing number of vehicles that operate on them each day. To accomplish this, it is important to properly manage freeways.

Implementing policies, strategies and technologies to improve freeway performance is what freeway management is about. "The over riding objectives of freeway management programs are to minimize congestion, and its side effects, improve safety, enhance overall mobility, and provide support to other agencies during emergencies. The Transportation Research Board's (TRB) Freeway Operations Committee's Millennium Paper states: 'Freeway operations, in its broadest context, entails a program to combat congestion and its damaging effects: user delay, inconvenience and frustration, reduced safety, and deteriorated air quality.' Moreover, this "context" includes a vast array of freeway uses – the daily commute, commercial vehicle operations, personal and recreational trips, emergency service response, and evacuations during emergencies." These objectives need to be put into practice in order to help reduce congestion and increase safety.

When freeways become congested people are inclined to think that the way to solve the problem is simply to increase capacity, i.e., build more freeways or add lanes to existing freeways. Construction is often the number one choice for congestion reduction because it provides a visible increase in roadway capacity. It can also be politically popular because people can see that something is being done about the problem. There are a number of drawbacks to this option. First is cost, there is typically not enough money to finance all the road improvement projects that need doing. This means there is a need to stretch resources as far as possible. Another problem is that in many urban areas there is no room for freeway expansion because of development. This causes land prices to be higher, increasing the cost of the overall project. There are also environmental mitigation requirements that have to be followed.²⁸ This will usually only solve the congestion temporarily. Once the supply or road capacity has been increased, demand also increases.²⁹ That is, once capacity is augmented, people who have been using alternate routes, or other forms of transportation will begin to drive on the newly expanded roadway. Eventually the congestion problem will return. Therefore other solutions are needed to help solve the problem of congestion.

Managed Lanes

The use of managed lanes is one way to help reduce to help reduce freeway congestion.

Managed lanes include high occupancy vehicle (HOV) lanes, also known as carpool lanes.

These are dedicated lanes to be used only my vehicles with multiple occupants. The exact number of occupants varies by freeway.

Another type of managed lane is the high occupancy toll (HOT) lane. A HOT lane allows single drivers access to HOV lanes, for a price. When HOV lanes are being underutilized then single drivers can take advantage of the available capacity. An electronic devise is attached

to a vehicle; a toll is prepaid and then deducted electronically when the vehicle enters the HOV/HOT lane. The price of the toll may vary depending on time of day and the amount of traffic on the freeway at the time. This is one example of congestion or value pricing. Revenue collected from these tolls can then be used to pay for road improvements. What is congestion or value pricing? "Value pricing, also known as congestion pricing and peak-period pricing is a way of harnessing the power of the market and reducing the waste associated with congestion. It entails fees or tolls for road use that vary with the level of congestion. Fees are typically assessed electronically to eliminate delays associated with toll collection facilities." What are some benefits to be gained from utilizing congestion or value pricing? "Value pricing makes it easier for drivers to make efficient choices about when and where they travel and it helps more people commute during peak periods. In short, the public saves time and money by avoiding congestion. This helps boost productivity in the economy, reduces accidents, and lessens smog. It also improves traffic flow on the highways and gives valuable information about demand and costs to those in charge of maintaining and expanding the highways."

A third option is reversible and contra-flow lanes. These types of lanes allow for the use of under utilized lanes when traffic flow is much greater in one direction than the other. This allows for some lanes on the underutilized size to switch direction and help alleviate congestion on the opposite side. This allows more lanes to be used during peak travel times without having to construct more lanes, which is sometimes impossible. Each day thousands of people in the San Francisco bay area drive over the Golden Gate Bridge as they travel between the city of San Francisco and Marin County. "Reversible lanes were inaugurated on the roadway on October 29, 1963. Their use greatly aids the flow of traffic during the heavy morning and evening commute hours and during weekend tourist periods. At any given time, the number of lanes

northbound or southbound may be adjusted. The Bridge has six roadway lanes and during the morning commute, there are typically four lanes of traffic southbound to San Francisco and two lanes northbound to Marin County. During the afternoon commute, there are typically three lanes northbound to Marin and three lanes southbound to San Francisco."³²

A fourth strategy for managing traffic lanes is to create truck-only or truck by-pass lanes.

These allow for the separation of large freight trucks and passenger cars. Limiting interaction between large trucks and other vehicles will help to increase traffic flow and increase safety, saving time, money and lives.³³

Ramp Management

Access to the nation's interstate highway system is strictly controlled. Entry can only be gained through the use of access ramps. Proper management of these ramps can help improve the quality and safety of highways. "Ramp management involves processes that control the amount of traffic that can enter or exit the freeway in an effort to maintain or enhance operational efficiency." There are four basic strategies that have been implemented to help control and manage traffic on freeway ramps. Ramp management control devices include such things as traffic signals, signs and gates.

Traffic signals or ramp meters are used to control the number of cars attempting to enter a freeway at a given time. They also control the speed vehicles are traveling and smooth the flow of traffic as it enters a freeway. Ramp meters can be programmed to release one or more vehicles at a time, depending on freeway volumes. Meters at various ramps along stretches of the same freeway can be coordinated in order to smooth the flow of traffic at entry points. Ramp meters can help to optimize congestion and some of its effects, such as collisions and delays, because freeway entry traffic is controlled and orderly.

Another ramp management technique is closing a ramp, either temporarily or permanently, thereby preventing vehicles from using it to enter or exit a freeway. Ramp closures are a good option when traffic needs to be controlled due to a constructions work zone or special event. Ramps can be closed to all or certain types of traffic on a temporary or permanent basis or intermittently, as needed. Long established traffic patterns can be changed when ramps are closed, so this should not be used is come other ramp management technique can be used successfully. If it is necessary to close a ramp, then consideration needs to be given to how traffic will be rerouted.³⁵ This could serve to increase traffic congestion, if it is not done properly. Consideration needs to be given to traffic patterns and volumes.

A third element of ramp management is special use treatments of freeway ramps. Special use treatments involve, as the name implies, give some classes or types of vehicles preferential treatment. This can apply to the entire ramp or to a special lane, such as one for emergency or high occupancy vehicles.

The fourth element of ramp management is called ramp terminal treatments (RTT).

Ramp terminal treatments employ such strategies as signal timing, turn lanes, the widening of ramps, additional storage on adjoining arterials, signs and pavement markings. "Ramp terminal treatments are geared to improving localized problems at either entrance or exit ramp terminals.

Treatments focus on providing solutions to problems at the ramp/arterial intersection." 36

At exit ramp intersections, the strategies can be used to help keep exiting cars from backing up onto the freeway. At entrance ramps, the strategies are generally used to advance the synchronization between ramp meters and traffic signals, not enough space on the ramp for vehicles waiting to enter or exit and notifying drivers and advising alternatives.

Ramp management strategies and programs are designed to address problems relating to safety and mobility. Proper implementation of ramp management techniques can save money and lives by reducing collisions that occur on or around freeway entrance or exit ramps, which helps improve conditions and avoid delays.³⁷

In order to know if freeway management strategies are working they need to be continuously monitored and evaluated. Performance measures are a way to do that.

"Performance measures provide the basis for evaluating the effectiveness of implemented freeway management strategies, as well as for identifying the location and severity of problems, such as congestion and high accident rates."

The information collected from system monitoring can be used to track changes in performance over periods of time. This can be used to identify systems or area with poor performance, and potential causes. Furthermore, specific areas of a freeway management program that need improving can be identified. Once problems or system failures have been identified, appropriate remedies can be put in place. Performance measures are needed to gauge how a transportation system performs with regards to the goals and objectives set forth, for not only the current and on going management and operation of a system, but also for the evaluation of future options.

The use of ramp management techniques is best in high density traffic areas. In Michigan, as with so many other congestion mitigation techniques, they would be most cost effective in the larger metropolitan regions of Detroit and Grand Rapids where traffic congestion is the greatest.

Travel Demand Management

While supply side management deals with capacity issues, such as roadway, bridge and transit infrastructure, demand side strategies are designed to make existing facilities work better.

"Demand side strategies are designed to better balance people's need to travel a particular route at a particular time with the capacity of available facilities to efficiently handle this demand."

Demand side strategies focus on providing people with greater travel choices, from mode, i.e., driving or using transit, to route and departure-time. Demand side strategies also provide incentives and information to travelers so they can make educated choices. 40

General Strategies

3

Travel demand strategies are divided into two categories, general and targeted. General strategies are more broad-based strategies that included mode, route and departure time choices. They also include infrastructure and travel program investments. General strategies are divided into four categories: 1) technology accelerators, 2) financial incentives, 3) travel time incentives, and 4) marketing and education.

Technology Accelerators

Technology advances, which are discussed in various place throughout this paper, are helping to accelerate the implementation of demand side strategies by transportation agencies. Intelligent transportation systems are one example of how technological advances are affecting travel choices.

Financial Incentives

The average American household spends approximately 18 percent of total household expenses on transportation costs.⁴¹ There are a number of financial incentives that can help drivers think about alternatives to driving alone. These are especially useful for people who commute to work.

Under section 132(f) of the Internal Revenue Service code, employers can offer employees tax-free vanpool, parking and transit benefits. Employers can offer up to \$100 per

month, tax-free, to employees who take advantage of vanpool and transit services. Employees can also offer up to \$195 per month for qualified parking expenses, again tax-free (2004 tax year figures, subject to annual change). Employers also get a tax benefit, in that they can receive a deduction on their payroll related taxes for offering this benefit.⁴²

Employees can also set aside up to \$100 per month (subject to annual change) to pay for transit or vanpooling expenses. The advantage in this is that the money is pre-tax. This reduces the amount of an employees pay that is subject to tax. Employers also benefit because again, this set aside money is not subject to payroll tax.⁴³

There are other types of financial incentives that can be offered by individual companies to meet the unique needs of their employees. The use of financial incentives will only work if there are alternate transportation methods available.

Travel Time Incentives

Travel time incentives are designed to help reduce travel time. Some methods used to accomplish this, such as high occupancy vehicle lanes and access ramps, are discussed in separate sections. Another method is to provide priority parking for car and vanpools. Preferred or priority parking can include such things as covered parking or assigned spaces close to the building entrance. If employees must pay for parking, then employers could offer free parking for cars and vanpools.

Marketing and Education

Marketing and education involves making sure that people are well informed about (1) available transportation choices, (2) encourage travelers to try new or more efficient travel methods and (3) maintain and increase the incidence with which people use more efficient travel modes, routes or times.⁴⁴

Targeted Strategies

Targeted strategies, as the name implies, are demand-side strategies that are targeted to specific traveler preferences. There are four primary categories of targeted strategies including:

1) mode strategies, 2) departure time strategies, 3) route strategies, and 4) trip reduction strategies.

Mode Strategies

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The first category is mode strategies, which have to do with choosing from different methods of travel. In order to get people to try alternative transit options, instead of their cars, then they need to see transit as a convenient and cost effective option. One problem with taking transit is that is an emergency arises, they may not have a way home. Guaranteed Ride Home programs provide rides to people who do not drive to work, but then have some type of unexpected urgent situation arise. Guaranteed Ride Home promises that the person can get home, with no additional cost. The rides home may be provided by taxi, rental cars, company owned vehicles, or some other alternative mode. This method allows for people to use transit while eliminating the inconvenience of having to find a ride home in an emergency.

Providing free or subsidized transit passes to travelers on local or regional bus, rail, ferry or shuttle services is another way to perhaps get people to try transit. Passes can be provided by employers or municipalities to help alleviate traffic on overly congested highways and streets.

Shared vehicles are another mode strategy. Shared vehicles are an option for people who do not own cars but occasionally need one for special trips, such as big shopping trips or a weekend get-a-way. Car sharing, which began in Switzerland in 1987, now has over 100,000 members in the United States, utilizing 2,558 vehicles of all types. 45 "Car sharing is a system where a fleet of cars (or other vehicles) is owned and operated/overseen by a company, public agency, cooperative, *ad hoc* grouping, or even a single individual, and made available for use by

members of the car share group in a wide variety of ways. The costs and troubles of vehicle purchase, ownership and maintenance are transferred to a central organizer (the Car share Operator or more familiarly CSO)."⁴⁶ A person who would like to utilize car sharing simply needs to locate a company in their area, become a member and away they go. Members can then enjoy the benefits of having access to vehicles when needed without the cost of ownership. Unlike conventional car rental companies, these types of vehicles may be rented by the hour or the day. Car sharing companies and programs now exist in 39 cities and counties throughout the United States. They are principally located in large metropolitan areas, where traffic congestion and smog are usually the worst.

1

Departure time strategies specifically target the time people leave their current location, i.e., home or work, for a different location. People traveling for leisure or personal activities don't normally have to leave at a set time. They can alter their travel times to depart at non-peak moments. It is different for people commuting to work.

The "typical" work day in this country is 8:00am to 5:00pm. So many people work this schedule that freeways are routinely and predictably congested around those times each day. In order to reduce congestion during these "peak" travel times, employers need to be willing to help. One way to do this is to offer employees flexible work schedules. Altering work schedules so employees arrival and departure times are staggered can aid in reducing demand on roadways and/or transit systems during peak times and make the commute a bit easier for all.

Unfortunately in the state of Michigan, public transportation is limited. Many local municipalities, such as Detroit, Lansing, and Grand Rapids, have bus services available. Tax and company incentives given to employees may make this a viable option for some employees, if they live within walking distance of a transit stop. Of course adverse weather conditions may

impact mode choice, since it is not fun to stand at a bus stop in rain or snow, high heat or bitter cold. Furthermore, bus service tends to be closed looped, they only run with a specific metropolitan region. This makes it is more difficult for commuters, people who live in one area, but work in another, to use public transit as an alternative to driving. One alternative that does exist for them, depending on where they live, is Amtrak.

Amtrak train service connects 22 cities in the lower half of Michigan's Lower Peninsula. There are two east-west routes, that run from the cities of Detroit and Port Huron (on Michigan's east side), to the city of Battle Creek (on Michigan's west side). There the lines join and continue on as one to the city of Chicago, Illinois. Two smaller north-south lines also exist, one connecting the cities of Port Huron and Detroit and the other connecting Grand Rapids to the Chicago line.⁴⁷ This may be an option for commuters provided they live and work in cities along the Amtrak route. This also leaves the question of how someone gets to their place of employment from the train station. Bus service is one possibility, if it exists. Employees meeting at the train station and traveling together from there is another possibility. Employers could also assist by allowing a company owned vehicle to take employees to and from the train station at a regularly scheduled times each work day.

Route Strategies

Everyday travelers need to make choices on what route to take in order to get to their destination. People typically use a combination of information resources to establish the quickest and most reliable course to get where they need to go. TV and radio news casts typically include traffic reports, especially in larger metropolitan areas. Real time travel information is available through some intelligent transportation systems. Some people just head to their destination using the same old route and only think about alternatives if that route is

heavily congested. Demand side route strategies are designed to get timely and accurate information on road conditions to travelers before they find themselves trapped on congested roadways. They can thus choose less congested routes at the beginning of their trip. This is where systems that provide real time travel information and in-vehicle navigation systems come into play.⁴⁸

Trip Reduction Strategies

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Trip reduction strategies are designed to lessen the need for some trips. People can reduce the number of trips they make by combining what could be many trips into one. This is also another area in which employers and technology can play important roles.

Programs such as telecommuting and compressed work week can help. Telecommuting is basically using telecommunications technology such as computers, fax machines, e-mail and the internet to allow employees to set-up work stations at home. Employees can stay in touch with work centers and even access company files and directories by using current and ever evolving technologies. By working at home employees save time that would have been spent on roadways and aid in reducing congestion.

Compressed work weeks involve working more than a standard eight hours per day. By working ten hours per day, the standard forty hour work week can be achieved in four days instead of the usual five. This leaves one work day each week when employees don't have to be in the office and there are fewer cars on the road that day. Working longer hours also means some employees will be arriving at work early and leaving later. This will help ease congestion during peak travel times.⁴⁹

Traffic Incident Management

Traffic incident management involves the bringing together the resources of various public agencies and private companies to identify, respond to, and help clear roadway obstructions. Roadway obstructions or traffic incidents can include things such as vehicle crashes, stalled vehicles, spilled loads of cargo and any other debris that ends up in the roadway causing traffic delays. 51

When a traffic incident occurs, depending on what specifically happened, any number of agencies may be involved. For an vehicle accident, police, fire, emergency medical services, also known as first responders, are usually called in. First responders would then call in second responders, if it were necessary. Second responders include transportation agencies, towing & recovery services and hazardous materials removal.⁵²

It is crucial that a traffic incident management plan be worked out before a problem occurs. If first and even second responders are going to be ready when an incident occurs, they need to plan and even practice a head of time. Many hours of time and gallons of fuel will be wasted by travelers sitting in idling vehicles on a blocked roadway.

Incidents in which some or all the lanes of a roadway are blocked affects the flow of traffic far out of proportion to the number of lanes that are actually blocked. Blocking one lane of a three lane freeway will reduce that freeway's capacity by 50 percent. Blocking a second of the three lanes will further reduce capacity by an additional 30 percent, meaning that blocking two-thirds of a three lane freeway will reduce capacity by a total of 80 percent. The amount of time it takes for traffic to return to normal is increased the longer the roadway is blocked. If the incident occurs during a peak travel period, then the traffic that accumulates behind the blockage will not fully dissipate until the amount of traffic decreases. This means that traffic will not

return to normal until the peak travel time has ended. Even after lane blockage has been cleared, depending on when the incident occurred, how many lanes were blocked and for how long, it could take several hours for traffic to return to normal.⁵³

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Another problem that can happen during a traffic incident is the probability of a secondary incident. That is, some type of incident transpires in the traffic that backs up because of a primary event. This could be cars running out of gas or overheating as a result of idling. There is also the danger of vehicle accidents. If traffic comes to a halt suddenly and a driver is traveling at a high rate of speed or not paying enough attention to the road, they may not stop in time and can rear-end a stopped or slow moving car. Approximately 20 percent of all incidents are secondary in nature.⁵⁴ This serves to add to congestion by prolonging the original incident.

Incidents that occur on a freeway, forcing lane closures, affect more than just vehicles traveling on that freeway. Freeway lane closures can have a cascading effect on arterials and collector roads. Congestion occurring both on and off the freeway can limit the ability of emergency services to respond to accidents that may or may not be related to the original incident. 55

Some of the primary goals of an effective traffic incident management plan include:

- Protecting both emergency responders and travelers;
- Reduce delays and associated impacts on travelers;
- Ensure that response resources tied up at incidents are put back into service quickly.⁵⁶

The most important part is to have cooperation between responders and be prepared. A plan must be made up ahead of time and then executed when necessary.

Delays can be mitigated by implementing a previously prepared plan. It is also necessary to communicate to the public that a traffic incident has happened. Letting people know as

quickly as possible about freeway incidents allows them to take an alternate route. It is also necessary to clear incidents as quickly as possible.

3

Quick clearance is the process by which traffic obstructions and accidents are removed safely and quickly from a roadway. "Such obstructions include disabled or wrecked vehicles, debris, and spilled cargo. According to the stated definition, quick clearance practices increase the safety of incident responders and victims by minimizing their exposure to adjacent passing traffic. Also, a reduced probability of secondary incidents accompanies lower congestion levels resulting from fast removal of lane-blocking obstructions." 57

In order to implement quick clearance practices laws, policies, procedures, and infrastructure intended to ensure that traffic incidents are removed in a safe and timely manner.

Ouick clearance is designed to remove such frequent barriers to incident removal as:

- ❖ A delay in or improperly responding to a traffic incident;
- Continuing to block traffic lanes with a prolonged site investigation;
- Unclear policies, procedures or concerns over liability leading to on site indecision as to how things should be handled.

One unique aspect of quick clearance is that it goes beyond the scope of conventional incident management procedures by possible involving drivers to assist in vehicle removal.

Adopting quick clearance procedures could have a number of potential benefits for road users and the communities in which incidents occur. These benefits include decreases in the amount of congestions resulting from a traffic incident; secondary incidents; the amount of motor vehicle fuel that is wasted; emissions being released into the air by idling vehicles; response time to emergencies; driver stress levels; and aggressive driving behaviors. Quick clearance techniques also reduce the effects that traffic incidents have on freight haulers, tourism and future land use.⁵⁸

The most important element in traffic incident management is proper planning before an incident occurs. It is important to know who will do what during an incident. All responders need to be "on the same page," to be sure that traffic begins flowing again as quickly as possible.

Road Weather Management

Approximately 1.5 million traffic accidents that occur each year are the result of bad or adverse weather conditions. This results in about 800,000 injuries and 7000 fatalities. Snow, rain, ice and fog are examples of inclement weather. Each can cause roads to become hazardous and frustrate drivers by causing more than 500 million hours of delay on freeways. Not only does this cause problems for commuters and others on the road, but also effects economic productivity. While there is nothing that can be done to change or stop weather, there are things that can be done to mitigate the adverse effects of weather on roads and travelers.

Technology is a key factor in mitigating weather's effects on roads.

Understanding weathers impacts on roads is a first step to formulating techniques to help mitigate its effects. Weathers impacts on roadways can be divided into five categories: 1) ice, snow and rain cause a loss of pavement friction; 2) rain, fog and the spray from other vehicles restrict visibility; 3) standing water or snow; 4) snow blowing across road lanes; and 5) roads and bridges damaged by storms and flooding.⁶⁰ The first three of these fall into the category of operation and maintenance. Snow can be removed (plowed) and standing water pumped away. Electronic signs warning of fog ahead can help drivers to know what they are getting into before preceding. Signs can also advise of alternate routes.

Having visibility reduced, lanes blocked and a loss of friction can affect traffic flow in a number of ways. They can cause speeds to be reduced, greater variation in driver speeds, and a decrease in roadway capacity. These impacts then go on to affect other areas aspects of the

overall road system. Drivers behavior may change, not just speed, but some may delay or cancel trips. People who normally use mass transit may, if they have access to vehicles, drive to avoid waiting at bus stops or walking to a train station, in the rain or cold. Snow can also have the opposite effect, causing people to want to take trains, where an available option, to avoid delays and possible accidents on slippery, snow covered or icy roads. Bad weather can also cause traffic signals and other traffic control devices to malfunction, causing further delays and increasing the likelihood of crashes. "When expressed in terms of statistics, the magnitude of the impact of weather on traffic flow becomes apparent: speeds may drop by 10 percent for light rain and 16 to 40 percent for heavy rain or snow; capacity can decrease by 11 to 19 percent; and delays can increase by 11 to 50 percent. Clearly these impacts are large enough to warrant action and solutions exist to manage or reduce the impact of these factors." It is important that roadway managers learn to manage the transportation system under all conditions, including adverse weather. Following are examples of success stories from North Carolina and Minnesota on what can be done to mitigate the effects of weather on travel.

The Charlotte, North Carolina Department of Transportation uses a computerized control system to manage 615 traffic signals within the city. One hundred forty nine of those signals are located within the city's central business district. One those signals, the city uses a weather-related signal timing system to reduce traffic speeds during severe weather. Special signal timing can also be employed at over 350 intersections within the closed-loop system. The system employs 25 plus closed—circuit television cameras (CCTV), connected by twisted pair cables and linked by a fiber-optic cable communications system that is linked to the traffic signal computer control in the traffic operations center. After reviewing weather forecasts and current conditions and then observing traffic patterns and speeds by viewing images from the CCTV

cameras, system operators can manually implement weather-related timing plans when necessary. If vehicles are traveling to fast, then signal length, normally 90 seconds, can be increased, while offsets and splits remain the same, in order to slow down traffic. If bad weather strikes during non-peak period times, then peak period signal timing may be employed, which are designed to lower traffic speeds. System operators continually monitor road conditions and traffic flow, when the bad weather subsides, then traffic signals can be returned to normal time-of-day and day-of-week timing patterns. By employing weather-related signal timing traffic speeds can be reduced by an average of 5 to 10 miles per hour, roadway safety is increased and this, in turn, minimizes the likelihood and severity of crashes.⁶²

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Another method of helping to improve roadway safety during bad weather is the antiicing system used by the Minnesota Department of Transportation on curved and super-elevated
bridges whose pavement is known to become extremely slippery in the winter. One example of
this is on a 1,950 foot, eight-lane bridge along Interstate 35 near downtown Minneapolis. The
deck of the bridge crossed the Mississippi River and would easily freeze because of the moisture
that rose up from the water. There was an average of 25 vehicle crashes on that bridge each
winter, which increased congestion and decreased safety. An enclosure was built to house a
large chemical storage tank containing 3,100 gallon of liquid potassium acetate, a second tank
holding 100 gallons of water, the pump and control mechanisms. The system works when
"liquid potassium acetate is pumped through the delivery system to 38 valve bodies installed in
the median barrier. The valves direct the anti-icing chemical to 76 spray nozzles. Sixty-eight
nozzles are embedded in the bridge decks of both northbound and southbound lanes. The
nozzles are installed in the center of travel lanes at a spacing of [55 feet]. Eight barrier-mounted
nozzles are located at the north end of the bridge to spray approach and exit panels." Two

types of environmental sensor stations were installed on the bridge. The first is designed to monitor air, pavement and subsurface temperatures as well as detect pavement conditions, precipitation type and intensity. The second sensor station is only for the monitoring of pavement temperature and conditions. Environmental sensors determine whether or not the pavement wet or dry, in addition to whether or not the pavement temperature is cold enough for moisture on the roads surface to freeze.

The system is controlled by a computer that constantly gathers data from the environmental sensors which are used to predict the possibility of and detect the presence of snow or ice. When preset threshold conditions are detected a computer sends out a signal, activating flashing beacons located on the bridges entrance ramps to warn motorists of slippery conditions. The same computer also checks the chemical delivery system for leaks and then commences of the 13 preprogrammed spray patterns. A typical spray cycle dispenses roughly 34 gallons of potassium acetate or 12 gallons per lane mile over a 10 minute period. This aids in melting ice and snow and makes the bridge safer to travel on in the winter. Conventional ice and snow removal techniques, like plowing, salting and laying down sand are used to supplement the automated system during heavy storms or when snow accumulates on the bridge.

A sixty-eight percent decline in winter accidents was achieved in the first year after the anti-icing system was installed. Fewer accidents mean an increase in mobility and a reduction in congestion. A third benefit was also improved productivity due to lower material costs and enhanced winter maintenance operations throughout the area.⁶⁴

While there is no way to hold back the weather, there are technologies, both existing and developing, that can help reduce the impacts on roadways, reducing congestion and increasing safety.

Michigan has a climate similar to that of Minnesota. Winter in both states means ice, snow and slippery pavement on roads. Highway bridges and overpasses here in Michigan carry signs warning of the possibility of ice on pavement due to moisture and precipitation that has frozen because of drops in temperature. An anti-icing system like the one employed by the Minnesota Department of Transportation should work here in Michigan as well. Areas such as Detroit and Grand Rapids, which are the largest population centers in the state, would seem to be the best and most cost effective places to implement such a system. Keeping heavily traveled bridges and freeway overpasses free of ice and snow would aid in reducing accidents, saving money for both drivers and the state in the form of lower insurance rates and less money spent on emergency services. It would be up to the Michigan Department of Transportation to identify the locations that would give the state the greatest return on their investment. Identifying factors such as the number and types of vehicles using a particular stretch of highway, the number and severity of vehicle accidents, and the cost to the state for emergency services to aid accident victims could be used. While no two roadways are exactly the same, conditions can be similar. There is no reason not to believe that the technology used in Minnesota would not also work well here in Michigan.

Special Events Traffic Management

Special events add to congestion because they increase demand for access to specific roads, i.e., people traveling to a sporting events, concert or county fair, leading to the venue hosting the event. They can also cause some roads to be closed completely, i.e., a street fair or parade.

Unlike most other types of congestion, special events are not unexpected. They are usually planned weeks, if not months, in advance. They are also typically well publicized. If

drivers know that a particular road will have increased traffic due to a planned event, they can plan in advance to take an alternate route. The same holds true for roads that are closed. Drivers may choose to avoid a particular area altogether during the time the event is occurring, plus a period of time before and after that avoid the increased traffic. As a result of drivers using alternate routes, traffic will increase on those roads. This could have a cascade effect on large areas of a transportation network, as people look for alternate routes to avoid event traffic.

In order to mitigate the congestion caused by special events, it is important that public agencies, such as police and emergency services, work together with event planning and venue officials. Currently, "advanced planning, proactive management and control of traffic in support of planned special events are not yet commonly accepted or consistently applied practices."65 To do this, event operators, public agencies and service providers, which don't normally work together, need to start. They should work together to plan and coordinate events before they begin, during the actual event and after it is over. It also requires that the appropriate resources be allocated to support such activities and practices. Current practices are usually not performed for all events within a metropolitan area, but are typically event specific. To improve current practices, new local initiatives may be needed. They should focus on facilitating "advanced planning, coordination, proactive management, and control of traffic for all planned special events within a region or for specific events."66 Preparations for increased traffic need to be put into place as an event is being planned. Traffic routes need to be mapped out in advance, marked with clear, easy to read signs placed along the entrance route so that arriving attendees know which direction to go and where to park. If normal traffic direction patterns are to be temporarily changed, i.e., turning what is normally a two-way road into a one-way road, for traffic entering or exiting a venue, this also needs to be clearly posted and alternatives provided for thru traffic.

Each fall, East Lansing, Michigan residents can count on two things happening, approximately 45,000 students will return to the Michigan State University campus and football season will begin. Six to seven home football games are played at Spartan Stadium each season. They attract approximately 75,000 ticket holders, who watch the game from inside the stadium and hundreds more who get together on the campus with friends to be near the action. All this attracts thousands of vehicles of all sizes to the campus each game day.

While this may be good for local businesses, such as restaurants who serve hungry game goers and stores mobbed with people loading up on game and tailgating supplies, it is a major inconvenience for those not attending the game. Increased congestion on surrounding roads that non-game attendees have to deal with makes getting where they need to go all the more difficult.

Since the public knows well in advance when home games are played, the best option for people not attending the game is to just stay clear of the area on those days. Congestion would be much worse were it not for the special events traffic plan that the University has and uses each game day. The Michigan State University police department even includes a special events unit.

A few elements of the plan, according to Inspector Kelly Beck of the special events unit, include coordinating with the East Lansing police department to help control traffic on public roads which border the campus. The campus has several large outlying parking lots which are always filled to capacity on game day. After parking, attendees are shuttled to the stadium. This helps to cut down the number of cars which need to enter the actual campus. On campus road use is restricted. Some roads are closed to all traffic and others can only be used by parking lot shuttles buses dropping off and picking up attendees. Some attendees have special parking passes which entitle them to on campus parking. They may also use the same roads as shuttle buses. When the game is over and people are leaving campus, those roads open up to help

facilitate departure. Some two-way roads become one-way roads for a brief time, again to help attendees exit campus quickly. If there was not traffic plan and attendees were allowed to drive and park where ever they wanted, with no control, people would spend much more time sitting in traffic coming and going on game days.

Construction and Work Zones

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In the United States, as of the year 2000, there were 3,936,232 miles of public roads.⁶⁷ This includes interstate highways, other freeway and expressways, arterials, collectors, and local roads. Many of today's interstate highways are well over 30 years old, having been built in the 1950's, 1960's and 1970's. Today few new freeways are being built and the focus is on maintaining the infrastructure that currently exists.

During the summer of 2001, there were approximately 3110 road construction work zones on United States highways. This meant that about 13 percent of the National Highway System was under construction, reducing capacity by over 20,000 miles of roadway. What did not decrease, however, was demand. In fact, over the past 20 years freeway lane miles have increased by only 5 percent, while vehicle miles of travel grew by approximately 79 percent.⁶⁸ The demand for access to interstate highways far exceeds capacity.

Reducing this capacity during road repairs only makes this worse. Road repair however, must be done. Concrete and steel were not made to last forever and need maintenance. It is important to make the time roads are under repair as easy as possible for travelers.

The first and most obvious step is to make sure that travelers know the road work is going on. The information needs to be accurate and issued for enough in advance so people can make informed choices about travel times and routes.⁶⁹

Some current methods for providing information on road construction are via web sites, traffic reports on radio and articles in local newspapers. Road signs are also usually posted well in advance of a construction project, letting travelers know when a project will begin.

An emerging technology to help travelers learn about the location of construction projects and other types of congestion causing problems is the 511 traveler information phone number. "On March 8, 1999, The U.S. Department of Transportation (USDOT) petitioned the Federal Communications Commission (FCC) to designate a nationwide three-digit telephone number for traveler information. This petition was formally supported by 17 State DOTs, 32 transit operators, and 23 Metropolitan Planning Organizations and local agencies. On July 21, 2000 the Federal Communications Commission designated "511" as the single traffic information telephone number to be made available to states and local jurisdictions across the country."⁷⁰ As of August 1, 2005, the service was available in 23 states and Northern California. It was accessible to approximately 32 percent of the United States population, with plans for 7 more states to launch the service by the end of 2006. This would bring the percentage of the population with access to 511 services to 54 percent. The "As the 511 traveler information" telephone service is implemented and becomes more available across the country, detailed information will be accessible for anyone with a phone, enabling motorists to plan for the inconvenience of delays and remain in control of their own schedules. Increasingly, the 511 service is providing the real-time information necessary to choose alternate routes, and times of day for travel."72 Since this service will eventually be nation wide, it will be of great benefit not only to local drivers, but also to long distance travelers. Interstate travel will be more convenient because people will know in advance if lanes are reduced or roads are closed altogether.

Alternate routes can be planned in advance, if necessary, saving driver's time, inconvenience, and frustration.

Other elements to consider when dealing with road construction include deciding whether to do the construction during the day or at night. One advantage to nighttime construction is that there is much less traffic on the road. It is usually more convenient for drivers because road lanes, depending on what exactly is being done, can remain open. This means less congestion for drivers. Currently over one-quarter of road work is done at night.⁷³ If road work is being done at night then issues need to be taken into account that do not exist during the day. One of the primary issues is visibility. At night, when visibility is greatly reduced people tend to drive at a higher rate of speed, because there is usually less traffic on the road. Drivers can come upon a traffic work zone quickly, especially if the work has not been publicized. This can cause greater harm for drivers and workers. Nighttime work zones must be well lit and greater traffic control measures need to be taken. Illuminated signs warning of the upcoming work zones need to be posted, speeds reduced and drivers given plenty of notice about upcoming work zones.

If road work is to be done during the day then a decision must be made on whether to keep the roadway open, with reduced lanes in use, or to close the road completely. There are advantages and issues with each. "Full road closure alleviates the potential for long-term traffic congestion and improves safety by reducing crashed and other incidents. In the full-closure strategy, the roadway is closed, traffic rerouted, and the contractor given full access to the roadway. Full closure strategies are used to help reduce the construction period, improve quality, increase safety by reducing traveler exposure to complex work zones and separate the road worker from the hazard of freeway traffic." Although it may seem a drastic step and of greater inconvenience to travelers, the advantages of being able to work on the entire road at

once and getting the project completed faster may be worth whatever temporary inconvenience it causes drivers; the added benefit to road workers is they are in a much safer environment without drivers going by. Full closure can be used for some, but not all of the duration of a project. In addition full closure could occur at night or on weekends when there is less traffic.

Full lane closures are best used when there are clear and easy alternatives for rerouting traffic, such as where there are several freeways or major arterials close together and running in the same direction, east-west or north-south. This allows the rerouted traffic to be spread out among multiple roadways and may help to reduce the congestion caused by the construction project. In the state of Michigan, this may work best in larger metropolitan areas, such as Detroit and Grand Rapids, where more road lanes, freeway and arterial, exist. In less populated regions, such as small suburbs or rural areas, there are typically fewer alternatives. Full closure of a highway or major roadway may necessitate a very long detour. In addition, if it is the only alternate route heading in a particular direction, north-south or east-west, and all traffic must use it, congestion will increase significantly.

Partial road closure exists when only some of the lanes on a road are closed during construction or repair projects. This has the advantage of keeping at least part of the road open for use. This could lead to more congestion than completely closing the road because of bottlenecks that can occur because of closed lanes. Road workers can also be put at greater risk working in such close proximity to moving vehicles. It may also take longer to complete the project if only part of the road is closed at a time. Whether a full or partial road closure is warranted should be decided on a case by case basis.

Quick construction strategies are designed to speed road work projects. They include such things as using precise sections of pavement that will easily fit together on site.

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Additionally, concrete that cures quickly and machines that guarantee pavement is smooth before it dries can help to further ensure shorter construction periods.⁷⁵

Another method for reducing congestion due to road work is to give contractors an incentive to complete the work quickly. One such method is an innovative contracting technique known as A + B bidding. It is a cost-plus-time bidding process that decides on a contractors bid based on the cost of the bid (A) and time needed to complete the project (B) or at least the critical portion of it. "The intent of this kind of bidding is to provide an incentive for the contractor to minimize delivery time for high-priority and congested roadways by offering incentives for early completion and disincentives for late completion." This strategy works especially well for road work that needs to be done on heavily traveled roads.

Another innovative technique used to give contractors an incentive to complete projects as quickly as possible is called lane rental. Lane rental involves charging the contractor a fee for occupying non-work lanes or the shoulder to do contract work.⁷⁷

In Michigan, summer not only means hot weather, but also the beginning of what is called "pothole or road construction season." Potholes and cracked or broken pavement are created by cold weather, which cause cement to expand and contract causing cracks to form.

Water from rain or snow gets inside the cracks and freezes when temperatures drop. This causes the cracks to get bigger and with the added weight of heavy vehicles, the cement will break apart and holes can form. The use of ice melts, usually salt, to help keep roads free of ice and snow, and therefore safer for vehicles, only exacerbates the problem. Each summer the Michigan Department of Transportation and many local road commissions, begin repairs on hundreds of miles of roads within the state. This causes a real headache for drivers who have to endure lane

closures, traffic tie-ups, and slow going through construction zones. Road repairs, however, have to be made. It is simply best to get them done as swiftly as possible.

According to Larry Doyle at the Michigan Department of Transportation, MDOT uses financial incentives and disincentives to help get road repairs completed more quickly. For one thing, they do, in some cases, charge companies contracted to do repair work lane rental fees for the use of any lane or lanes not under construction. In addition bonuses are given for early completion of a project. By the same token, a penalty is charged if the work is not completed on time (as per the contract) or simply drags on with no solid reason for a delay, i.e. long periods of bad weather, when work cannot be done.

Conclusion

7

There are more vehicles on the road today than at any other time. More vehicles mean more congestion, increased travel time and a decrease in safety. Congestion costs are high, not only in terms of money, time and resources wasted, but also the number of lives lost each year due to vehicle crashes. Advances in technology will help to alleviate congestion and increase safety.

The cost of implementing new technologies can be expensive, sometimes to the point of being prohibitive. When it comes to allocating the limited funds state & local governments and transportation agencies get, the first thought is generally to put the money into the repair and upgrading of roadways. People can see and feel potholes, cracks and broken pavement. They are typically the easiest to fix. The problem is that with more and more vehicles being added to roadways, congestion is only going to get worse. The need to invest money in the technologies that will help to ease that congestion is essential. Starting with smaller, simpler projects, such as improvements in traffic signal timing, is one way to begin. As technologies evolve, costs usually

decrease. This may make implementation easier for cash strapped governments and transportation agencies.

Drivers must also do their part by being willing to explore and use alternative transportation methods, when they exist. Further, it is essential to understand that there are costs to congestion that have to be paid. Changing driver's attitudes about driving alone in their cars, increasing the use of things such as carpools and public transportation, and helping educate the public of the costs of congestion are some key ways to help reduce road congestion.

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Okemos Road Crash Report Summary

				Reason for Collision	Collision		Pavement	Pavement Conditions
		Crashes that	Rear-End	Animal	Side		lcy/Wet	
ar	Total Crashes	Include Injuries	Injuries Collisions	Collisions	Swipe	Other	Snowy	Dry
2003	69	8	32	4	10	13	15	44
2004	121	68	83	2	11	22	43	32
2005	1.7	8	47	2	5	14	24	4
2006	89	19	36	3	6	20	52	4

Ingham County

Report Module: Safety Management Analysis

Today's Date: Thursday, November 30, 2006

Dates: 7/1/2003 to 7/1/2005

PR/RoadName: 362602: Okemos Rd

Milepoints: From 7.108 To 9.116

Sort Order: Road Name, Milepoint, Date of Crash

Milepoint Intersection Name

0.000 Okemos Rd & E Columbia St & N Jefferson

0.267 Okemos Rd & N Rogers St

0.558 Mason Hills Dr & Okemos Rd & Coppersmit

3.152 Lamb Rd & Okemos Rd

6.693 Okemos Rd & Okemos/E I 96 RAMP 5.163 Okemos Rd & Willoughby Rd

7.008 Okemos Rd & University Park Dr & Woodlak

7.267 Jolly Oak Rd & Okernos Rd

7.812 Okemos Rd & Club Meridian Dr 7.573 Okemos Rd & Fox Hollow Dr

8.842 Riverwood Dr & Okernos Rd 8.470 Okemos Rd & Sower Blvd

9.010 Okemos Rd & Shawnee Trl

9.405 Clinton St & Okemos Rd 9.658 Kent St & Okemos Rd

10.203 Okemos Rd & Central Park Dr

11.000 Okemos Rd & Quarry Rd

11.584 Haslett Rd & Okemos Rd 12.019 Okemos Rd & Village Dr

0.157 Randolph St & Okemos Rd

1.143 Okemos Rd & W Howell Rd 0.405 Valley Ct & Okemos Rd

4.156 Holt Rd & Okemos Rd

6.168 Sandhill Rd & Okemos Rd

6.896 Okemos Rd & Okemos/W I 96 RAMP 7.108 Jolly Rd & Okemos Rd

7.313 Association Dr & Okemos Rd

7.945 Okemos Rd & Heritage Ave 7.646 Okemos Rd & Knob Hill Dr

8.662 Okemos Rd & Woodfield Rd 8.856 Hulett Rd & Okemos Rd

9.116 Okemos Rd & E Mount Hope Rd

9.861 Okemos Rd & W Grand River Ave 9.484 Hamilton Rd & Okemos Rd

10.663 Gaylord C Smith Ct & Okernos Rd 11.258 Okemos Rd & Songbird Pointe 11.664 Blue Lac Dr & Okemos Rd

12.160 Lake Lansing Rd & Okemos Rd

0.237 Ann St & Okemos Rd

0.484 Mason Hills Dr & Okemos Rd 2.145 Okemos Rd & Harper Rd 4.910 Willoughby Rd & Okernos Rd

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7.210 Hampton PI & Okemos Rd

7.428 Coyote Creek Dr & Okemos Rd 7.658 Okemos Rd & Tamarack Dr 8.063 Okemos Rd & Bennett Rd & Kinawa Dr

8.935 Kewanee Way & Okemos Rd 8.759 Science Pkwy & Okemos Rd

9.562 Methodist St & Okemos Rd 9.234 Okemos Rd & Wonch Dr

10.112 Hillcrest Ave & Okemos Rd

10.874 Banyon Trl & Okemos Rd 11.407 Okemos Rd & Raby Rd

1.735 La Mer Ln & Okemos Rd

Page 2 of 8

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6900634 Mendral Tup 250* N JOLLY JOLLY OLLY Rear-End Straight PDO 63020204 MONOHOHM 2 5 9 Wednascay Clear Daylight Dy 63020204 MONOHOHM 2 2 2 0 Sunday Clear Daylight Dy 127/2003 ORPMAGEN 3 4 1 Monday Clear Daylight Dy 0 Sunday Clear Daylight Dy 0 Sunday Clear Daylight Dy 0 Sunday Clear Daylight Dy 0	7.155	5958571 Mendian Twp	250. N	חסררג	Rear-End Straight	PDO	3/13/2004	03PM-04PM	က	8	0	Saturday	Cloudy	Daylight	Dry	On Road
400 NW JOLLY Rear-End Straght PDO 127/2003 03PM-04PM 2 2 0 Sunday Clear Daylight Dry 0 4189523 Mendian Twp 400'N JOLLY Rear-End Straght Injury 1/26/2040 05PM-06PM 3 4 1 Monday Clear Dayk Slushy 0 4271458 Mendian Twp 391'S JOLLYOAK Masc-End Straght Injury 1/26/20/203 05PM-06PM 2 0 Wednesd Clear Daylight Dry 0 4390086 Mendian Twp 532'N JOLLYOAK Rear-End Straght Injury 1/31/2003 02PM-03PM 2 1 Thursday Clear Daylight Dry O 4211964 Mendian Twp 528'N JOLLY OAK Rear-End Straght Injury 1/32/2004 05PM-05PM 2 1 Thursday Clear Daylight Dry O 4211964 Mendian Twp 200'S JOLLY OAK Rear-End Straght Injury 1/32/2004 05PM-05PM 2 1 Thursday Clear	7.156	6808634 Meridian Twp	250' N	יסררא	Side-Swipe Same	PDO	6/30/2004	MOON-01PM	2	sc.		Wednesday	Clear	Daylight	ογ	On Road
4189523 Mandian Twp 400 M JOLLY OAK Rear-End Straight Injury 1726-2004 GPM-06PM 3 4 1 Monday Snow Dusk Slushy On 4271458 Mandian Twp 391'S JOLLYOAK Masc. Multiple Vahicle PDO 87020203 GPM-06PM 2 2 0 Wordnesd Straight Dry 67020203 GPM-06PM 2 2 0 Wordnesd Straight Dry 67020203 GPM-05PM 2 2 1 Thursday Cloudy Day/ight Dry 0	7.184	5666625 Mendian Twp	400. NW	JOLLY	Rear-End Straight	8		03PM-04PM	7	7	0	Sunday	Clear	Daylight	٩	On Road
4390086 Mendian Twp 530'N JOLLY OAK Rear-End Straight Injury 7/31/2003 02PM-03PM 2 2 1 Thursday Cloudy Dayingth Dry On 2523377 Mendian Twp 520'N JOLLY OAK Rear-End Straight Injury 7/31/2003 02PM-03PM 2 2 1 Thursday Cloudy Dayingth Dry On 2533377 Mendian Twp 200'S JOLLY OAK Rear-End Straight PDO 1/4/2004 05PM-03PM 2 2 2 1 Thursday Cloudy Dayingth West On 24369988 Mendian Twp 200'S JOLLY OAK Rear-End Straight PDO 1/4/2004 05PM-03PM 2 2 2 2 Finday Clear Dayingth Dry On 24369988 Mendian Twp 100'S JOLLY OAK Rear-End Straight PDO 1/4/2004 05PM-03PM 2 2 2 2 Finday Clear Dayingth Dry On 1/4/2004 05PM-03PM 2 2 2 2 Finday Clear Dayingth Dry On 2749990 Mendian Twp 100'S JOLLY OAK Sear-End Straight PDO 1/4/2004 05PM-03PM 2 2 2 2 Finday Clear Dayingth Dry On 1/4/2004 05PM-03PM 2 2 2 2 Finday Clear Dayingth Dry On 1/4/2004 05PM-03PM 2 2 2 2 Finday Clear Dayingth Dry On 1/4/2004 05PM-03PM 2 2 2 2 Finday Clear Dayingth Dry On 1/4/2004 05PM-03PM 2 2 2 2 Finday Clear Dayingth Dry On 1/4/2004 05PM-03PM 2 2 2 2 Finday Clear Dayingth Dry On 1/4/2004 05PM-03PM 2 2 2 2 2 Finday Clear Dayingth Dry On 1/4/2004 05PM-03PM 2 2 2 2 Finday Clear Dayingth Dry On 1/4/2004 05PM-03PM 2 2 2 2 Finday Clear Dayingth Dry On 1/4/2004 05PM-03PM 2 2 2 2 Finday Clear Dayingth Dry On 1/4/2004 05PM-03PM 2 2 2 2 Finday Clear Dayingth Dry On 1/4/2004 05PM-03PM 2 2 2 2 Finday Clear Dayingth Dry On 1/4/2004 05PM-03PM 2 2 2 2 Finday Clear Dayingth Dry On 1/4/2004 05PM-03PM 2 2 2 2 2 Finday Clear Dayingth Dry On 1/4/2004 05PM-03PM-03PM 2 2 2 2 2 Finday Clear Dayingth Dry On 1/4/2004 05PM-03PM-03PM 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	7.184	4169523 Meridian Twp	400. N	חסררג	Rear-End Straight	Injury	1	05PM-06PM	۳	4	-	Monday	Snow	Dusk	Slushy	On Road
4390006 Mendian Twp 520 N JOLLY Rear-End Straight Injury 7/31/2003 (2PM-03PM) 2 2 1 Thursday Cloudy Daylight Dry 4390006 (APM-03PM) 2 2 1 Thursday Cloudy Daylight Dry 430,2004 (APM-03PM) 2 2 1 Finday Cloudy Daylight Wet On 4211564 Mendian Twp 200°S JOLLY OAK Rear-End Straight PDO 1/41/2004 (APM-03PM) 2 5 0 Sunday Ciear Daylight PV 0 4211564 Mendian Twp 150°S JOLLY OAK Rear-End Straight PDO 1/41/2004 (APM-03PM) 2 2 7 Finday Ciear Daylight PV 0 421169 Mendian Twp 100°S JOLLY OAK Rear-End Straight PDO 1/11/2004 (APM-05PM) 2 2 2 Finday Ciear Daylight PV 0 421169 Mendian Twp 100°S JOLLY OAK Rear-End Straight PDO 1/11/2005 (APM-05PM) <th>7.190</th> <th>4271458 Meridian Twp</th> <td>391. S</td> <td>JOLLYOAK</td> <td>Misc. Multiple Vehicle</td> <td>PDO</td> <td></td> <td>05PM-06PM</td> <td>2</td> <td>2</td> <td></td> <td>Wednesday</td> <td>Clear</td> <td>Dayiight</td> <td>Day</td> <td>On Road</td>	7.190	4271458 Meridian Twp	391. S	JOLLYOAK	Misc. Multiple Vehicle	PDO		05PM-06PM	2	2		Wednesday	Clear	Dayiight	Day	On Road
523337 Mendian Twp 528 N JOLLY OAK Rear-End Straight Injury 4/30/2004 06PM-07PM 2 3 1 Finday Rain Daylight Wet On 4211964 Mendian Twp 200°S JOLLYOAK Side-Swipe Same PDO 1/4/2004 04PM-05PM 2 5 6 6 5 6	7.208	4390086 Meridian Twp	230. N	JOLLY	Rear-End Straight	Injury		02PM-03PM	2	2		Thursday	Cloudy	Daylight	Dry	On Road
421964 Mandian Twp 200°S JOLLYOAK Rear-End Straight PDO 8.17,2004 04PM-05PM 2 6 6 Sunday Clear Daylight Dry On 4286988 Mandian Twp 200°S JOLLYOAK Side-Swipe Same PDO 1/4,2004 04PM-05PM 2 2 2 7 Friday Clear Daylight Dry On 4212169 Mandian Twp 100°S JOLLYOAK Rear-End Straight PDO 1/17,2004 05PM-04PM 2 2 2 2 7 Friday Clear Daylight Dry On 4212169 Mandian Twp 100°S JOLLYOAK Side-Swipe Same PDO 1/17,2004 05PM-05PM 2 2 0 Sunday Rain Dark, Lighted Wet On 7549890 Mandian Twp 100°S JOLLYOAK Side-Swipe Same PDO 1/17,2004 05PM-05PM 2 3 0 Friday Clear Daylight Wet On 7549890 Mandian Twp So'S JOLLYOAK Rear-End Straight PDO 5/14,2005 02PM-03PM 2 2 0 Saturday Cloudy Daylight Wet On 8665350 Mandian Twp So'S JOLLY OAK Rear-End Straight PDO 5/14,2005 02PM-03PM 2 2 0 Tuesday Clear Daylight Wet On 8665350 Mandian Twp So'S JOLLY OAK Rear-End Straight PDO 9/12,2004 05PM-03PM 2 2 0 Tuesday Clear Daylight Wet On 8665350 Mandian Twp So'S JOLLY OAK Rear-End Straight PDO 9/12,2004 05PM-03PM 2 2 0 Tuesday Clear Daylight Wet On 8665350 Mandian Twp So'S JOLLY OAK Rear-End Straight PDO 9/12,2004 05PM-03PM 2 2 0 Tuesday Clear Daylight Wet On 8665350 Mandian Twp So'S JOLLY OAK Rear-End Straight PDO 9/12,2004 05PM-03PM 2 2 0 Tuesday Clear Daylight Wet On 8665350 Mandian Twp So'S DAW	7.208	5233377 Meridian Twp	528' N	אסררג	Rear-End Straight	Injury		06PM-07PM	2	၈	-	Fnday	Rain	Dayiight	Wet	On Road
4389999 Mandian Twp 200'S JOLLY OAK Side-Swipe Same PDO 1/4/2004 03PM-04PM 2 4 0 Sunday Snow Daylight Icy On 4212169 Mandian Twp 150'S JOLLY OAK Másc. Multiple Vehicle Injury 10/8/2004 03PM-04PM 2 2 2 2 2 2 2 3 0 Finday Daylight Dry On 4212169 Mandian Twp 100'S JOLLY OAK Rear-End Straight PDO 11/12/2004 05PM-07PM 2 2 0 Sunday Rain Daylight Dry On 7549890 Mandian Twp 50'S JOLLY OAK Rear-End Straight PDO 3/1/2005 02PM-03PM 2 3 0 Finday Cloudy Dry Dry On 7296980 Mandian Twp 50'S JOLLY OAK Rear-End Straight PDO 3/1/2005 02PM-03PM 2 4 0 Saturday Cloudy Daylight We; On 5666350 Mandian Twp 50'S JOLLY OAK <	7.229	4211964 Meridian Twp	200. S	JOLLYOAK	Rear-End Straight	PDO	ı	02PM-03PM	7	'n	0	Sunday	Ciear	Daylight	ογ	On Road
6809328 Mandian Twp 150'S JOLLY OAK Mac. Multiple Vahicle Injury 10/8/2004 03PM-04PM 2 2 2 2 2 6 Finday Clear Daylight Dry 07 4212169 Mandian Twp 100'S JOLLY OAK Rear-End Straight PDO 1/1/2304 05PM-06PM 2 3 2 3 2 3 4 3 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	7.229	438998 Meridian Twp	200. S	JOLLY OAK	Side-Swipe Same	P00	1	04PM-05PM	7	4	0	Sunday	Snow	Daylight	lcy	On Road
4212169 Manidian Twp 100'S JOLLY OAK Rear-End Straight PDO 1/11/2004 06PM-07PM 2 2 0 Sunday Rain Dark. Lighted Wet 6809143 Manidian Twp 100'S JOLLY OAK Side-Swipe Same PDO 1/1/23/2004 05PM-06PM 2 3 0 Tuesday Cloudy Dusk Dry 7596906 Manidian Twp 50'S JOLLY OAK Rear-End Straight PDO 3/11/2005 02PM-03PM 2 3 0 Finday Clear Daylight Dry 7596906 Manidian Twp 50'S JOLLY Rear-End Straight PDO 5/14/2005 02PM-03PM 2 4 0 Salurday Clear Daylight Wet 5666350 Manidian Twp 25'S OAK Rear-End Straight PDO 9/14/2005 02PM-03PM 2 4 0 Salurday Clear Daylight Wet	7.239	6809328 Meridian Twp	150'S	JOLLY OAK	Misc. Multiple Vehicle	Injury		03PM-04PM	7	2	7	Friday	Clear	Daylight	Š	On Road
6809143 Mendian Twp 100'S JOLLY OAK Side-Swope Same PDO 11/23/2004 05PM-06PM 2 3 0 Tuesday Cloudy Dusk Dry 7549800 Mendian Twp 50'S JOLLY OAK Rear-End Straight PDO 3/11/2005 02PM-03PM 2 3 0 Fnday Cloudy Daylight Dry 7296808 Mendian Twp 50'S JOLLY Rear-End Straight PDO 5/14/2005 02PM-03PM 2 4 0 Saturday Cloudy Daylight Wet 5666350 Mendian Twp 25'S OAK Rear-End Straight PDO 9/23/2003 08AM-09AM 2 2 0 Tuesday Clear Daylight Dry	7.248	4212169 Meridian Twp	100.8	חסררג	Rear-End Straight	PD0		06PM-07PM	~	2	0	Sunday	R.	Dark, Lighted	Vet	On Road
7549890 Menidian Twp 50° SE JOLLY OAK Rear-End Straight PDO 3/1/2005 NOON-01PM 2 3 0 Fnday Clear Daylight PV 7296908 Menidian Twp 50° SE JOLLY Rear-End Straight PDO 5/14/2005 02PM-03PM 2 4 0 Saturday Cloudy Daylight Wet 5666350 Menidian Twp 25° S OAK Rear-End Straight PDO 9/23/2003 08AM-09AM 2 2 0 Tuesday Clear Daylight Dry	7.248	6809143 Meridian Twp	100.8	JOLLY OAK	Side-Swipe Same	P00	11/23/2004	05PM-06PM	7	e	0	Tuesday	Cloudy	Dusk	ğ	On Road
7298808 Menidian Twp 50'SE JOLLY Rear-End Straight PDO 5/14/2005 02PM-03PM 2 4 0 Saturday Cloudy Daylight Wet 5686350 Menidian Twp 25'S OAK Rear-End Straight PDO 9/23/2003 08AM-09AM 2 2 0 Tuesday Clear Daylight Dry	7 258	7549890 Mendian Twp	\$.05	JOLLY OAK	Rear-End Straight	PDO	3/11/2005	NOON-01PM	2	3	0	Fnday	Clear	Dayight	ρ _γ	On Road
5666350 Meridian Twp 25'S OAK Rear-End Straight PDO 9/23/2003 08AM-09AM 2 2 0 Tuesday Clear Daylight Dry	7.258	7296808 Meridian Twp	20. SE	JOLLY	Rear-End Straight	PDO	5/14/2005	02PM-03PM	2	4	0	Saturday	Cloudy	Daylight	We:	On Road
	7.262	5666350 Mendian Twp	25. \$	OAK	Rear-End Straight	PD0	9/23/2003	08AM-09AM	2	2	0	Tuesday	Ciear	Daylight	وم	On Road

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Poi	MilePoint UD10 # UD10 City/Township	UD-10 Crash Location	h UD-10 Crossroad Reference	Crash Type	Crash Severity	Date	Occurence	, ,	Number of.	<u> </u>	Weekday	Weather	Lighting	Surface	On Road
7.263	4568304 Meridian Twp	l	JOLLY OAK	Rear-End Straight	8	9/26/2003	9/26/2003 06PM-07PM	~	~	٥	Fnday	Cloudy	Daylight	δ	On Road
7.264	4169427 Mendian Twp	S.S	JOLLYOAK	Fixed Object	8	7/8/2003	08AM-09AM	-	-	0	Tuesday	Cloudy	Daylight	δ	On Road
7.267	5666125 Mendian Twp	30. €	JOLLY OAK	Angle Straight	8	11/3/2003	11/3/2003 01PM-02PM	2	7	0	Monday	Ran	Daylight	Wet	On Road
267	4390006 Mendian Twp	ò	JOLLY OAK	Angle Tum	004	1/15/2004	1/15/2004 NOON-01PM	2	so.	0	Thursday	Cloudy	Daylight	lcy	On Road
267	5958439 Meridian Twp	30. €	JOLLY OAK	Angle Straight	80	3/26/2004	04PM-05PM	2	2	0	Friday	Rain	Daylight	Wet	On Road
7.267	5958970 Mendian Twp	30.€	JOLLY OAK	Angle Straight	8	4/16/2004	05PM-06PM	2	2	•	Fnday	Cloudy	Daylight	Day	On Road
7.267	6808780 Meridian Twp	15. W	JOLLY OAK	Angle Straight	8	6/17/2004	02PM-03PM	2	6	0	Thursday	Cloudy	Daylight	Wet	Uncoded
7.267	6808980 Meridian Twp	10 €	JOLLY OAK	Head-On Left-Turn	8	6/21/2004	03PM-04PM	2	6	0	Monday	Coudy	Daylight	è	On Road
7.267	6808689 Meridian Twp	5. W	JOLLY OAK	Angle Tum	8	6.25,2004	08PM-09PM	2	2	0	Friday	Ciear	Daylight	Ą	On Road
7.267	6809291 Mendian Twp	10. €	JOLLY OAK	Rear-End Straight	8	10/11/2004	07AM-08AM	2	2	0	Monday	Clear	Daylight	Ą	On Road
268	5233416 Meridian Twp	S.S	JOLLY OAK	Head-On Left-Turn	8	5:6:2004	11AM-NOON	7	2	0	Thursday	Clear	Daylight	Dγ	On Road
276	6808843 Mendian Twp	N.06	JOLLYOAK	Rear-End Straight	8	8/27:2004	07AM-08AM	2	2	0	Fnday	Rain	Dayiight	Wet	On Road
7.281	5666332 Meridian Twp	N.52	JOLLY OAK	Rear-End Straight	hjury	11/14/2003	11/14/2003 05PM-06PM	9	ro.	2	Fnday	Cloudy	Dusk	۵۰۶	On Road
7.286	7549917 Mendian Twp	100.N	JOLLY OAK	Rear-End Straight	004	3/10/2005	05PM-06PM	7	6	۰	Thursday	Snow	Daylight	Snowy	On Road
7.313	5666052 Meridian Twp	10.€	ASSOCIATION	Angle Turn	900	10/17/2003	10/17/2003 10AM-11AM	2	2	0	Friday	Clear	Daylight	Dry	On Road
7.387	6809165 Mendian Twp	634' N	JOLLY OAK	Rear-End Straight	800	3/10/2005	3/10/2005 05PM-06PM	2	2	0	Thursday	Snow	Dawn	Snowy	On Road
7.390	4169399 Meridian Twp	S.002	COYOTE CREEK	Rear-End Straight	Injury	12/22/2003	12/22/2003 Unknown	2	2	•	Monday	Cloudy	Dark	Ω ζ	On Road
7.400	5233369 Meridian Twp	150°S	COYOTE CREEK	Rear-End Straight	Injury	4/8/2004	4/8/2004 09PM-10PM	2	2	-	Thursday	Cloudy	Dark	we:	On Road
904	4390375 Mendian Twp	150.8	COYOTE CREEK	Animal	PDO	4/8/2004	09PM-10PM	-	-	0	Thursday	Clear	Dark	Day	On Road
419	7549662 Mendian Twp	\$.05	COYOTE CREEK	Rear-End Drive	PD0	3/22/2005	3/22/2005 03PM-04PM	2	2	0	Tuesday	Cloudy	Dayinght	Day	On Road
426	6809208 Meridian Twp	10.8	COYOTE CREEK	Rear End Left Tum	Injury	9:8/2004	07PM-08PM	2	2	-	Wednesday	Cloudy	Dayiight	Dry	On Road
7.427	6808985 Meridian Twp	7.SE	COYOTE CREEK	Rear-End Straight	P00	7/13/2004	08AM-09AM	7	2	0	Tuesday	Clear	Daylight	Ωγ	On Road
7.447	6808686 Mendian Twp	100. N	COYOTE CREEK	Rear-End Straight	8	6/21/2004	06PM-07PM	6	6	۰	Monday	Rain	Daylight	Wet	On Road
7.528	5958544 Meridian Twp	S .989	TAMARACK	Side-Swipe Same	004	3/30/2004	05PM-06PM	2	7	٥	Tuesday	Cloudy	Daylight	Dry	On Road
7.545	6809178 Meridian Twp	150.8	FOX HOLLOW	Rear-End Straight	004	4/18/2005	02PM-03PM	2	2	0	Monday	Clear	Daylight	Dry	On Road
7.574	6808692 Meridian Twp	S.	FOX HOLLOW	Head-On Left-Turn	PDO	6/29:2004	04PM-05PM	2	-	0	Tuesday	Clear	Dayiight	Dry	On Road
7.577	6808608 Meridian Twp	20. N	FOXHOLLOW	Rear-End Straight	PDO	8/23/2004	02PM-03PM	ဗ	၈	0	Monday	Cloudy	Dayugnt	Dry	On Road
7.579	566048 Mendian Twp	N.08	FOX HOLLOW	Side-Swipe Same	P00	10/6/2003	05PM-06PM	7	၈	0	Monday	Clear	Daylight	Dry	On Road
582	5666493 Mendian Twp	N .09	FOX HOLLOW	Rear-End Straight	PD0	12/9/2003	05PM-06PM	2	2	0	Tuesday	Rain	Dark, Lighted	Wet	On Road
639	6808817 Mendian Twp	100.8	TAMARAK	Rear-End Straight	P00	8/5/2004	03PM-04PM	2	2	0	Thursday	Clear	Daylight	Ş	On Road
7.639	6808619 Mendian Twp	100.8	TAMARACK	Rear-End Straight	P00	10/7:2004	06PM-07PM	2	2	0	Thursday	Clear	Dayiight	Dry	On Road
7.639	7549725 Meridian Twp	100.8	TAMARAK	Rear-End Straight	PDO	11/24/2004	06PM-07PM	2	3	0	Wednesday	Wind	Dark, Lighted	Snowy	On Road
7.646	5666316 Mendian Twp	0. X	KNOBHILL	Rear-End Straight	PDO	8/3/2003	05PM-06PM	3	3	0	Wednesday	Ciear	Daylight	ο	On Road
7.648	6810100 Meridian Twp	10. N	KNOBHILL	Rear-End Straight	PDO	6/21/2005	6/21/2005 08PM-07PM	2	3	0	Tuesday	Clear	Daylight	ğ	On Road
7.649	1														

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UD-10 Crossrood Refunes Creath Type Creath Type Creath Type Creath Control VRAN Coccup NR VRAND Coccup NR VRAND COCCUP NR UD-10 Crossrood NR VRAND COCCUP NR VRAND COCCUP NR NR VRAND COCCUP NR			10-40 Crack					Hour	Ź	Number of:			Envir	Environmental Condition	r con	Relationship
4000030 Memorah may 37.3 FAMANDACA Ramifications on 10.18 (MANDACA) Ramifications on 10.18 (MANDACAA) <th>MilePol</th> <th>nt UD10 # UD10 City/Township</th> <th>Location</th> <th></th> <th></th> <th>Crash Severity</th> <th>Date</th> <th>Occurence</th> <th>.</th> <th>Occup.</th> <th>Ę</th> <th>Weekday</th> <th>Weather</th> <th>Lighting</th> <th>Surface</th> <th>On Road</th>	MilePol	nt UD10 # UD10 City/Township	Location			Crash Severity	Date	Occurence	.	Occup.	Ę	Weekday	Weather	Lighting	Surface	On Road
6900000 Manchan Trage 38.9 TAMARROCK Rase Fost Left Trage PODO 6202000 Manchan Trage 0.0 Thomase Trage 0.0 Thomase Trage 0.0 Displayed Manchan Trage 0.0 1.0 Thomase Trage 0.0 1	7.651	4390345 Meridian Twp	37.8	TAMARACK	Rear-End Straight	PD0	10/19/2003	03PM-04PM	2	2	0	Sunday	Clear	Daylight	Š	On Road
6900021 Ministration 28.5 TAMARROCK Reservicia Simplication Project Occupant C 19,000 CORPUSIDED 2 Significant Color Displication 45100000 Ministration 28.5 TAMARROCK Reservicia Simplication POD 717,1000 Ministration 2 1 Finish Cloud Chippin 42172000 Ministration 38.7 TAMARROCK Reservicid Simplication POD 717,1000 Ministration 2 1 Finish Cloud Displication 5568001 Ministration 100.1 Ministration 100.1 Ministration 2 1 Finish Cloud Displication 4217200 Ministration 100.1 Ministration 1 1 Finish PST-2000 CIPULATION 2 1 Ministration Cloud Displication 421720 Ministration 100.1 Ministration Ministration PST-2000 CIPULATION 2 2 1 Ministration Cloud Displication 421720 Ministration 2 2 Ministration Ministration Mini	7.651	6809205 Mendian Twp	32.8	TAMARACK	Rear End Left Turn	8	9/2/2004	06PM-07PM	6	-	0	Thursday	Clear	Daylight	δ	On Road
6000000 Marchani Top 20.5 NAMBACK Raad-Ed-Straph Inyo 10,237,004 MORDAN 2 1 Fronty Chough Day of Pringh	7.652	6808978 Meridian Twp	30.8	TAMARACK	Rear-End Straight	lnjury	6/19/2004	05PM-06PM	7	0	۳	Saturday	Clear	Daylight	ρίγ	On Road
4711200 Mandam Tage 67. X. MAMAROK Raw-End Strapt POD 7111200 Mandam Tage 7. Frieday Chandam Cage Chandam Cage <t< td=""><td>7.654</td><th>6809508 Mendian Twp</th><td>S.02</td><td>TAMARACK</td><td>Rear-End Straught</td><td>rojon</td><td>10/29/2004</td><td>NOON-01PM</td><td>2</td><td>2</td><td>-</td><td>Fnday</td><td>Cloudy</td><td>Daylight</td><td>5</td><td>On Road</td></t<>	7.654	6809508 Mendian Twp	S.02	TAMARACK	Rear-End Straught	rojon	10/29/2004	NOON-01PM	2	2	-	Fnday	Cloudy	Daylight	5	On Road
422000 Ministrating 20 MM TAMANCK Raye-End Strapt PDO 16,2004 G/MANDAM 2 mm 1 must be to the property of the prop	7.658	4211930 Meridian Twp	v.o	TAMARACK	Rear-End Straight	88	7/11/2003	NOON-01PM	6	6	0	Friday	Cloudy	Daylight	È	On Road
598.000 Ministral Trip 35 NM TAMARACK Rate For Let Trin Injuit 58.500.00 GaPALAGEM 2 5 1 Salectory Certain Day 100 Trip 783.00.00 Ministral Trip 10.01 10.01 10.00	7.662	4212006 Mendian Twp	20. NW	TAMARACK	Rear-End Straight	8	1/6/2004	07AM-08AM	2	۳	0	Tuesday	Cloudy	Dawn	lCy	On Road
2008-051 Minician Tivo 100 Mill Nood-HULL Raiv-End Dive Injury 1277/2004 ORD-NO-DIVA 2 1 Frings Charge Day-pill 598-8421 Minician Tivo 150 M TAMARAK Sepecial Sama Injury 357-200 ORD-NO-DIVA 2 3 0 Injury 500-00-DIVA 598-8421 Minician Tivo 150 M 140 M <td< td=""><td>7.665</td><th>5958981 Meridian Twp</th><td>35. NW</td><td>TAMARACK</td><td>Rear End Left Turn</td><td>lnjury</td><td></td><td>04PM-05PM</td><td>2</td><td>2</td><td>-</td><td>Saturday</td><td>Clear</td><td>Daylight</td><td>δ</td><td>On Road</td></td<>	7.665	5958981 Meridian Twp	35. NW	TAMARACK	Rear End Left Turn	lnjury		04PM-05PM	2	2	-	Saturday	Clear	Daylight	δ	On Road
5956437 Merician Trap 75 M TAMANAK Side-Sived Street Injury 324/2004 OFFIANSON 2 1 Wedneted Trap Clock Day (0) 421201 Merician Trap 150 M 150 M 140 M 1475010 Merician Trap 2 3 1 Number 10 M Chock Day (0) 585643 Merician Trap 150 M 150 M Merician Trap 300 M 100 M Merician Trap 2 1 Truntaday Color Day (0) Day (0) 660547 Merician Trap 200 S CLUB MERICIAN Rear-End Strapin PDO 113,2003 1584-668M 2 1 Truntaday Color Day (0) 566035 Merician Trap 200 S CLUB MERICIAN Rear-End Strapin PDO 113,2003 1584-668M 2 1 Truntaday Color Day (0) 566035 Merician Trap 200 S CLUB MERICIAN Rear-End Strapin PDO 113,2003 1584-668M 2 2 0 Merician Strapin Day (0) 113,2003 1584-668M 2 2 0 Merician Strapin Day (0) 113,2003 1584-668M	7.665	7549693 Meridian Twp	100. N	KNOB HILL	Rear-End Drive	lnjury	12/17/2004	03PM-04PM	2	6	-	Friday	Clear	Dayligh:	Š	On Road
2012012 Mancian Tugo 155 N TAMAROAK Raar-End Drue PDO 1155 DRU GARH-GERM 2 1 Fundato Clear Dayight 868566 Mancian Tugo 150 N 1 AMAROAK Raar-End Graph Input 55 2004 1 AMAROAK 2 2 1 Invusato Clear Dayight 8600547 Mancian Tugo 400 N 400 N NAME AMAROAK Raar-End Graph Input 65 2004 1 AMAROAK 2 1 1 Turvato Dayight 860017 Mancian Tugo 200 S CLUB MERDIDAM Raar-End Graph PDO 117,0000 1 SPM-ABRA 2 1 1 Turvato Dayight 866017 Mancian Tugo 25 S CLUB MERDIDAM Raar-End Straght PDO 112,0000 1 SPM-ABRA 2 2 0 Mancian Tugo 0 Mancian Tu	7.672	5958437 Meridian Twp	N.S.	TAWARAK	Side-Swipe Same	lujury	3/24/2004	01PM-02PM	2	6	-	Wednesday	Cloudy	Daylight	Wet	On Road
6508551 Manclan Tuyo 150 N TAMARACK Raa-End Stragm Iny 56/2004 ORNA-COMM 2 1 Thurday Cough Day-gible 6008551 Manclan Tuyo 200 LUB MERIDIAN Maca-End Stragm POO 11/9/2005 10AAAAAAAAA 4 0 Maca-End Stragm Day-gible 6608571 Manclan Tuyo 200 CLUB MERIDIAN Rear-End Stragm POO 91/22003 05HAGAAA 2 4 0 Maca-End Stragm 508 GLUB MERIDIAN Rear-End Stragm POO 91/22003 05HAGAAAA 2 4 0 Maca-End Stragm 968 91/2004 05HAGAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA	7.686	4212012 Mendian Twp	150.N	TAMARAK	Rear-End Drive	88	1/15/2004	04PM-05PM	2	6	0	Thursday	Clear	Dayiight	lcy	On Road
6008627 Mendean Tep 2007 MORBHILL MACE Multiple Vance PDO 1179 2005 11AAH-NOON 2 1 1 1 Levelage 5 George Day got 6608067 Mendean Tep 2005 S. CLUB MERIDIAN Raaz-End Shaper Injury 6 83004 11AAH-NOON 2 1 1 1 Levelage Cear Day got 5666071 Mendean Tep 35 S. CLUB MERIDIAN Reaz-End Shaper PDO 113,2003 GPM-GPM-R 2 2 2 2 1 1 Levelage Cear Day got 5666021 Mendean Tep 25 S. CLUB MERIDIAN Reaz-End Shaper PDO 1113,2003 GPM-GPM-R 2 2 2 Medical Shaper Day got 5668021 Mendean Tep 10 S. CLUB MERIDIAN Reaz-End Shaper PDO 11118,2004 GBM-GPM-R 2 2 Medical Shaper Cear Day got 5668021 Mendean Tep 10 S. CLUB MERIDIAN Reaz-End Shaper PDO 11118,2004 GBM-GPM-R 2 2 2 Medical Shaper Day GBM-GPM-GPM-R 2 2 2 3 3 3 3	7.686	5958866 Meridian Twp	150° N	TAMARACK	Rear-End Straight	lnjury		03PM-04PM	7	2	-	Thursday	Cloudy	Daylight	کم	On Road
60000017 Manchain Tupe 200 S CLUB MERIDIAN Rasi-End Stapint PDO 6122003 GPM-SDRM 2 4 0 Finding Cear Day-gight 5660018 Manchain Tupe 30 S CLUB MERIDIAN Rasi-End Stapint PDO 91222003 GPM-SDRM 2 4 0 Finding Cear Day-gight 5660018 Manchain Tupe 25 S CLUB MERIDIAN Rasi-End Strapint PDO 117,02003 GPM-SDRM 2 4 0 Monrada Cear Day-gight 5660017 Manchain Tupe 10 C CLUB MERIDIAN Rasi-End Strapint PDO 117,02003 GPM-SDRM 2 2 Wednesday Cear Day-gight 5660017 Manchain Tupe 10 C CLUB MERIDIAN Rasi-End Strapint PDO 117,02003 GPM-SDRM 2 2 Wednesday Cear Day-gight 5660017 Manchain Tupe 10 C CLUB MERIDIAN Rasi-End Strapint PDO 117,02003 GPM-SDRM 2 2 Wednesday Cear Day-gight 5660017 Manchain Tupe 10 C CLUB MERIDIA	7.722	6809547 Meridian Twp	N.004	KNOBHILL	Misc. Multiple Vehicle	88	1/19/2005	11AM-NOON	6	4	0	Wednesday	Snow	Daylight	Snowy	On Road
5666018 Mancian Tupo 30 S CLUB MERIDIAN Rear-End Straght PDO 91/22/003 03PM-40PM 2 4 0 Finds Coles Day/gitt 5666017 Mancian Tupo 25 S CLUB MERIDIAN Rear-End Straght PDO 91/02/030 39PM-40PM 2 0 Mecrasa Clear Day/gitt 8666017 Mancian Tupo 25 S CLUB MERIDIAN Rear-End Straght PDO 11/12/000 02PM-40PM 2 0 Mecrasa Clear Day/gitt 5666017 Mancian Tupo 0 T C CLUB MERIDIAN Rear-End Straght PDO 11/12/2004 02AM-60AM 2 0 Webriesa Clear Day/gitt 5666017 Mancian Tupo 10 E CLUB MERIDIAN Rear-End Straght PDO 11/12/2004 02AM-60AM 2 0 Webriesa Clear Day/gitt 566017 Mancian Tupo 10 E CLUB MERIDIAN Rear-End Straght PDO 11/12/2004 02AM-60AM 2 0 Webriesa Clear Day/gitt 566017 Mancian Tupo 10 E CLUB MERIDIAN Rear-End	7.774	6808677 Mendian Twp	S.002	CLUB MERIDIAN	Rear-End Drive	lnjury	6:8/2004	11AM-NOON	2	-	-	Tuesday	Clear	Dayiight	ζ	On Road
3666329 Marcian Tupp 25 S CLUB MERIDAM Raar-End Sinaphi PDO 91/0 2003 G3PM-G4PM 2 3 0 Mechasidary Circle MeRIDAM Raar-End Sinaphi PDO 11/12/2003 G9PM-G4PM 2 4 0 Mechasidary Circle MeRIDAM Rear-End Sinaphi PDO 11/12/2003 G9PM-G4PM 2 2 Mechasidary Circle Meridada PDO 11/12/2003 G9PM-G4PM 2 2 Mechasidary Circle Meridada PDO 11/12/2003 G9PM-G4PM 2 2 Mechasidary Circle Meridada Meridada Circle Meridada Meridada Circle Meridada Meridada PDO 11/12/2003 G9PM-GAM-GAMA 2 2 2 Meridada PDO 11/12/2003 G9PM-GAM-GAMA 2 2 Meridada Meridada <td>7.806</td> <th>5666018 Meridian Twp</th> <td>30.8</td> <td>CLUB MERIDIAN</td> <td>Rear-End Straight</td> <td>PD0</td> <td>8/22/2003</td> <td>05PM-06PM</td> <td>2</td> <td>4</td> <td>0</td> <td>Friday</td> <td>Clear</td> <td>Daylight</td> <td>ړ٥</td> <td>On Road</td>	7.806	5666018 Meridian Twp	30.8	CLUB MERIDIAN	Rear-End Straight	PD0	8/22/2003	05PM-06PM	2	4	0	Friday	Clear	Daylight	ړ٥	On Road
5666325 Meridan Tupp 25°S CLUB MERIDIAN Raar-End Sinaght PDO 113,2003 GSPH4,0PM 2 2 Wednessay Clear Dayight 5666325 Meridan Tupp 25°S CLUB MERIDIAN Raar-End Sinaght Inyry 622,2005 GSPH4,0PM 2 2 Wednessay Clear Dayight 5666523 Meridan Tupp 0°X CLUB MERIDIAN Raar-End Sinaght PDO 12,172,003 MONOLISM 2 2 Wednessay Clear Dayight 4608423 Meridan Tupp 1°C CLUB MERIDIAN Raar-End Sinaght PDO 11,178,2005 GBM4,09AM 2 3 0 Mentasay Clear Dayight 4568304 Meridan Tupp 1°C CLUB MERIDIAN Raar-End Sinaght PDO 11,178,2005 GBM4,09AM 2 0 Mentasay Clear Dayight 4568304 Meridan Tupp 50°S HERITAGE Raar-End Sinaght PDO 11,178,2005 GBM4,09AM 2 0 Muncasay Clear Dayight 4680370 Meridan Tupp 50°S HERITAGE Raar-End Sinaght <td< td=""><td>7.807</td><th>5666037 Meridian Twp</th><td>25.8</td><td>CLUB MERIDIAN</td><td>Rear-End Drive</td><td>00</td><td>9/10/2003</td><td>03PM-04PM</td><td>2</td><td>e.</td><td></td><td>Wednesday</td><td>Clear</td><td>Daylight</td><td>Š</td><td>On Road</td></td<>	7.807	5666037 Meridian Twp	25.8	CLUB MERIDIAN	Rear-End Drive	00	9/10/2003	03PM-04PM	2	e.		Wednesday	Clear	Daylight	Š	On Road
4680213 Meridian Trop 25 S CLUB MERIDIAN Raar-End Straight Injury 6221/2005 02PM-03PM 2 PV Vedresalsy Corp Dayight 566623 Meridian Trop 0 X CLUB MERIDIAN Angle Dive PDO 1277/2003 MONOIPM 2 2 Vivedresalsy Cloudy Dayight 6808473 Meridian Trop 10 E CLUB MERIDIAN Rear-End Straight PDO 11/12/2005 GBAM-05RM 2 3 0 Thursday Cloudy Dayight 74698473 Meridian Trop 1320 S BENNET Animal PDO 11/12/2005 GBAM-05RM 2 3 0 Thursday Cloudy Dayight 4588300 Meridian Trop 350 S HERTAGE Rear-End Straight PDO 11/12/2005 GBAM-05RM 2 2 0 Thursday Cloudy Dayight 6808312 Meridian Trop 300 S HERTAGE Rear-End Straight Injury 92/2/2004 GBAM-05RM 2 2 0 Thursday Cloudy Dayight 6808323 Meridian Trop 300 S HERTAGE Rear-End Straight	7.807	5666305 Mendian Twp	25. S	CLUB MERIDIAN	Rear-End Straight	8	11/3/2003	05PM-06PM	2	4		Monday	Rain	Dark	Wet	On Road
5606032 Mandlan Tup 0°X CLUBMERIDIAN Angle Dnee PDO 1217/2003 NOON 01PM 2 2 0 Wednesday Cloudy Dayight 68080472 Mandlan Tup 10°E CLUB MERIDIAN Rear-End Straght PDO 11/18/2004 08AAA-08AA 2 3 0 Thurlday Cloudy Dayight 68080472 Mandlan Tup 10°E CLUB MERIDIAN Rear-End Straght PDO 11/18/2004 08AAA-08AA 2 3 0 Thurlday Cloudy Dayight 75480303 Mandlan Tup 30°S HERITAGE Rear-End Straght PDO 11/18/2003 1AAA-08AM 2 3 0 Thursday Cloudy Dayight 6808076 Mandlan Tup 30°S HERITAGE Rear-End Straght Injury 92/2004 05PM-05PM 2 1 Thursday Cloudy Dayight 6808239 Mandlan Tup 30°S HERITAGE Rear-End Straght Injury 12/13/2004 05PM-05PM 2 1 1 1 Injury 12/13/2004 05PM-05PM 2 1 1 1	7.807	8165257 Meridian Twp	52. S	CLUB MERIDIAN	Rear-End Straight	lnjury	6/22/2005	02PM-03PM	2	2	2	Wednesday	Clear	Daylight	٥	On Road
6809472 Mendelar Tup 10°E CLUB MERIDIAN Rear-End Straght PDO 11/18/2004 08AM-09AM 2 3 0 Thursday Cloudy Dayight 7549503 Mendelar Tup 10°E CLUB MERIDIAN Rear-End Straght PDO 11/18/2004 08AM-09AM 2 3 0 Thursday Cloudy Dayight 4588503 Mendelar Tup 30°S HERTAGE Rear-End Straght PDO 11/18/2004 08AM-03AM 2 3 0 Thursday Cloudy Dayight 5868013 Mendelar Tup 50°S HERTAGE Rear-End Straght PDO 10/12/2003 1AAM-03AM 2 3 0 Thursday Cloudy Dayight 8808170 Mendelar Tup 30°S HERTAGE Rear-End Straght Injury 12/13/2004 04PM-05PM 2 1 Thursday Cloudy Dayight 8808244 Mendelar Tup 30°S HERTAGE Rear-End Straght Injury 12/13/2004 04PM-05PM 2 1 Thursday Cloudy Dayight 8608244 Mendelar Tup 20°S HERTAGE </td <td>7.812</td> <th>5666632 Mendian Twp</th> <td>o X</td> <td>CLUBMERIDIAN</td> <td>Angle Drive</td> <td>Ş</td> <td>12/17/2003</td> <td>MOON-01PM</td> <td>~</td> <td>2</td> <td>0</td> <td>Wednesday</td> <td>Cloudy</td> <td>Daylight</td> <td>ις</td> <td>On Road</td>	7.812	5666632 Mendian Twp	o X	CLUBMERIDIAN	Angle Drive	Ş	12/17/2003	MOON-01PM	~	2	0	Wednesday	Cloudy	Daylight	ις	On Road
6809473 Mencian Tup 10°E CLUB MERIDIAN Rear-End Straight PDO 11/18/2004 06AM-09AM 2 3 0 Thursday Cloudy Davight 7548503 Mencian Tup 1320°S BENNETT Animal PDO 11/18/2005 0FM-07PM 1 1 0 Tuesday Cloudy Davight 4568306 Mencian Tup 530°S HERITAGE Rear-End Straight PDO 10/27003 07AM-08AM 2 0 Tuesday Cloudy Davight 8608178 Mencian Tup 300°S HERITAGE Rear-End Straight Injuy 9/22004 0FM-05PM 2 0 Tuesday Cloudy Davight 8808432 Mencian Tup 300°S HERITAGE Rear-End Straight Injuy 12/13/2004 0FM-05PM 2 1 Thursday Uncoded Davight 8808432 Mencian Tup 300°S HERITAGE Rear-End Straight Injuy 12/13/2004 0FM-05PM 2 1 Thursday Uncoded Davight 8808432 Mencian Tup 300°S HERITAGE Ammal Injuy	7.812	6809472 Meridian Twp	10' E	CLUB MERIDIAN	Rear-End Straight	P00	11/18/2004	08AM-09AM	2	3	0	Thursday	Cloudy	Dayight	Wet	On Road
7456203 Manchan Twp 530°S ERNIETT Rear-End Straight PDO 11472050 GPAMORAM 1 1 0 Tuesday Clear Dark 4568030 Manchan Twp 530°S HERITAGE Rear-End Straight PDO 10122003 17AMAROR 2 3 0 Tuesday Clear Dayight 868013 Manchan Twp 500°S HERITAGE Rear-End Straight Injuy 9172004 3PMA04PM 2 2 0 Tuesday Clear Dayight 8680872 Manchan Twp 300°S HERITAGE Rear-End Straight Injuy 91212004 3PMA04PM 2 2 0 Tuesday Clear Dayight 8680873 Manchan Twp 300°S HERITAGE Rear-End Straight Injuy 12132004 3PMA05PM 2 0 1 1 0 1 1 0 1 1 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0	7.812	6809473 Mendian Twp	10' E	CLUB MERIDIAN	Rear-End Straight	PDO	11/18/2004	08AM-09AM	2	٣	0	Thursday	Cloudy	Daylight	Wet	On Road
4568304 Mandam Twp 530 S HERITAGE Rear-End Straght PDO 1022033 17AM-NOSM 2 3 0 Thursday Clear Dayight 566013 Mandam Twp 500 S HERITAGE Rear-End Drve PDO 81122033 11AM-NOSM 2 0 1 0 10-047 Dayight 6808376 Mandam Twp 400 S HERITAGE Rear-End Straght Injury 9122004 03PM-04PM 2 1 7 1 7 10-047 Dayight 6808373 Mandam Twp 300 S HERITAGE Rear-End Straght Injury 1213.2004 04PM-05PM 2 1 7 1-045 Dayight 6808450 Mandam Twp 300 S HERITAGE Rear-End Straght Injury 129.2030 05PM-06PM 2 1 A norday Mind Dayight 8608244 Mandam Twp 200 S HERITAGE Sade-Swipe Same PDO 1272.2004 04PM-05PM 2 1 A norday Mind Dayight 8508244 Mandam Twp 100 S HERITAGE Animal PDO	7.813	7549503 Meridian Twp	1320. S	BENNETT	Animal	8	1/4/2005	06PM-07PM	-	-	0	Tuesday	Clear	Dark	Wet	On Road
5666013 Manidan Twp 500°S HERITAGE Rear-End Druve PDO 8/12/2003 11AA-HOON 2 2 0 Tuesday Cloudy Daylight 8608708 Manidan Twp 40°S HERITAGE Rear-End Straght Injury 9/2/2004 03PA-04PM 2 4 1 Thurday Cloudy Daylight 8608872 Manidan Twp 30°S HERITAGE Rear-End Straght Injury 8/27/2004 04PA-05PM 2 1 Thurday Cload Daylight 8608453 Manidan Twp 30°S HERITAGE Rear-End Straght Injury 12/3/2004 04PA-05PM 2 3 0 Monday Wind Dusk 8608454 Manidan Twp 20°S HERITAGE Rear-End Straght Injury 12/3/2004 04PA-05PM 2 3 0 Monday Wind Dusk 8608454 Manidan Twp 20°S HERITAGE Animal PDO 12/3/2004 04PA-05PM 2 3 0 Monday Wind Dusk 8608424 Manidan Twp 20°S HERITAGE Animal	7.845	4568306 Meridian Twp	530. S	HERITAGE	Rear-End Straight	8	10/2/2003	07AM-08AM	2	m	0	Thursday	Clear	Dayight	δ	On Road
6808372 Meridian Twp 400'S HERITAGE Raar-End Straight Injury 9/2/2004 GPM-04PM 2 4 1 Thursday Clear Daylight 6808372 Meridian Twp 300'S HERITAGE Raar-End Straight Injury 12/13/2004 6PM-05PM 2 1 Fnday Uncoded Uncoded 6808373 Meridian Twp 300'S HERITAGE Rear-End Straight Injury 12/13/2004 6PM-05PM 2 3 0 Monday Wind Dusk 8608450 Meridian Twp 200'S HERITAGE Rear-End Drive Injury 12/13/2004 04PM-05PM 2 3 0 Monday Wind Dusk 8608454 Meridian Twp 200'S HERITAGE Animal PDO 12/13/2004 1AM-06PM 2 3 0 Monday Wind Duskight 8808624 Meridian Twp 200'S HERITAGE Animal PDO 12/2/2004 1AM-06PM 2 3 0 Monday Nind Daylight	7.850	5666013 Mendian Twp	S .005	HERITAGE	Rear-End Drive	800	8/12/2003	11AM-NOON	2	2	0	Tuesday	Cloudy	Daylight	مُ	On Road
6809329 Mendian Twp 300°S HERITAGE Rear-End Straight Injury 12713/2004 GPDM-05PM 2 1 Friday Uncoded Uncoded Uncoded 8809339 Mendian Twp 300°S HERITAGE Rear-End Straight Injury 12/13/2004 05PM-06PM 2 3 0 1 Monday 2 3 0 Monday Wind Dusk 6809450 Mendian Twp 300°S HERITAGE Rear-End Drive Injury 12/13/2004 07M-05PM 2 3 0 Monday Wind Dusk 6809244 Mendian Twp 200°S HERITAGE Animal PDO 10/27/2004 11AM-NOON 1 1 1 1 Monday Rain Daylight 6809244 Mendian Twp 200°S HERITAGE Animal PDO 12/25/2005 7AM-08AM 1 1 4 0 Wednesday Clear Daylight 7549638 Mendian Twp 5° HERITAGE Rear-End Straight PDO 11/19/2003 0.2M-0.	7.869	6808706 Meridian Twp	\$.00 7	HERITAGE	Rear-End Straight	lnjury	l	03PM-04PM	~	4	-	Thursday	Clear	Daylight	ځ	On Road
6809339 Mendian Tup 300'S HERITAGE Rear-End Straight Injury 12/13/2004 05PM-06PM 2 6 1 Monday Wind Dusk 6809450 Mendian Tup 300'S HERITAGE Side-Swipe Same PDO 12/13/2004 04PM-05PM 2 3 0 Monday Wind Dusk 6809628 Mendian Tup 200'S HERITAGE Animal Injury 6/72004 11AA-NOON 1 1 1 1 Monday Rin Dayight 6809624 Mendian Tup 200'S HERITAGE Animal PDO 10/27/2004 05PM-05PM 1 1 4 0 Wednesday Clear Dayight 6809624 Mendian Tup 200'S HERITAGE Animal PDO 10/27/2004 05PM-05PM 1 1 4 0 Wednesday Clear Dayight 866558 Mendian Tup 20'S HERITAGE Rear-End Straight PDO 11/19/2003 05PM-05PM 2 0 Wednesday Clear Dayight 5666158 Mendian Tup 20'S	7.888	6808872 Meridian Twp	300. S	HERITAGE	Rear-End Straight	Injury		04PM-05PM	7	7	-	Friday	Uncoded	Uncoded	Uncoded	Or Road
6809450 Mendian Twp 300'S HERITAGE Side-Swipe Same PDO 12/13/2004 04PM-05PM 2 3 0 Monday Wind Dusk 5866541 Mendian Twp 200'S HERITAGE Animal Injury 12/9/2003 07AM-08AM 2 3 2 3 2 1 Lesday Rain Daylight 6808244 Mendian Twp 200'S HERITAGE Animal PDO 12/2/2004 08PM-09PM 1 1 4 0 Wednesday Clear Daylight 7549653 Mendian Twp 200'S HERITAGE Animal PDO 12/2/2004 08PM-08PM 1 1 1 Monday Clear Daylight 8165444 Mendian Twp 50'S HERITAGE Rear-End Straight PDO 11/19/2003 06PM-0PM 2 0 Wednesday Clear Daylight 5666158 Mendian Twp 20'S HERITAGE Rear-End Straight PDO 11/19/2003 06PM-0PM 2 4 0 Wednesday Clear Daylight 7549708 Mendian Twp 25'S <td>7.888</td> <th>6809339 Mendian Twp</th> <td>300. S</td> <td>HERITAGE</td> <td>Rear-End Straight</td> <td>Injury</td> <td>12/13/2004</td> <td>05PM-08PM</td> <td>7</td> <td>•</td> <td>-</td> <td>Monday</td> <td>Wind</td> <td>Dusk</td> <td>Snowy</td> <td>On Road</td>	7.888	6809339 Mendian Twp	300. S	HERITAGE	Rear-End Straight	Injury	12/13/2004	05PM-08PM	7	•	-	Monday	Wind	Dusk	Snowy	On Road
5866541 Mendian Twp 200'S HERITAGE Rear-End Drive Injury 12/9/2003 07AM-08AM 2 3 2 Tuesday Rain Daylight 8808626 Mendian Twp 200'S HERITAGE Animal Injury 67/2004 11AM-NOON 1 1 1 1 Monday Clear Daylight 6809244 Mendian Twp 200'S HERITAGE Animal PDO 2/25/2005 07AM-08AM 1 1 1 1 Monday Clear Daylight 8165484 Mendian Twp 50'S HERITAGE Rear-End Straight PDO 11/19/2003 06PM-07PM 2 0 Wednesday Clear Daylight 5666156 Mendian Twp 20'S HERITAGE Rear-End Straight PDO 11/19/2003 06PM-07PM 2 0 Wednesday Clear Daylight 7549708 Mendian Twp 25'N HERITAGE Rear-End Straight PDO 11/19/2004 02PM-03PM 2 0 Wednesday Clear Daylight 742021203 06AM-03PM 25'N HERITAGE A	7 888	6809450 Meridian Twp	300. S	HERITAGE	Side-Swipe Same	P00	12/13/2004	04PM-05PM	7	ъ	0	Monday	Wind	Dusk	Snowy	On Road
6808626 Mendian Twp 200'S HERITAGE Animal Injury 67/2004 11AM-NOON 1 1 1 Monday Clear Daylight 680924 Mendian Twp 200'S HERITAGE Animal PDO 10/25/2005 07AM-08AM 1 4 0 Wednesday Cloudy Dark 7549653 Mendian Twp 100'S HERITAGE Rear-End Straight PDO 2/25/2005 07AM-08AM 1 1 0 Friday Snow Daylight 5668158 Mendian Twp 20'S HERITAGE Side-Swipe Same PDO 1/1/92/2003 06PM-07PM 2 0 Friday Clear Daylight 5549708 Mendian Twp 20'S HERITAGE Side-Swipe Same PDO 1/1/92/2003 06PM-07PM 2 4 0 Wednesday Clear Daylight 7549708 Mendian Twp 25'N HERITAGE Rear-End Straight PDO 12/4/2004 02PM-03PM 2 4 0 Wednesday Clear Daylight 4212157 Mendian Twp 25'S BENVETT Animal <td>7.907</td> <th>566541 Meridian Twp</th> <td>S.00Z</td> <td>HERITAGE</td> <td>Rear-End Drive</td> <td>Injury</td> <td>12/9/2003</td> <td>07AM-08AM</td> <td>7</td> <td>e</td> <td>2</td> <td>Tuesday</td> <td>Rain</td> <td>Daylight</td> <td>Vet</td> <td>On Road</td>	7.907	566541 Meridian Twp	S.00Z	HERITAGE	Rear-End Drive	Injury	12/9/2003	07AM-08AM	7	e	2	Tuesday	Rain	Daylight	Vet	On Road
6809244 Mendian Twp 200'S HERITAGE Animal PDO 10.27/2004 08PM-09PM 1 4 0 Wednesday Cloudy Dark 7549633 Mendian Twp 100'S HERITAGE Animal PDO 2725/2005 07AM-05AM 1 1 0 7 6 7 8165484 Mendian Twp 50'S HERITAGE Rear-End Straight PDO 11/19/2003 06PM-07PM 2 0 7 0 Nednesday Dayight 7549708 Mendian Twp 20'S HERITAGE Rear-End Straight PDO 11/19/2003 06PM-07PM 2 4 0 Nednesday Clear Dayight 7549708 Mendian Twp 25'N HERITAGE Rear-End Straight PDO 12/4/2004 02PM-03PM 2 4 0 Nednesday Cloudy Dayight 4212157 Mendian Twp 25'N HERITAGE Rear-End Straight PDO 12/4/2004 02PM-03PM 2 4 0 Nednesday Cloudy Dayight 4212157 Mendian Twp 530'S BENVETT Ani	7.907	6808626 Meridian Twp	200. S	HERITAGE	Animal	Injury	6/7/2004	11AM-NOON	-	-	-	Monday	Clear	Daylight	Dry	On Road
7549653 Mendian Twp 100'S HERITAGE Animal PDO 2725/2005 07AM-08AM 1 1 0 Friday Snow Dawn 8165484 Mendian Twp 50'S HERITAGE Rear-End Straight PDO 61/28/2003 06PM-07PM 2 2 0 Tuesday Clear Daylight 5666158 Mendian Twp 20'S HERITAGE Side-Swpe Same PDO 11/19/2003 06PM-07PM 2 4 0 Wednesday Clear Daylight 7549708 Mendian Twp 25'N HERITAGE Rear-End Straight PDO 12/4/2004 02PM-03PM 2 4 0 Wednesday Cloudy Daylight 4212157 Mendian Twp 530'S BENVETT Animal PDO 12/2/2/2003 06AM-07AM 1 1 0 Monday Cloudy Daylight	7.907		200. S	HERITAGE	Animal	6	10/27/2004	08PM-09PM	-	4	0	Wednesday	Cloudy	Dark	Š	On Road
6165484 Mendian Twp 50'S HERITAGE Rear-End Straight PDO 6128/2003 NOON-01PM 2 2 0 Tuesday Clear Daylight 5866158 Mendian Twp 20'S HERITAGE Side-Swipe Same PDO 11/19/2003 06PM-07PM 2 4 0 Wednesday Clear Daylight 7549708 Mendian Twp 2S'N HERITAGE Rear-End Straight PDO 12/4/2004 02PM-03PM 2 4 0 Saturday Cloudy Daylight 4212157 Mendian Twp 530'S BENVETT Animal PDO 12/2/2/2003 06AM-07AM 1 1 0 Monday Cloudy Daylight	7.926	7549653 Mendian Twp	100. S	HERITAGE	Anmal	8		07AM-08AM	-	-	•	Friday	Snow	Dawn	Snowy	On Road
5666158 Mendian Twp 20'S HERITAGE Side-Swipe Same PDO 11/19/2003 06PM-07PM 2 4 0 Wednesday Clear Daylight 7549708 Mendian Twp 25'N HERITAGE Rear-End Straight PDO 12/4/2004 02PM-03PM 2 4 0 Saturday Cloudy Daylight 4212157 Mendian Twp 530'S BENVETT Animal PDO 12/2/2/2003 06AM-07AM 1 1 0 Monday Cloudy Daylighted	7.936	8165484 Mendian Twp	S.09	HERITAGE	Rear-End Straight	8	6/28/2005	NOON-01PM	7	~	0	Tuesday	Clear	Daylight	o _y	On Road
7549708 Mandian Twp 25'N HERITAGE Rear-End Straight PDO 12/4/2004 02PM-03PM 2 4 0 Salurday Cloudy Daylight 4212157 Mendian Twp 530'S BENVETT Animal PDO 12/2/2/2003 06AM-07AM 1 1 0 Monday Cloudy Dark.Lighted	1.92.7		50. S	HERITAGE	Side-Swipe Same	900 000	11/19/2003	06PM-07PM	7	4	0	Wednesday	Clear	Dark, Lighted	Ą	On Road
4212157 Mendan Twp 530'S BENVETT Animal PDO 12/22/2003 06AM-07AM 1 1 0 Monday Cloudy Dark.Lighted	7.950	7549708 Mendian Twp	25. N	HERITAGE	Rear-End Straight	P00		02PM-03PM	2	7	0	Saturday	Cloudy	Daylight	Dry	On Road
	7.963	4212157 Mendian Twp	530, S	BENVETT	Anmai	8	12/22/2003	06AM-07AM	-	-	0	Monday	Cloudy	Dark, Lighted	ઠે	On Road

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Point	MilePoint UD10# UD10 City/Township	UD-10 Crash Location	h UD-10 Crossroad Reference	Crash Type	Crash Severity	Dete	Occurence	Veh.	Occup.	Ę	Weekday	Weather	Lighting	Surface	Kelationship On Road
7.964	5958426 Mendian Twp	100 N	HRITAGE	Animal	6 00	3/9/2004	08AM-09AM	-	-	٥	Tuesday	Cloudy	Daylight	O Y	On Road
8.035	6809157 Meridian Twp	150.8	KINAWA	Rear-End Straight	Injury	12/10/2004	12/10/2004 04PM-05PM	6	•	2	Fnday	Rain	Daylight	× ×	On Road
8.035	7549919 Mendian Twp	150.8	BENNETT	Rear-End Drive	hjury	3/11/2005	3/11/2005 07AM-08AM	4	۳	-	Fnday	Cloudy	Daylight	lçy	On Road
8.044	4389999 Meridian Twp	100.8	BENNETT	Rear-End Straight	004	1/5/2004	09AM-10AM	2	2	0	Monday	Snow	Daylight	ζ	On Road
8.054	4568297 Mendian Twp	\$.09	BENNETT	Side-Swipe Opposite	004	8.20/2003	05PM-06PM	~	4	0	Wednesday	Clear	Daylight	٥٠	On Road
8.054	6809119 Meridian Twp	S.05	KINAWA	Rear-End Straight	Injury	10/4/2004	05PM-06PM	2	2	-	Monday	Clear	Dayinght	Day	On Road
8.055	5285269 Meridian Twp	\$.04	KINAWA	Angle Straight	Injury	4/21/2004	07AM-08AM	2	6	6	Wednesday	Cloudy	Dayligh:	ځ	On Road
8.055	5958721 Mendian Twp	\$.0 4	KINAWA	Rear-End Straight	8	6/1/2004	09PM-10PM	2	-	0	Tuesday	Cloudy	Dusk	Ę	Or Road
8.056	4169325 Mendian Twp	s.0e	KINRWA	Rear-End Straight	004	7/11/2003	02PM-03PM	2	2	0	Fnday	Cloudy	Dayight	٥	On Road
8.063	4169348 Mendian Twp	.S. E.	KINAWA	Rear End Left Turn	8	7/24:2003	07AM-08AM	2	2	0	Thursday	Ciear	Daylight	٥	On Road
8.063	6810095 Mendian Twp	io io	BENNETT	Angle Straight	Injury	6/16/2005	09AM-10AM	~	6	-	Thursday	Cien	Daylight	ģ	On Road
8.065	4212350 Mendian Twp	7.O	BENNETT	Rear-End Straight	8	2/10/2004	2/10/2004 08AM-09AM	6	6	0	Tuesday	Snow	Daylight	Snowy	On Road
8 067	6809007 Mendian Twp	Z0. N	BENNETT	Rear-End Straight	004	1/14/2005	1/14/2005 07PM-08PM	2	2	0	Fnday	Clear	Dark, Lighted	ર્ક	On Road
8.072	5233504 Mendian Twp	N.06	BENNETT	Rear-End Straight	Injury	1/24/2004	1/24/2004 NOON-01PM	2	2	-	Saturday	Cloudy	Daylight	We:	On Road
8.072	6808840 Mendian Twp	N.05	KINAWA	Side-Swipe Same	004	8/11/2004	8/11/2004 04PM-05PM	2	7	0	Wednesday	Cloudy	Dayiight	ڄُ	On Road
8.074	5666083 Mendian Twp	N.09	KINAWA	Side-Swipe Same	004	11/7/2003	11/7/2003 09PM-10PM	2	6	0	Fnday	Clear	Dark, Lighted	ڄ	On Road
8.101	7549882 Meridian Twp	200. N	BENNETT	Side-Swipe Same	000	3/2:2005	3/2:2005 07AM-08AM	2	7	•	Wednesday	Cloudy	Daylight	Snowy	On Road
8.110	4212369 Mendian Twp	250' N	KINAWA	Rear-End Straight	004	6.3.2004	04PM-05PM	2	۳	0	Thursday	Cloudy	Dayight	٥	Or Road
8.120	5666057 Mendian Twp	300. N	BENNETT	Side-Swipe Same	PD0	11/3/2003	11/3/2003 10AM-11AM	2	2	0	Monday	Rain	Daylight	We:	On Road
8.120	6808841 Mendian Twp	300. N	KINAWA	Rear-End Straight	PDO	8/19/2004	8/19/2004 02PM-03PM	7	7	0	Thursday	Cloudy	Daylight	o V	On Road
8.120	6808646 Mendian Twp	300. N	BENNETT	Rear-End Straight	PDO	5/5/2005	5/5/2005 03PM-04PM	2	4	0	Thursday	Clear	Daylight	Ą	On Road
8.139	5233365 Mendian Twp	400° N	BENNETT	Rear-End Straight	P00	2,26,2004	2/26/2004 03PM-04PM	၈	e	0	Thursday	Ciear	Daylight	8	On Road
8.163	4389993 Mendian Twp	530. NW	BENNETT	Animal	004	12/29/2003	12/29/2003 07AM-08AM	-	-	0	Monday	S. E.	Dark	Wet	Or Road
8.253	6808988 Mendian Twp	1003' N	KINAWA	Animal	P00	7/27/2004	7/27/2004 02PM-03PM	-	2	0	Tuesday	S. C.	Dayiight	Wet	On Road
8 264	5233309 Mendian Twp	1060' N	BENNETT	Rear-End Drive	PDO	1:22:2004	1:22:2004 NOON-01PM	3	3	0	Thursday	Clear	Dayught	Snowy	On Road
8.313	6809226 Mendian Twp	1320' N	KINAWA	Rear-End Straight	PDO	8/10/2004	04PM-05PM	2	-	0	Tuesday	Clear	Daylight	ð	On Road
8.313	6809505 Mendian Twp	1320' N	KINAWA	Rear-End Straight	P00	10/21/2004	05PM-06PM	2	3	0	Thursday	Cloudy	Dayiight	Dry	On Road
8.313	7549922 Mendian Twp	1320' N	BENNETT	Rear-End Straight	PDO	4/14/2005	07AM-08AM	4	7	0	Thursday	Clear	Daylight	ō	On Road
8.314	5686192 Mendian Twp	1325' N	BENNETT	Rear-End Straight	PDO	9/5/2003	05PM-06PM	2	2	0	Friday	Clear	Daylight	ō	On Road
8.394	4390176 Mendian Twp	400. S	SOWER	Rear-End Straight	Injury	5/19/2004	05PM-06PM	9	3	-	Wednesday	Clear	Daylight	ο̈́	On Road
8.394	6808848 Mendian Twp	\$.00 *	SOWER	Rear-End Straight	Injury	9/2/2004	03PM-04PM	2	2	-	Thursday	Clear	Daylight	Other	On Road
8.394	6809438 Meridian Twp	\$.00 *	SOWER	Rear-End Straight	Injury	12/4/2004	10PM-11PM	2	4	-	Saturday	Clear	Dark	Dry	On Road
8.413	6808629 Mendian Twp	3.008	SOWER	Rear End Left Turn	Injury	6/14/2004	6/14/2004 09AM-10AM	3	7	-	Monday	Clear	Daylight	٥٠	On Road
8.413	6809712 Meridian Twp	3.00£	SOWER	Animal	PD0	1/27:2005	1/27:2005 07PM-08PM	-	-	0	Thursday	Clear	Dark, Lighted	ō	On Road
8.423	F	0.000													

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Act (2012) Constitution Constitution <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th>1</th> <th>-</th> <th>30</th> <th></th> <th></th> <th>Envin</th> <th>Environmental Condition</th> <th>ition</th> <th></th>							1	-	30			Envin	Environmental Condition	ition	
47/10221 Memorah menerah menera	MilePo	int UD10# UD10 City/Township	Location	UD-10 Crossroad Reference	Crash Type	Crash Severity		> 4	Occup.	Ė	٠.	Weather	Lighting	Surface	On Road
44421219 Minister 1858 SOWNR Rest-Ed-Singed Pop. 1120200 CORPASIDAD 8 0 Friendy Code Daylot WIN 6602023 Minister 18.5 SOWIER Rest-Ed-Singed POD 17,2020 CORPASIDAD 2 0 1, Security Code Daylot WIN 6602023 Minister 18.5 SOWIER Rest-Ed-Singed POD 17, 12020 CORPASIDAD 2 0 0 Minister Daylot	8.432	4212021 Mendian Twp	S.002	SOWAR	Rear-End Straight	õ	1/22/2004 NOON-01PR		2	•	Thursday	Clear	Daylıght	Dry	On Road
400.0000000000000000000000000000000000	8.442		150.8	SOWAR	Rear-End Straight	8	11/28/2003 NOON-01PA	_	•		Friday	Cloudy	Daylıght	Wet	On Road
SCASSISSA Marcian Trage 77.8 SONCHER Raaz-End Shaper PRO 77.9 CASSISSA Marcian Trage PRO 77.2 CASSISSA MARCIAN Trage	8.447	5958872 Mendian Twp	120.8	SOWER	Rear-End Straight	fuluy	Į.		•	-	Saturday	Rain	Daylight	Wet	On Rosa
2015 SONCER Reacted Singer POST 022000 DONASTON C 0 C 120200 DONASTON C 0 C 12020 DONASTON C 0 C	8.456	6809426 Mendian Twp	S.52	SOWER	Rear-End Drive	ğ	7/19/2004 05PM-06PM		2	0	Monday	Cloudy	Daylight	ργ	On Road
2000000000000000000000000000000000000	8.456	8165412 Mendian Twp	75.8	SOWER	Rear-End Straight	8	6:29:2005 NOON-01PA		0	0	Wednesday	Clear	Daylight	مُ	Or Road
2006/25 Ministrating 200 Conversion Seed-Series Same PDO 11/20000 Seed-Action 2 3 0 Wednessey Cher One New 5066/32 Ministrating 40.5 SOWIER SOWIER SOWIER Sowier Sowier PDO 611/2000 Seed-Action 5 0 Wednessey Cher Day, Str. DAY 606632 Ministrating 10.5 SOWIER Rear-End Straptin PDO 611/2000 Seed-Action 8 0 1 Leaster Day, Str. DAY 606632 Ministrating 5.5 SOWIER Rear-End Straptin PDO 712/2003 Seed-Action 9 0 1 Leaster Day, Str. DAY 606632 Ministrating 5.5 SOWIER Rear-End Straptin PDO 712/2003 Seed-Action 9 0 1 Leaster Day, Str. DAY 806632 Ministrating 5.5 SOWIER Rear-End Straptin PDO 712/2003 Seed-Action D 0 1 Leaster DAY 0 1 Leaster DAY 0 0	8.461	5233397 Mendian Twp	S.09	SOWAR	Other Object	8	2/20/2004 11PM-MDN1		-	0	Friday	Snow	Dark, Lighted	Snowy	On Road
5005213 Munician Trg 40.5 SOVIER Rain-Endisinping POD 12000000 Gebus-Gebra 2 0 Medical Property Por 12000000 Gebus-Gebra 2 0 Medical Property Por 12000000 Gebra 2 0 Medical Property Christola Poly 12000000000000000000000000000000000000	8.461	7549501 Mendian Twp	S.09	SOWER	Side-Swipe Same	8	1/12/2005 06PM-07PM		\$	0	Wednesday	Other	Other	Other	On Road
6000320 Ministant Trap 40.5 SCARER Sea Savide Simple POD 617/2004 ORD-LOGAN 6 0 Valentian Proposition Character of Traps Char	8.462	5666178 Mendian Twp	S.07	SOWER	Rear-End Straight	004	12/10/2003 05PM-06PM		2	0	Wednesday	Rain	Dark	*	On Road
6000353 Marcian Trag 57.5 SOWER Rear-End Stagint PROD 6.22000 MONAJPM 2 0 Testeral Other Dayight Dry 5866002 Marcian Trag 10.5 SOWER Rear-End Stagint Rear-End Stagint TINE 2000 ORD-AGRAM 2 0 Testeral Oracle Dry 48860023 Marcian Trag 5.5 SOWER Rear-End Stagint Injuty 11.18.2000 ORD-AGRAM 2 0 Actual Oracle Dry 6880033 Marcian Trag 5.5 SOWER Rear-End Left Tran Injuty 11.18.2000 ORD-AGRAM 2 1 Actual Oracle Dry	8.462	6808743 Mendian Twp	\$.0¥	SOWER	Side-Swipe Same	8	8/11/2004 04PM-05PM		2	0	Wednesday	Clear	Daylight	δ	On Road
56000000000000000000000000000000000000	8.466	8165485 Mendian Twp	S.02	SOWER	Rear-End Straight	8	6/28/2005 NOON-01PA		3	0	Tuesday	Clear	Daylight	δ	On Road
5660022 Mancian Tupp 10.5 SOWER Mass End Left Tun Page 7725003 SIGNAGEM 3 6 2 Sudday Rain Left Tup Left Vir. County Day got County Day got County Day got County Day got Day got County County Day got County County Day got Day got County Day got	8.467	5666239 Mendian Twp	15.8	SOWER	Rear-End Drive	ğ	8:15:2003 03PM-04PM		3	0	Friday	Clear	Dayight	δ	Or Road
6903831 Mandan Tup 65 S SOWER Mate Multiple vehicle PDO 7728 2003 11AAANOON 2 0 Monday Cloudy Daylgot Dry 68038324 Mandan Tup 6 S SOWER Rear-End Singpit Input 85 2004 10AAH1AAM 2 4 Monday Cloudy Daylgot Dry 68038324 Mandan Tup 6 S SOWER Rear-End Left Tum PDO 51.2204 06AAH2AM 3 1 Thurstay Cloudy Daylgot Dry 6803832 Mandan Tup 15 E SOWER Rear-End Left Tum PDO 51.2204 05PAH2AM 3 0 Numbay Cloudy Daylgot Dry 6803832 Mandan Tup 5 E SOWER Rear-End Left Tum PDO 51.2204 05PAH2AM 3 0 Numbay Cloudy Daylgot Dry 5608382 Mandan Tup 5 E SOWER Rear-End Left Tum PDO 51.2204 05PAH2AM 3 1 Numbay Cloudy Daylgot Daylgot 5608382 Mandan Tup 25 N SOWER Rear-End Singth Tum PDO	8.468	5666062 Mendian Twp	10.8	SOWER	Rear End Left Turn	hjury	11/16.2003 05PM-06PM		•	2	Sunday	Rain	Dark, Lighted	Wet	On Road
6008339 Mandan Two 5 S SOWER Raar-End Singht Injury 58 2004 1 Mandan Two Couldy Only-gibby Day-gibt Da	8.469	4568343 Mendian Twp	8.8	SOWER	Misc. Multiple Vehicle	80	7/28/2003 11AM-NOON	ļ	6	0	Monday	Cloudy	Daylight	٥٠	On Road
6663328 Mandan Two 5° SOVER Chart Chied Drive 11182004 olbAl-09AM 3 1 Trundsky Color) Daylott Dry 5663322 Mandan Two 15° SOVER Other Chied POD 11182004 olbAl-09AM 1 3 0 Trundsky Color) Daylott Dry 5663322 Mandan Two 5° SOVER Raa-End Left Tun POD 5.12004 olbAl-09AM 2 3 0 Trundsky Clear Daylott Dry 6808683 Mandan Two 2° SOVER Raa-End Left Tun POD 5.12004 olbAl-09AM 2 3 0 Trundsky Clear Daylott Dry 5658807 Mandan Two 2° SOVER Raa-End Singht Tun POD 5.12004 olbAl-09AM 2 3 1 Alexaday Clear Daylott Dry 754883 Mandan Two 10° SOVER Raa-End Singht Tun POD 5.12004 olbAl-09AM 2 3 1 Alexaday Clear Daylott 754843 Mandan Tw	8.469	6808837 Mendian Twp	5.8	SOWER	Rear-End Straight	fulury	8/9/2004 10AM-11AM		4	-	Monday	Cloudy	Daylight	٥٠	On Road
5665322 Marcian Trup 40 X SOWER Other Object PDO 10.2003 0PH-30PM 1 3 0 Trunsday Cloudy Day DV 5656322 Marcian Trup 15 E SOWER Raar End Left Trun PDO 5.22004 0PM-30PM 2 0 Vacorassay Cleud Day-grid DAy-grid DAy-grid Well 6806863 Marcian Trup 20 N SOWER Raar End Strapt Impro 6.122004 0PM-30PM 3 1 Monday Cloudy DAy-grid Well 5698807 Marcian Trup 20 N SOWER Raar End Strapt Impro 6.122005 0PM-30PM 2 3 1 Monday Cloud DAy-grid Well 7546828 Marcian Trup 20 N SOWER Raar End Strapt Impro 6.122005 0PM-30PM 2 3 1 Monday Cloudy Day-grid	8.469	6809398 Mendian Twp	5.8	SOWER	Rear-End Drive	lnjury	11/18/2004 08AM-09AM		6	-	Thursday	Cloudy	Daylıght	٥٠٫	On Road
6505863 Maridian Tupp 15°E SOWER Rear End Left Tum PDO 51,22004 GPM-09PM 2 0 Viverable Clean Day-girt Day-girt Dry 6505864 Maridian Tupp 5°E SOWER Rear End Left Tum PDO 51,22044 GPM-0PPM 2 0 Tussals Cloudy Day-girt Dry 6505864 Maridian Tupp 25°N SOWER Rear End Right Tum PDO 51,22044 GPM-0PPM 2 0 Tussals Cloudy Day-girt Wer 756983 Maridian Tup 25°N SOWER Rear End Right Tum PDO 22,22045 GPM-0PPM 2 1 5 0 Day-girt Wer 756983 Maridian Tup 20°N SOWER Rear End Right Tum PDO 22,2204 GPM-0PPM 2 1 6 Montals PD 0 Day-girt PD Day-girt DA Clear Day-girt DA 756983 Maridian Tup 60°S WOODFIELD Rear-End Straght PDO 22,2204 GPM-0PPM 1 1 6	8.470	5666392 Mendian Twp	40. X	SOWER	Other Object	8	10/9/2003 08PM-09PM		6	0	Thursday	Cloudy	Dark	Ą	On Road
6808654 Mendian Two 5 E SOWER Rear-End Lieft Tunn PDO 6.3.2004 GSPHJGPM 2 2 0 Tuestdey Cloudy Day-girt Dry 6808654 Mendian Two 20 N SOWER Rear-End Lieft Tunn PDO 6.212004 GSPHJGPM 3 1 Monday Ran Day-girt Wer 5958807 Mendian Two 25 N SOWER Rear-End Right Tunn PDO 2.22205 GSPHJGBM 3 1 Shurday Cloudy Day-girt Wer 7548835 Mendian Two 25 N SOWER Rear-End Strapt Injury 51.22005 GSPHJGBM 2 4 0 Monday Ran Day-girt Wer 566655 Mendian Two 30 N WOODFIELD Finad Object PDO 11/18/2004 GSPHJGBM 1 1 0 Wednesday Ran Day-girt	8.470	5958926 Mendian Twp	15'E	SOWER	Rear End Left Tum	8	5:12/2004 08PM-09PM		6	0	Wednesday	Clear	Daylight	ργ	On Road
6503664 Mandean Tupy 20 N SOWER Rear-End Straght Injury 6.12,004 OPH-MICAD Mandean Tupy 3 1 Monday Rear Day-ght Weet 5958007 Mandean Tupy 25 N SOWER Haad-on Injury \$15,5004 GPM-MG-BM 2 1 5 at 10 Amoraly Coudy Day-ght DAy-GR 7549838 Mandean Tupy 25 N SOWER Rear-End Straght PDO 22,2005 GPM-MG-BM 7 6 Amoraly Great Day-ght DAY-CR 6608931 Mandean Tupy 300 N SOWER Rear-End Straght PDO 11/12/2005 GPM-MG-BM 7 6 To 404 Great Day-ght DAY-CR 7559-861 Mandean Tupy 60 S WOODFIELD Macchael Straght PDO 11/12/2005 GPM-MG-BM 2 2 0 Med-med-BM-MG-MG-MG-MG-MG-MG-MG-MG-MG-MG-MG-MG-MG	8.470	6808863 Mendian Twp	5.E	SOWER	Rear End Left Turn	8			2	0	Tuesday	Cloudy	Dayight	Dry	On Road
5589807 Manidan Tup 25 N SOWER Head-on Injury 515 2004 05PM-06PM 2 3 1 Saturday Cloudy Day-girl Dy 7549835 Manidan Tup 25 N SOWER Rear End Right Tum PDO 228 2005 07PM-06PM 2 4 0 Maniday Since Day-girl Doy 7549826 Manidan Tup 100°N SOWER Rear End Straght Tum PDO 228 2005 07PM-06PM 1 1 6 Mendey Since Day-girl Doy 5668293 Manidan Tup 75 S WOODFIELD Rear-End Straght Injury 61.82004 NOON-PM 3 7 1 Friead Day-girl Day-girl Doy 7554431 Manidan Tup 60°S WOODFIELD Masc Multiple Vanida PDO 11.12006 0.5 MANOBPM 2 0 Wednesday Clear Day-girl Wednesday 8666220 Manidan Tup 5°S WOODFIELD Masc Multiple Vanida PDO 11.12000 0.0 Mednesday Clear Day-girl Wednesday Cl	8.474	6808684 Mendian Twp	20. N	SOWER	Rear-End Straight	Injury			3	-	Monday	Rain	Dayiight	Wet	On Road
7549635 Mancian Twp 25 M SOWER Animal PDO 2282005 07PM-08PM 2 4 0 Monday Snow Dark Lighted Snow 7549626 Mancian Twp 100°N SOWER Animal PDO 212/2005 07PM-08PM 1 1 0 Mednesday Clear Dark Lighted Snow 8608931 Mancian Twp 300°N SOWER Rasi-End Siraght Injuny 6182004 MOON-1PM 3 7 1 6 Wednesday Clear Dark Wet 7549431 Mancian Twp 75 WOODFIELD Animal PDO 11/18/2003 GPM-06PM 1 2 0 Wednesday Ran Dark Wet 7549431 Mancian Twp 60°S WOODFIELD Animal PDO 11/12/2005 GPM-06PM 1 2 0 Wednesday Ran Dark Wet 7549431 Mancian Twp 5°S WOODFIELD Ange Straght PDO 11/12/2005 GPM-06PM 2 2 0 Wednesday Dark Dark No <	8.475	5958907 Meridian Twp	25. N	SOWER	Head-on	kunluj			3	-	Saturday	Cloudy	Dayiight	Dry	On Road
7549624 Mendan Twp 100 N SOWER Animal PDO 2122005 OPM-00-PM 1 1 0 Wednesday Clear Day Dy 6608931 Mendan Twp 300 N SOWER Rear-End Straight hiny 6182004 NOON-01PM 3 7 1 Friday Clear Day Wet 5668155 Mendan Twp 75 S WOODFIELD Animal PO 11122003 SPAN-06PM 1 2 0 Twesday Ran Day Wet 7549481 Mendan Twp 60 S WOODFIELD Mac Multiple Vehicle PDO 11122005 SPAN-06PM 2 2 0 Wednesday Ran Day Wet 7549882 Mendan Twp 50 S WOODFIELD Mac Multiple Vehicle PDO 21/22005 SPAN-06PM 2 2 0 Wednesday Ran Day Wet 5668270 Mendan Twp 5 S WOODFIELD Fixed Oped PDO 1/12200 SPAN-06PM 2 2 0 Wednesday Ran Day La 0 W	8.475	7549835 Mendian Twp	25. N	SOWER	Rear End Right Turn	P00			7	0	Monday	Snow	Dark.Lighted	Snowy	On Road
6808031 Mandian Twp 300 N SOWER Raar-End Straght hjny 618.2004 NOON-OFPM 3 7 1 Friday Clear Dayight Dyn 5668155 Mandian Twp 75.5 WOOPFELD Animal PDO 11712005 GPM-06PM 1 2 0 Tuesday Ran Dark_Lighted Wet 7549431 Mandian Twp 60.5 WOOPFELD Fixed Object PDO 1172005 GPM-06PM 2 2 0 Wednesday Ran Dark_Lighted Wet 7549824 Mandian Twp 50.5 WOOPFELD Raar-End Straght PDO 3112005 GPM-06PM 2 2 0 Wednesday Ran Dark_Lighted Wet 5668270 Mandian Twp 5.5 WOOPFELD Fixed Object PDO 1728.2004 GPM-05PM 2 2 0 Wednesday Rai-Hall Dark Rai 5668270 Mandian Twp 5.5 WOOPFELD Fixed Object PDO 1728.2004 GPM-05PM 2 2 0 Tuesday Rai-Hall Dayingt	8.489	7549626 Mendian Twp	100. N	SOWER	Anmal	8	ı	-	-	0	Wednesday	Clear	Dark	Ę	On Road
5666156 Mendian Twp 75'S WOODFIELD Animal PDO 11/18/2003 OSPM-06PM 1 2 0 Tuesday Ran Dark Lighted Wet 7549481 Mendian Twp 60'S WOODFIELD Fixed Object PDO 1/12/2005 OSPM-06PM 1 0 Wednesday Ran Dark Lighted Wet 7549481 Mendian Twp 50'S WOODFIELD Masc Multiple Vehicle PDO 2/3/2005 OSPM-06PM 2 0 Wednesday Sleet Hail Daylight ky 5666270 Mendian Twp 5'S WOODFIELD Fixed Object PDO 2/3/2005 OSPM-06PM 2 3 0 Wednesday Sleet Hail Daylight ky 5666270 Mendian Twp 5'S WOODFIELD Fixed Object PDO 2/3/2004 OSPM-08PM 2 3 0 Wednesday Cloudy Daylight Bylight Daylight Daylight Daylight Daylight Daylight Wet 6809416 Mendian Twp 100'N WOODFIELD Rear-End Straght PDO 1/2/2/2004 OSPM-06P	8.527	6808931 Mendian Twp	300. N	SOWER	Rear-End Straight	Priory	6/18/2004 NOON-01PM	_	7	-	Friday	Clear	Daylight	δ	On Road
7549481 Meridian Tupy 60'S WOODFIELD Fixed Object PDO 1/12/2005 0.8PM-06PM 1 0 0 Wednesday Ran Dank, Lighted West 754982 Meridian Tupy 50'S WOODFIELD Masc Multiple Vehicle PDO 3/1/2005 0.8AM-06PM 2 2 0 Friday Cloudy Daylight ky 6809784 Meridian Tupy 30'S WOODFIELD Rear-End Straight PDO 2/9/2004 0.7PM-06PM 2 3 0 Wednesday Cloudy Daylight ky 5666270 Meridian Tupy 5'S WOODFIELD Fixed Object PDO 2/9/2004 0.7PM-06PM 2 3 0 Wednesday Clear Daylight Ky 5566270 Meridian Tupy 15'S WOODFIELD Rear-End Straight PDO 4.79/2004 0.7PM-06PM 2 2 0 Thursday Clear Daylight Daylight 6809416 Meridian Tupy 100'N WOODFIELD Rear-End Straight PDO 1/1/15/2004	8.648	5666155 Mendian Twp	75.8	WOODFIELD	Animai	8	11/18/2003 05PM-06PM	-	2	0	Tuesday	S. C.	Dark	Wet	On Road
7549862 Mendian Twp 50'S WOODFIELD Masc Multiple Vehicle PDO 3.11/2005 0.8MA-09AM 2 2 0 Friday Cloudy Daylight ky 6809784 Mendian Twp 30'S WOODFIELD Rear-End Straight PDO 2/9/2005 SPM-06PM 2 0 Wednesday Siet, Hall Dusk Ky 5665270 Mendian Twp 5'S WOODFIELD Fixed Object PDO 1/28/2004 07PM-08PM 2 3 0 Wednesday Clear Daylight Ky 6808655 Mendian Twp 15'S WOODFIELD Rear-End Straight PDO 11/15/2004 07PM-08PM 2 2 2 2 A monday Clear Daylight Write 6809416 Mendian Twp 100'N WOODFIELD Rear-End Straight PDO 11/15/2004 05PM-04PM 2 2 2 2 2 2 2 2 3 0 Tuesday Clear Daylight Write 6809416 Mendian Twp 100'N	8.651	7549481 Meridian Twp	\$.09	WOODFIELD	Fixed Object	PD0		-	0	0	Wednesday	Rain	Dark, Lighted	Wet	On Road
6809784 Mendan Twp 30'S WOODFIELD Rear-End Straight PDO 1/28/2004 GPM-06PM 2 3 0 Wednesday Seet Hall Dusk Icy 5666270 Mendan Twp 5'S WOODFIELD Fixed Object PDO 1/28/2004 07PM-08PM 1 1 0 Wednesday Clear Daylight Slushy 5685974 Mendan Twp 5'S WOODFIELD Angle Straight Tum PDO 4.29/2004 07PM-08PM 2 2 0 Thursday Clear Daylight Dry 680949 Mendan Twp 15'N WOODFIELD Rear-End Straight PDO 12/21/2004 03PM-04PM 2 2 2 Monday Clear Daylight Wet 6809416 Mendan Twp 10'N WOODFIELD Rear-End Straight PDO 1/27/2004 03PM-04PM 2 2 2 A Monday Clear Daylight Wet 6809416 Mendan Twp 10'O'N WOODFIELD Rear-End Straight PDO 1/27/2004 03PM-04PM	8.653	7549862 Mendian Twp	S.05	WOODFIELD	Msc. Multiple Vehicle	80			2	0	Friday	Cloudy	Daylight	lcy	On Road
5666270 Mendian Twp SS WOODFIELD Fixed Object PDO 128.2004 02PM-03PM 1 1 0 Wednesday Clear Daylight Slunty 5958974 Mendian Twp 55 WOODFIELD Angle Straight PDO 4.29,2004 07PM-08PM 2 3 0 Thursday Clear Daylight Dry 6808649 Mendian Twp 15° N WOODFIELD Rear End Right Turn Int/15/2004 03PM-04PM 2 2 2 Monday Clear Daylight Dry 6809416 Mendian Twp 50° N WOODFIELD Rear-End Straight PDO 12/21/2004 03PM-04PM 2 2 Monday Clear Daylight Wet 6808740 Mendian Twp 100° N WOODFIELD Rear-End Straight PDO 8/10/2004 03PM-06PM 3 4 0 Tuesday Clear Daylight Wet 6808740 Mendian Twp 100° N WOODFIELD Rear-End Straight Injury 2/10/2004 03PM-06PM 3 4 0 Tuesday Cloudy Daylight Dry <	8.656	6809784 Mendian Twp	30.8	WOODFIELD	Rear-End Straight	8			8	0	Wednesday	Sleet Hail	Dusk	lcy	On Road
5958974 Mandran Twp 5958974 Mandran Twp 5958974 Mandran Twp 57 WOODFIELD Angle Straight PDO 4.29,2004 07PM-08PM 2 3 0 Thursday Clear Daylight Dry 68080466 Mandran Twp 15° M WOODFIELD Rear End Left Turn Injury 11/15/2004 03PM-04PM 2 2 2 2 2 2 2 3 9 99/1971 Dry Dry 11/15/2004 03PM-04PM 2 2 2 2 2 2 2 3 9 3 9 99/1971 Dry Dry 11/15/2004 03PM-04PM 2 2 2 2 2 2 2 2 2 3 9 1 2 3 3 3 4 3 4 3 4 4 3 4	8.661	5666270 Meridian Twp	S.S	WOOD FIELD	Fixed Object	õ			-	0	Wednesday	Clear	Daylight	Slushy	Out Shou/Curb
6808656 Mandlan Twp 15° E WOODFIELD Rear End Right Turn PDO 8.3.2004 07PM-08PM 2 2 0 Tuesday Clear Day/ight Dry 6809048 Mandlan Twp 15° N WOODFIELD Rear-End Straight PDO 12/21/2004 03PM-04PM 2 2 2 Amnday Clear Day/ight Dry 6809416 Mandlan Twp 50° N WOODFIELD Rear-End Straight PDO 12/21/2004 03PM-04PM 2 2 2 Amnday Clear Day/ight Wot 680840 Mandlan Twp 100° N WOODFIELD Rear-End Straight PDO 12/21/2004 03PM-04PM 2 3 0 Tuesday Rain Day/ight Wot 754900 Mandlan Twp 100° N WOODFIELD Rear-End Straight PDO 8/10/2004 02PM-05PM 3 1 Wednesday Cloudy Day/ight Wot 754900 Mandlan Twp 100° N WOODFIELD Rear-End Straight PDO 8/12/2004 02PM-05PM 2 3 1 Wednesday Cloudy	8.661	5958974 Mendian Twp	S.S	WOODFIELD	Angle Straight	P00			3	0	Thursday	Clear	Daylight	Dry	On Road
680949 Mandan Twp 15° Mandan Twp 11′15/2004 03PM-04PM 2 2 2 About A	8 662	6808865 Mendian Twp	15.E	WOODFIELD	Rear End Right Turn	00	l	_	2	0	Tuesday	Clear	Dayignt	Ο'n	On Road
6809416 Mendian Twp 50'N WOODFIELD Rear-End Straight PDO 12/21/2004 03PM-04PM 2 3 0 Tuesday Crear Daylight Wet 6808740 Mendian Twp 100'N WOODFIELD Rear-End Straight PDO 8/10/2004 05PM-06PM 3 4 0 Tuesday Rain Daylight Wet 7549008 Mendian Twp 100'N WOODFIELD Rear-End Straight Injury 2/2/2000 02PM-03PM 2 3 1 Wednesday Cloudy Daylight Dry 6808903 Mendian Twp 200'S SCIENCE Rear-End Straight PDO 8/12/2004 02PM-03PM 2 2 0 Thursday Clear Daylight Dry	8.665	6809049 Mendian Twp	15. N	WOODFIELD	Rear End Left Turn	lnpury	11/15/2004 03PM-04PM		2	7	Monday	Cloudy	Daylight	ο _γ	On Road
6808740 Mendian Twp 100° N WOODFIELD Rear-End Straight PDO 8/10/2004 05PM-03PM 3 4 0 Tuesday Rain Daylight Wet 7549908 Mendian Twp 100° N WOODFIELD Rear-End Straight Injury 2/23/2005 02PM-03PM 2 3 1 Wednesday Cloudy Daylight Dry 6808903 Mendian Twp 200° S SCIENCE Rear-End Straight PDO 8/12/2004 02PM-03PM 2 2 0 Thursday Clear Daylight Dry	8.671		N .09	WOODFIELD	Rear-End Straight	P D0	12/21/2004 03PM-04PM		6	0	Tuesday	Ciear	Daylight	Wet	On Road
7549908 Mendian Twp 100° N WOODFIELD Rear-End Straight Injury 2/23/2005 02PM-03PM 2 3 1 Wednesday Cloudy Daylight Dry 6808903 Mendian Twp 200°S SCIENCE Rear-End Straight PDO 8/12/2004 02PM-03PM 2 2 0 Thursday Clear Daylight Dry	8.681	6808740 Meridian Twp	100. N	WOODFIELD	Rear-End Straight	PDO			4	0	Tuesday	Rain	Daylight	Wet	On Road
6808903 Mendian Twp 200'S SCIENCE Rear-End Straight PDO 8/12/2004 02PM-03PM 2 2 0 Thursday Clear Daylight Dry	8.681	7549908 Mendian Twp	100. N	WOODFIELD	Rear-End Straight	lnjury			9	-	Wednesday	Cloudy	Dayligh:	ر مح	On Road
	8.721	6808903 Mendian Twp	S.002	SCIENCE	Rear-End Straight	900			2	0	Thursday	Clear	Daylight	Š	On Road

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HePoint UD1	MilePoint UD10 # UD10 City/Township	UD-10 Crash Location	UD-10 Crossroad Reference	Crash Type	Crash Severity	Date	Hour of Occurence	₹ ₹	Number of: 0. Occup.	Ē	Weekday	Weather	Lighting	Surface	Relationship On Road
8.721 6809	6809976 Maridian Twp	S00. 8	SCIENCE	Rear-End Straight	004	4/28/2005	03PM-04PM	2	2	0	Thursday	Clear	Daylight	۵۰	On Road
8.721 6610097	3097 Meridian Twp	S.002	SCIENCE	Rear-End Straight	8	6/20/2005	02PM-03PM	7	2	•	Monday	Cloudy	Deylight	δ	On Road
8.731 4390	4390002 Meridian Twp	150.8	SCIENCE PARKWAY	Fixed Object	8	1/8/2004	11AM-NOON	-	-	0	Thursday	Cloudy	Daylight	δ	On Road
8.731 6809	6809792 Meridian Twp	150.8	SCIENCE	Rear End Left Tum	8	3/3/2005	11AM-NOON	7	2	0	Thursday	Clear	Daylight	ò	On Road
8.740 6809	6809213 Meridian Twp	100.8	SCIENCE	Rear-End Drive	000	9/24/2004	09AM-10AM	2	е	٥	Fnday	Cloudy	Dayinght	o V	On Road
8.745 5958	5958947 Mendian Twp	75.8	SCIENCE	Rear-End Straught	8	5/11/2004	06PM-07PM	2	2	0	Tuesday	Cloudy	Daylight	ος	On Road
8.748 6808	6808555 Meridian Twp	s.06	SCIENCE	Rear-End Straight	8	7/19/2004	7/19/2004 08AM-09AM	7	6	0	Monday	Ciear	Daylight	ρογ	On Road
8.748 7549	7549489 Mendian Twp	s.09	SCIENCE	Rear-End Straight	8	2/9/2005	2/9/2005 05PM-06PM	2	2	0	Wednesday	Snow	Desk	Slushy	On Road
8.755 7549	7549695 Meridian Twp	SQ. 8	SCIENCE	Bicycle	Injury	12/20/2004	12/20/2004 03PM-04PM	2	2	-	Monday	N N	Daylight	Snowy	On Road
8.756 5666	5666172 Meridian Twp	15.8	SCIENCE PKWY	Rear End Left Tum	00	10/13/2003	10/13/2003 NOON-01PM	2	6		Monday	Clear	Daylight	å	On Road
8.757 5666	5666124 Meridian Twp	10.8	SCIENCE PARKWAY	Angle Straight	8	11/2/2003	11/2/2003 03PM-04PM	2	4	0	Sunday	Rain	Daylight	Wet	On Road
8.758 6809	6809124 Meridian Twp	5:8	SCIENCE	Angle Straight	8	10/14/2004	10/14/2004 06PM-07PM	2	2	0	Thursday	Clear	Daylight	È	On Road
8.758 7549	7549506 Meridian Twp	5:8	SCIENCE	Rear-End Straight	Injury	6/14/2005	6/14/2005 NOON-01PM	2	S	2	Tuesday	Clear	Daylight	Š	On Road
8.759 5666	5666355 Meridian Twp	15' W	SCENCE	Head-On Left-Tum	8	10/3/2003	10/3/2003 01PM-02PM	2	2	٥	Fnday	Cloudy	Daylight	۵	On Road
8.759 7549	7549681 Meridian Twp	5. W	SCIENCE	Head-On Left-Turn	lnjury	12/7/2004	08AM-09AM	2	2	-	Tuesday	Rain	Daylight	Wet	On Road
8.763 5666	5666647 Meridian Twp	Z.03	SCIENCE PARKWAY	Side-Swipe Same	8	12/9:2003	02PM-03PM	2	2	0	Tuesday	R Cie	Daylight	Wet	On Road
8.763 8165	8165414 Meridian Twp	Z0. N	SCIENCE	Rear-End Straight	900	6/29/2005	01PM-02PM	2	-	0	Wednesday	Clear	Daylight	Day	On Road
8.764 6808	6808981 Meridian Twp	52. N	SCIENCE	Rear-End Straight	lnjury	6/21/2004	04PM-05PM	2	က	2	Monday	Rain	Daylight	Wet	On Road
8.764 6808	6808561 Meridian Twp	72. N	SCIENCE	Rear-End Straight	PDO	9/9/2004	05PM-06PM	2	2	0	Thursday	Clear	Daylight	Ο _Ο	On Road
8.765 7549	7549762 Meridian Twp	30. NW	SCIENCE	Rear-End Straight	Injury	12/18/2004	02PM-03PM	7	7	-	Saturday	Cloudy	Daylight	Wet	Oncoded
8.765 7549	7549535 Meridian Twp	30. K	SCIENCE	Rear-End Straight	P00	2/8/2005	05PM-06PM	7	8	0	Tuesday	Cloudy	Dusk	ο	On Road
8.773 5233	5233506 Meridian Twp	75' N	SCIENCE	Rear-End Straight	PDO	1/24/2004	06PM-07PM	2	4	0	Saturday	Clear	Dark	٥	On Road
8.778 5666	5666362 Meridian Twp	100.N	SCIENCE PARKWAY	Rear-End Straight	900	10/6/2003	05PM-06PM	7	7	0	Monday	Clear	Daylight	Dry	On Road
8.797 5666	566544 Meridian Twp	200. N	SCIENCE PKWY	Fixed Object	PD0	12/17/2003	12/17/2003 07AM-08AM	-	-	0	Wednesday	Snow	Dark	Snowy	On Road
8.842 5666	5666139 Meridian Twp	x.o	RIVERWOOD	Rear-End Straight	Injury	8/1/2003	NOON-01PM	8	7	-	Fnday	Cloudy	Daylight	ο _γ	On Road
8.842 6809	6809138 Meridian Twp	10.W	RIVERWOOD	Rear-End Straight	PDO	9/28/2004	03PM-04PM	2	က	0	Tuesday	Rain	Daylight	Wet	On Road
8.848 6808	6808869 Mendian Twp	40. S	HULETT	Rear-End Straight	PDO	8/21/2004	02PM-03PM	2	2	0	Saturday	Clear	Daylight	O	On Road
8.856 4568	4566298 Meridian Twp	10' E	HULETT	Angle Turn	PD0	8/20/2003	03PM-04PM	7	2	0	Wednesday	Clear	Daylight	ο _γ	On Road
8.856 6808	6808970 Meridian Twp	30.€	HULETT	Rear-End Straight	P00	9/6/2004	04PM-05PM	2	2	0	Monday	Cloudy	Daylight	Οry	On Road
8.865 5666	5666042 Meridian Twp	N.08	HULETT	Side-Swipe Same	800	9/9/2003	05PM-06PM	7	6	0	Tuesday	Ciear	Daylight	ο	On Road
8.875 5866	5666481 Mendian Twp	100° N	носетт	Side-Swipe Same	90 0	11/26/2003	Unknown	7	2	0	Wednesday	Clear	Dark	Dry	On Road
8.910 4169	4169521 Mendian Twp	\$30.8	SHAWNEE	Rear-End Straight	PDO	1/26/2004	1/26/2004 11AM-NOON	2	6	0	Monday	Snow	Daylight	Snowy	On Road
8.916 5958	5958520 Meridian Twp	100.8	KEWANEE	Rear-End Straight	P00	2/15/2004	2/15/2004 01PM-02PM	2	4	0	Sunday	Clear	Daylight	Day	On Road
8.929 6809	6809862 Meridian Twp	30.8	KEWANEE	Rear-End Straight	PDO	2/25/2005	2/25:2005 08PM-09PM	4	10	0	Friday	Cloudy	Dark, Lighted	Wet	On Road
8,934 5058	SOCIARIO Meridian Two	or.	KEWANEE	Side-Swipe Same	Q	5/14/2004	5/14/2004 07PM.0APM	,	~	0	Table 1	o o	i de la companya de l	14/41	20.00

		UD-10 Crash					je L	ž	Number of:			Envir	Environmental Condition	idos	Relationship
MilePoin	MilePoint UD10# UD10 City/Township	Location	Location UD-10 Crossroad Reference	Crash Type	Crash Severity	Date	Occurence	Veh.		Ė	Weekday Weather	Weather	Lighting	Surface	On Road
8.940	6809132 Mendian Twp	72. N	KEWANEEWAY	Angle Drive	004	8/20/2004	8/20/2004 NOON-01PM	2			Fnday	Clear	Daylight	٥	On Road
8.941	5666211 Mendian Twp	Z .08	KEWANEE	Side-Swipe Same	P00	10/20/2003	10/20/2003 02PM-03PM	2	2	0	Monday	Clear	Daylight	ογ	On Road
8.963	6808782 Meridian Twp	150' N	KEWANEEW	Rear-End Straight	900	6/19/2004	6/19/2004 NOON-01PM	2	60	0	Saturday	Cloudy	Daylight	٥ry	On Road
8.973	6809905 Mendian Twp	200. N	KEWANEE	Rear-End Drive	PDO	3/27/2005	3/27/2005 02PM-03PM	~	m	0	Sunday	Cloudy	Daylight	ογ	On Road
9.005	5666489 Meridian Twp	25. S	SHAWNEE	Rear End Left Tum	Pulury	12/15/2003	12/15/2003 06PM-07PM	2	~	-	Monday	Cloudy	Dark	٥	On Road
9.029	5958956 Mendian Twp	100. N	SHAWNEE	Side-Swipe Same	PD0	6/3/2004	6/3/2004 11AM-NOON	2	m	0	Thursday	Clear	Daylight	Ą	On Road
9.048	6808641 Mendian Twp	200. NE	SHAWNEE	Rear-End Straight	Pulory	9/18/2004	9/18/2004 04PM-05PM	6	7	-	Saturday	Clear	Dayinght	ð	Uncoded
9.097	4390087 Meridian Twp	100. S	MT HOPE	Rear-End Straight	PDO	8.6.2003	8.6.2003 01PM-02PM	2	е	0	Wednesday	Clear	Daylight	δ	On Road
9.102	5666318 Mendian Twp	75.8	MT HOPE	Rear-End Straight	PDO	9/15/2003	9/15/2003 08AM-09AM	7	2	0	Monday	Rain	Daylight	Wet	On Road
9.107	6808622 Meridian Twp	S.05	MT HOPE	Rear-End Drive	PDO	10/16/2004	10/16/2004 NOON-01PM	2	7	0	Saturday	Rain	Daylight	Wet	On Road
9.110	5958470 Meridian Twp	30. S	MT HOPE	Fixed Object	900	2/12/2004	2/12/2004 08PM-09PM	-	-		Thursday	Cloudy	Dark, Lighted	٥	On Road
9.115	5958678 Meridian Twp	5.8	МТ НОРЕ	Rear-End Straight	PDO	5/28/2004	5/28/2004 11AM-NOON	7	က	0	Friday	Cloudy	Daylight	٥٠	On Road
9.116	4390140 Meridian Twp	20. W	MT HOPE	Angle Straight	PD0	7/30/2003	7/30/2003 10PM-11PM	7	ď	0	Wednesday	Clear	Dark.Lighted	٥٠	On Road
9.116	4211944 Meridian Twp	30. E	МТ НОРЕ	Angle Straight	Injury	9/12/2003	9/12/2003 01PM-02PM	2	3	-	Fnday	Clear	Daytight	ο _γ	On Road
Total	Total crashes for PR 0362602: 223	223					Total Fa	al Cr	shes:	0 To	tal Injury	Crashe	s: 53 Tota	PDO C	Total Fatal Crashes: 0 Total Injury Crashes: 53 Total PDO Crashes: 170

Ingham County

Report Module: Safety Management Analysis

Today's Date: Wednesday, November 08, 2006

Dates: 7/28/2005 to 11/30/2005_

PR/RoadName: 362602: Okemos Rd

Milepoints: From 7.108 To 9.116

Sort Order: Road Name, Milepoint, Date of Crash

Milepoint Intersection Name	Milepoint Intersection Name	Milepoint Intersection Name
0.000 Okemos Rd & E Columbia St & N Jefferson	0.157 Randolph St & Okemos Rd	0.237 Ann St & Okemos Rd
0.267 Okemos Rd & N Rogers St	0.405 Valley Ct & Okemos Rd	0.484 Mason Hills Dr & Okemos Rd
0.558 Mason Hills Dr & Okemos Rd & Coppersmit	1.143 Okemos Rd & W Howell Rd	2.145 Okemos Rd & Harper Rd
3.152 Lamb Rd & Okemos Rd	4.156 Holt Rd & Okemos Rd	4.910 Willoughby Rd & Okemos Rd
5.163 Okemos Rd & Willoughby Rd	6.168 Sandhill Rd & Okemos Rd	6.682 E I 96/Okemos RAMP & Okemos Rd & Oke
6.693 Okemos Rd & Okemos/E I 96 RAMP	6.896 Okemos Rd & Okemos/W I 96 RAMP	6.906 W I 96/Okemos RAMP & Okemos Rd & Oke
7.008 Okemos Rd & University Park Dr & Woodlak	7.108 Jolly Rd & Okemos Rd	7.210 Hampton PI & Okemos Rd
7.267 Jolly Oak Rd & Okemos Rd	7.313 Association Dr & Okemos Rd	7.428 Coyote Creek Dr & Okemos Rd
7.573 Okemos Rd & Fox Hollow Dr	7.646 Okemos Rd & Knob Hill Dr	7.658 Okemos Rd & Tamarack Dr
7.812 Okemos Rd & Club Meridian Dr	7.945 Okernos Rd & Heritage Ave	8.063 Okemos Rd & Bennett Rd & Kinawa Dr
8.470 Okernos Rd & Sower Blvd	8.662 Okernos Rd & Woodfield Rd	8.759 Science Pkwy & Okemos Rd
8.842 Riverwood Dr & Okemos Rd	8.856 Hulett Rd & Okemos Rd	8.935 Kewanee Way & Okemos Rd
9.010 Okemos Rd & Shawnee Trl	9.116 Okemos Rd & E Mount Hope Rd	9.234 Okemos Rd & Wonch Dr
9.405 Clinton St & Okemos Rd	9.484 Hamilton Rd & Okemos Rd	9.562 Methodist St & Okemos Rd
9.658 Kent St & Okemos Rd	9.861 Okernos Rd & W Grand River Ave	10.112 Hillcrest Ave & Okemos Rd
10.203 Okemos Rd & Central Park Dr	10.663 Gaylord C Smith Ct & Okemos Rd	10.874 Banyon Trl & Okemos Rd
11.000 Okemos Rd & Quarry Rd	11.258 Okernos Rd & Songbird Pointe	11.407 Okernos Rd & Raby Rd
11.584 Haslett Rd & Okernos Rd	11.664 Blue Lac Dr & Okemos Rd	11.735 La Mer Ln & Okemos Rd
12.019 Okemos Rd & Village Dr	12.160 Lake Lansing Rd & Okemos Rd	

								;	:				Envir	Environmental Condition	lition	
MilePo	ine UD10#	MilePoint UD10 # UD10 City/Township	ا د	ID-10 Crash Location UD-10 Crossroad Reference	Crash Type	Crash Severity	Date	Hour of Occurence	Veh.	Number of: L. Occup.	Ė	Weekday Weather	Weather	Lighting	Surface	Relationship On Road
A N	PR Number: 0362602		toad Name:	Road Name: Okemos Rd												
7.110		7549811 Mendian Twp	10° NW	JOLLY	Angle Tum	PD0	9/17/2005	9/17/2005 06PM-07PM	7	၈	0	Saturday	Clear	Daylight	È	Uncoded
7,117	8165683	8165683 Meridian Twp	20, N	JOFFY	Rear-End Straight	8	8/20/2005	8/20/2005 02PM-03PM	. 2	, m	0	Saturday	Cloudy	Daylight	Š	On Road
7.117	7549956	7549956 Mendian Twp	N.09	JOFFY	Rear-End Straight	8	11/22/2005	1/22/2005 06PM-07PM	7	. 7	•	Tuesday	Cloudy	Pak	È	On Road
7.122	6614856	8614856 Meridian Twp	N.52	JOHA	Rear-End Straight	Injury	8/28/2005	8/28/2005 03PM-04PM	8	9	~	Sunday	Clear	Daylight	£	On Road
7.239	,	7549519 Meridian Twp	150'S	JOLLY	Rear-End Straight	8	9/21/2005	9/21/2005 05PM-06PM	~	~		Wednesday	Clear	Daylight	È	On Road
7.276	8165309	8165309 Meridian Twp	20.X	JOLLY OAK	Rear-End Straight	6	8/12/2005	8/12/2005 01PM-02PM	7	ີ ຕ	0	Friday	Cloudy	Daylight	æ	On Road
7.281	7549949	7549949 Mendian Twp	75'N	JOLLY OAK	Anmed	8	11/7/2005	11/7/2005 04PM-05PM	 	-	0	Monday	Zes Z	Daylight	È	On Road
7.286	8165656	8165656 Meridian Twp	100.N	JOLLY OAK	Rear-End Straight	8	8/9/2005	8/9/2005 NOON-01PM	. 2	-		Tuesday	Clear	Daylight	Š	On Road
7.569	8165886	8165886 Meridian Twp	20. SW	FOX HOLLOW	Angle Tum	8	11/21/2005	11/21/2005 08AM-09AM	8	7		Monday	Cloudy	Daylight	8	On Road
7.657	8165865	8165865 Mendian Twp	S: S	TAMARACK	Angle Straight	8	10/25/2005	0/25/2005 04PM-05PM	7	7		Tuesday	Cloudy	Daylight	8	On Road
7.658	6809258	6809258 Mendian Twp	20. W	TAMMARACK	Head-On Left-Turn	8	10/5/2005	0/5/2005 07AM-08AM	~	7	0	Wednesday	Cloudy	Desk	કે	On Road
7.803	8165513	8165513 Meridian Twp	SO.03	CLUB MERIDIAN	Rear-End Straight	8	8/29/2005	8/29/2005 01PM-02PM	7	7	0	Monday	Clear	Daylight	£	On Road
7.898	8165500	8165500 Meridian Twp	250'S	HERITAGE	Side-Swipe Same	8	8/22/2005	8/22/2005 04PM-05PM	7	7	0	Monday	Clear	Daylight	æ	On Road
7.959	7549620	7549620 Meridian Twp	N.52	HERITAGE	Rear-End Straight	000	9/2/2005	9/2/2005 01PM-02PM	~	-	0	Fnday	Cloudy	Daylight	æ	On Road
8.006	8165516	8165516 Mendian Twp	300.8	KINAWA	Rear-End Straight	00	8/29/2005	8/29/2005 07PM-08PM	~	. 7	0	Monday	Cloudy	Daylight	<u>م</u>	On Road
8.065	8165508	8165508 Meridian Twp	7 O.	BENNETT	Rear-End Straight	P00	8/8/2005	8/8/2005 06AM-07AM	~	7	0	Monday	Clear	Dewn	ð	On Road
8.069	7549562	7549562 Mendian Twp	Z .00	BENNETT	Rear-End Straight	8	8/20/2005	8/20/2005 10PM-11PM	7	, ຕ	0	Saturday	Clear	Dark, Lighted	δ	On Road
8.562	8165868	8165866 Meridian Twp	528°S	WOODFIELD	Hit Train	Injury	10/25/2005	10/25/2005 11PM-MDNT	~	6	-	Tuesday	Cloudy	Cark	Debris	On Road
8.662	8165941	8165941 Meridian Twp	25. W	WOODFIELD	Fixed Object	8	10/18/2005	0/18/2005 NOON-01PM	-	-	0	Tuesday	Clear	Daylight	કે	On Road
8.664		6809200 Meridian Twp	10.N	WOODFIELD	Rear-End Straight	00	8/4/2005	8/4/2005 04PM-05PM	7	4	0	Thursday	Cloudy	Daylight	È	On Road
9.107	8165741	8165741 Meridian Twp	45°S	MT HOPE	Angle Tum	8	10/17/2005	10/17/2005 06PM-07PM	~	6	0	Monday	Cloudy	Dusk	Vet	On Road
9.116	8165620	8165620 Meridian Twp	10'E	MOUNT HOPE	Angle Tum	000	11/16/2005	1/16/2005 09AM-10AM	~	ဂ	0	Wednesday	Rain	Daylight	New Year	On Road
Total	crashes	Total crashes for PR 0362602: 22	22					Total	Fatal	Crash	0 :	Total Init	IIV Cras	hes: 2 To	ODG let	Total Fatal Crashee: 0 Total Injury Crashee: 2 Total PDO Crashee: 20

Ingham County

Report Module: Safety Management Analysis

Today's Date: Thursday, November 30, 2006

Dates: 12/1/2005 to 11/30/2006_

PR/RoadName: 362602: Okemos Rd

Milepoints: From 7.108 To 9.116

Sort Order: Road Name, Milepoint, Date of Crash

Intersection Name
Milepoint

0.000 Okemos Rd & E Columbia St & N Jefferson

0.267 Okemos Rd & N Rogers St

0.558 Mason Hills Dr & Okemos Rd & Coppersmit

3.152 Lamb Rd & Okemos Rd

6.693 Okemos Rd & Okemos/E I 96 RAMP 5.163 Okemos Rd & Willoughby Rd

7.008 Okemos Rd & University Park Dr & Woodlak

7.267 Jolly Oak Rd & Okemos Rd

7.573 Okemos Rd & Fox Hollow Dr

7.812 Okemos Rd & Club Meridian Dr

8.842 Riverwood Dr & Okernos Rd 9.010 Okemos Rd & Shawnee Trl 8.470 Okemos Rd & Sower Blvd

9.405 Clinton St & Okemos Rd 9.658 Kent St & Okemos Rd 10.203 Okemos Rd & Central Park Dr 11.000 Okemos Rd & Quarry Rd

11.584 Haslett Rd & Okemos Rd

12.019 Okemos Rd & Village Dr

Milepoint Intersection Name

0.157 Randolph St & Okemos Rd

1.143 Okemos Rd & W Howell Rd 0.405 Valley Ct & Okemos Rd

6.168 Sandhill Rd & Okemos Rd 4.156 Holt Rd & Okemos Rd

6.896 Okemos Rd & Okemos/W I 96 RAMP

7.108 Jolly Rd & Okemos Rd

7.313 Association Dr & Okemos Rd 7.646 Okemos Rd & Knob Hill Dr

8.662 Okemos Rd & Woodfield Rd 7.945 Okemos Rd & Heritage Ave 8.856 Hulett Rd & Okemos Rd

9.861 Okemos Rd & W Grand River Ave 9.116 Okemos Rd & E Mount Hope Rd 9.484 Hamilton Rd & Okemos Rd

10.663 Gaylord C Smith Ct & Okemos Rd

2.160 Lake Lansing Rd & Okemos Rd 11.258 Okemos Rd & Songbird Pointe 11.664 Blue Lac Dr & Okemos Rd

0.237 Ann St & Okemos Rd

0.484 Mason Hills Dr & Okemos Rd 2.145 Okemos Rd & Harper Rd

6.682 E 196/Okemos RAMP & Okemos Rd & Oke 4.910 Willoughby Rd & Okemos Rd

6.906 W I 96/Okemos RAMP & Okemos Rd & Oke

7.210 Hampton PI & Okemos Rd

7.428 Coyote Creek Dr & Okemos Rd

7.658 Okemos Rd & Tamarack Dr

8.063 Okemos Rd & Bennett Rd & Kinawa Dr

8.935 Kewanee Way & Okemos Rd 8.759 Science Pkwy & Okemos Rd

9.234 Okemos Rd & Wonch Dr

0.112 Hillcrest Ave & Okemos Rd 9.562 Methodist St & Okemos Rd

10.874 Banyon Trl & Okemos Rd 11.407 Okemos Rd & Raby Rd

11.735 La Mer Ln & Okemos Rd

												Enviro	Environmental Condition	dition	
		UD-10 Crash					Hour of	Ž	Number of:		,				Relationship
MilePoit	liePoint UD10 # UD10 City/Township Location UD-10 Crossroad Reference	Location	UD-10 Crossroad Reference	Crash Type	Crash Seventy	Date		Veh .	Veh. Occup. Inj.	Ē,	Weekday	Weekday Weather Lighting		Surface	On Road
PR	PR Number: 0362602	Road Name:	Road Name: Okemos Rd												
7.155	7.155 8166836 Meridian Twp	250' NW JOLLY	JOLLY	Rear-End Straight	8	12/29/2005	12/29/2005 06PM-07PM	7	eo	0	Thursday Cloudy	Cloudy	Oark A	Š	On Road
7.611	8165294 Mendian Twp	200. N	FOX HOLLOW	Rear-End Straight	PDO	12,7/2005	12/7/2005 04PM-05PM	7	2	0	Wednesday Clear	Clear	Daylight	Dry	On Road
7.639	8166806 Mendian Twp	100.8	100'S TAMARACK	Angle Straight	004	12/16/2005	12/16/2005 08AM-09AM	~	ъ	0	Fnday	Fnday Cloudy Daylight	Daylight	lcy	On Road
7.705	8166685 Mendian Twp	250' N	250'N TAMARAK	Rear-End Straight	PDO	12/22/2005	12/22/2005 03PM-04PM	2	9	0	Thursday	Rain	Daylight	Wet	On Road
8.057	6809973 Meridian Twp	30. S	KINANA	Rear-End Drive	PDO	12/16/2005	12/16/2005 07AM-08AM	2	2	0	Friday	Snow	Daylight	lcy	On Road
8.740	8166883 Meridian Twp	100.8	100'S SCIENCE	Side-Swipe Same	PDO	12/16/2005	12/16/2005 08AM-09AM	2	2	0	Fnday	Cloudy Daylight	Daylight	lcy	On Road
8.842	8166609 Meridian Twp	25' E	RIVERWOOD	Angle Straight	PDO	12/21/2005	12/21/2005 03PM-04PM	2	2	0	Wednesday Snow	Snow	Daylight	lcy	On Road
9.105	8165801 Meridian Twp	S.09	MT HOPE	Rear-End Straight	PDO	12/4/2005	12/4/2005 03PM-04PM	2	2	0	Sunday	Sunday Cloudy Daylight	Dayight	Slushy	On Road

Total Fatal Crashes: 0 Total Injury Crashes: 0 Total PDO Crashes: 8

Total crashes for PR 0362602: 8

Ingham County

Report Module: Safety Management Analysis

Today's Date: Tuesday, April 17, 2007

Dates: 1/1/2006 to 12/31/2006

PR/RoadName: 362602: Okemos Rd

Milepoints: From 7.100 To 9.200

Sort Order: Road Name, Milepoint, Date of Crash

Milepoint Intersection Name	Milepoint Intersection Name	Milepoint Intersection Name
0.000 W Columbia St & Okemos Rd & S Jefferson	0.157 Okemos Rd & Randolph St	0.237 Ann St & Okemos Rd
0.267 Okemos Rd & N Rogers St	0.405 Okemos Rd & Valley Ct	0.484 Okemos Rd & Mason Hills Dr
0.558 Copperamith Dr & Okemos Rd & Mason Hill	1.143 W Howell Rd & Okemos Rd	2.145 Okemos Rd & Harper Rd
3.152 Lamb Rd & Okemos Rd	4.156 Holf Rd & Okemos Rd	4.910 Okemos Rd & Willoughby Rd
5.163 Willoughby Rd & Okemos Rd	6.168 Sandhill Rd & Okemos Rd	6.682 E I 96/Okemos RAMP & Okemos Rd & Oke
6.693 Okemos/E I 96 RAMP & Okemos Rd	6.896 Okemos Rd & Okemos/W I 96 RAMP	6.906 W 96/Okemos RAMP & Okemos/W 96 R
7.008 University Park Dr & Okemos Rd & Woodlak	7.108 Jolly Rd & Okemos Rd	7.210 Okemos Rd & Hampton Pl
7.267 Okemos Rd & Jolly Oak Rd	7.313 Association Dr & Okemos Rd	7.428 Coyote Creek Dr & Okemos Rd
7.573 Okemos Rd & Fox Hollow Dr	7.646 Knob Hill Dr & Okemos Rd	7.658 Tamarack Dr & Okemos Rd
7.812 Club Meridian Dr & Okemos Rd	7.945 Heritage Ave & Okemos Rd	8.063 Kinawa Dr & Bennett Rd & Okemos Rd
8.470 Okemos Rd & Sower Blvd	8.581 Okemos Rd & CSX Transportation	8.662 Okemos Rd & Woodfield Rd
8.759 Okemos Rd & Science Pkwy	8.842 Riverwood Dr & Okernos Rd	8.856 Hulett Rd & Okemos Rd
8.935 Okemos Rd & Kewanee Way	9.010 Shawnee Tri & Okemos Rd	9.116 E Mount Hope Rd & Okemos Rd
9.234 Wonch Dr & Okemos Rd	9.405 Okemos Rd & Clinton St	9.484 Hamilton Rd & Okemos Rd
9.562 Methodist St & Okemos Rd	9.658 Kent St & Okemos Rd	9.861 Okemos Rd & W Grand River Ave
10.112 Okemos Rd & Hillcrest Ave	10.203 Okemos Rd & Central Park Dr	10.663 Okemos Rd & Gaylord C Smith Ct
10.727 Canadian National Railway & Okemos Rd	10.874 Banyon Tri & Okemos Rd	11.000 Okemos Rd & Quarry Rd
11.258 Okemos Rd & Songbird Pointe	11.407 Raby Rd & Okemos Rd	11.584 Okemos Rd & Haslett Rd
11.664 Okemos Rd & Blue Lac Dr	11.735 Okemos Rd & La Mer Ln	12.019 Okemos Rd & Village Dr
12.160 Lake Lansing Rd & Okemos Rd		

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		4000												
Polnt UD	Mis-Point UDIS# UDISCKy/Township		Location UD-10 Crossroad Reference	Creek Type	Creeh Severty	/ Date Occurence	3	Veh. Occup.	ž	Weekstay	Weather	Lighting	Surface	On Road
R Number	PR Number: 0362602	Road Name:	Road Name: Okemos Rd											
7.102 72963	7298327 Alaledon Twp	30.8	JOHA	Angle Streight	P00	1/21/2006 07PM-06PM	7	7	0	Seturdey	Cloudy	Dark, Lighted	ç	On Road
7.104 72986	7298678 Alaiedon Twp	20.8	NOTE	Rear-End Straight	900	6/24/2006 10AM-11AM	7	2	0	Seturday	Clear	Daylight	È	On Road
7.104 72990	7299049 Alaiedon Twp	20.8	POLLY	Rear-End Straight	hjury	10/27/2008 11AM-NOON	7	7	7	Friday	Rein	Daylight	Wet	On Road
7.106 72917	7291716 Alaiedon Twp	×	יסררא	Rear-End Straight	8	3/1/2008 03PM-04PM	2	2	0	Wednesday	Cloudy	Daytight	δ	On Road
7.116 85863	8566396 Meridian Twp	2 Q	JOLLY	Reer-End Drive	8	7/20/2006 09AM-10AM	7	7	0	Thursday	Cloudy	Daylight	Depoun	On Road
7.117 85665	8586550 Meridian Twp	2,05	ATTOR	Rear-End Straight	8	5/30/2006 07AM-08AM	7	2	0	Tuesday	Clear	Daylight	Ą	On Road
7.121 85860	8586086 Meridian Twp	Z P	JOLLY	Rear-End Drive	Injury	11/7/2008 01PM-02PM	8	7	-	Tuesday	Rain	Deylight	Wet	On Road
7.127 85868	8588958 Meridian Twp	100 N	JOITA	Rear-End Straight	8	2/16/2006 05PM-06PM	7	60	0	Thursday	R.	Deylight	Ş	On Road
7.127 68100	6810050 Meridian Twp	100 N	JOLLY	Rear-End Straight	Injury	10/26/2006 06PM-07PM	•	4	-	Thursday	Cloudy	Pask	Š	On Road
7.165 85868	8566868 Meridian Twp	300 N	OULY	Rear-End Straight	8	5/17/2006 04PM-05PM	7	-	0	Wednesday	Cloudy	Deylight	8	On Road
7.208 85662	8566233 Meridian Twp	\$28. N	OULY	Rear-End Straight	8	12/13/2006 05PM-06PM	~	~	0	Wednesday	Cloudy	Dark, Lighted	Ą	On Road
7.258 81662	8166249 Meridian Twp	40'S	OULY	Becking	8	10/17/2006 07PM-08PM	7	6		Tuesday	Cloudy	Dark, Lighted	Vet	On Road
7.262 85868	8586800 Meridian Twp	25.8	JOLLY OAK	Rear-End Straight	8	5/25/2008 04PM-05PM	7	7	•	Thursday	Cloudy	Dayright	Ķ	On Road
7.272 81660	8166060 Meridian Twp	25' NE	JOLLY OAK	Angle Tum	8	7/30/2006 11PM-MDNT	~	2		Sunday	C)	Dark	કે	On Road
7.286 85665	8586519 Meridian Twp	100 N	JOLLY OAK	Animal	8	5/4/2006 09PM-10PM	-	-	0	Thursday	Clear	Derk	Š	On Road
7.556 85861	8566170 Meridian Twp	80.8	FOX HOLLOW	Side-Swipe Opposite	8	12/7/2006 03PM-04PM	7	~	0	Thursday	Snow	Deytight	Vet	On Road
7.573 81860	8166038 Meridian Twp	30'E	FOX HOLLOW	Reer End Right Turn	8	2/8/2006 05PM-08PM	~	6	•	Wednesday	Snow	Daylight	<u>5</u>	On Road
7.649 81663	8186363 Meridian Twp	50'S	TAMARACK	Rear-End Straight	8	10/8/2006 05PM-06PM	2	•	0	Monday	Clear	Daylight	ō	On Road
7.852 81862	8166293 Meridian Twp	30.8	TAMARACK	Reer-End Straight	900	10/5/2006 10AM-11AM	2	2	0	Thursday	Clear	Daylight	ą	On Road
7.655 85662	8566268 Meridian Twp	15'8	TAMARACK	Rear-End Straight	Injury	12/19/2006 04PM-05PM	7	2	2	Tuesday	Clear	Daylight	Ą	On Road
7.856 75499	7549972 Meridian Twp	10'S	TAMARACK	Misc. Multiple Vehicle	8	1/16/2008 01PM-02PM	2	2		Monday	Clear	Dayight	Ą	On Road
7.658 81663	8166356 Meridian Twp	×	TAMARACK	Angle Straight	Injury	9/28/2006 10AM-11AM	7	7	7	Thursday	Clear	Daylight	Dry	On Road
7.861 75498	7549832 Meridian Twp	15°N	TAMARACK	Head-On Left-Tum	mjuny	6/3/2006 04PM-05PM	2	7	-	Thursday	Cloudy	Daylight	Wet	On Road
7.662 81661	8196124 Meridian Twp	20' N	TAMARACK	Side-Swipe Seme	Ş	7/16/2006 06PM-07PM	2	6	0	Sunday	Clear	Daylight	Dry	On Road
7.677 81657	8165723 Meridian Twp	100 N	TAMARACK	Rear-End Straight	8	4/12/2006 04PM-06PM	2	80	0	Wednesday	Rein	Daylight	Wet	On Road
7.807 85663	8566354 Meridian Twp	25' S	CLUB MERIDIAN	Rear-End Drive	8	5/10/2006 03PM-04PM	7	6	•	Wednesday	Rain	Daylight	Dry	On Road
7.926 81666	8166626 Meridian Twp	100'8	HERITAGE	Rear-End Straight	ş	2/8/2006 05PM-06PM	2	m	0	Wednesday	Cloudy	Derk	Ş	On Road
7.937 81668	8186861 Meridian Twp	40°S	HERITAGE	Side-Swipe Opposite	Injury	2/8/2006 06PM-07PM	7	7	-	Wednesday	Snow	Dusk	<u>5</u>	On Road
7.945 81668	8166860 Meridian Twp	×	HERITAGE	Fload Object	8	2/8/2006 05PM-06PM	-	-	•	Wednesday	Snow	Dusk	<u>5</u>	On Road
7.950 81668	8186859 Meridian Twp	25' N	HERITAGE	Rear-End Straight	8	2/8/2006 05PM-06PM	2	2	0	Wednesday	Snow	Duek	łcy	On Road
8.035 68101	6810141 Meridian Twp	150'S	KINDAA	Rear-End Drive	Injury	8/24/2006 10AM-11AM	2	3	-	Thursday	Rain	Daylight	Wet	On Road
8.049 85865	8586506 Meridian Twp	75' 8	KINAWA	Side-Swipe Seme	P00	2/27/2006 03PM-04PM	2	2	0	Mondey	Snow	Daylight	Wet	On Road
8.056 65663	6566396 Meridian Twp	40'S	KINAWA	Rear-End Drive	Injury	7/20/2006 06AM-09AM	6	3	-	Thursday	Cloudy	Daylight	P,	On Road
8 AE7 81887	8188252 Medidien Tues	25.0	KINAWA	Beer Frod Strainte	3,5	112/2008 11AM-NOON	,	•	-	1	ě	4		1

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Weakday Weather Ligiting Surface Wednesday Clear Daylight Dry			4				7	i	i i				Environmental Condition	Millon	Defederation
	Milerot	IN UDIO # UDIO CIEN			Srash Severity		Occurence	Ę	Occup.	Ē		Neather	Ughtho	Surface	On Road
	8.059	8588121 Meridian Tv	KINAWA	Rear-End Straight	90	12/8/2006	01PM-02PM	2	7	0	Fridey	Clear	Daylight	\$	On Road
Modestial Intercenting 10 N MANAM Separation Draws PDO 8220000 Intercenting 1 N MANAM Separation Draws PDO 8220000 Intercenting 2 N MANAM PDO 822000 Intercenting PDO 82200	8.063	8166130 Meridian Tv	BENNETT	Angle Tum	Injury	8/2/2008	NOON-01PM	2	7	-	Wednesday	0	Daylight	£	On Road
Sesses sincharing 25 N BENNETT ResideDine PDO SMOOD BONAGOMA 2 No. House STON SENNETT ResideDine PDO SMOOD BONAGOMA 2 No. House Companies Displayed No. House Companies Displayed	8.065	7550021 Meridian Tv	KINAWA	Side-Swipe Opposite	8	ļ	11PM-MDNT	7	2	0	Wednesday	Refr cie	Dark, Lighted	*	On Road
5000000000000000000000000000000000000	8.068	8566535 Meridlen Tv	BENNERT	Rear-End Drive	S ₂		08AM-08AM	7	6	0	Monday	Snow	Deylight	¥et	On Road
15.55.22.1 Ministrating 200. Michael Cholomode Seba-Super Same PDD 4.20.2008 Cholomode Cholomode Designation	8.069	8566419 Meridian Tv	KINAWA	Head-On Left-Tum	8		03PM-04PM	7	7		Monday	Cloudy	Daylight	Uncoded	d On Road
2550071 Michaelan Top 220 N NOMAWA State-Single Opposite Injury 96270000 DAMAGRAM 2 1 Timestay Top Damping Dry No Dry No Control Control Day of the Control Dry No Dry No Control 2 1 Timestay Control Dry No Dry	8.101	8165726 Meridian Tv	KINANA	Side-Swipe Same	90		02PM-03PM	2	4	0	Saturday	Cloudy	Daylight	કે	On Road
15500000 Montania Color Chinata Chouse Daylot Day	8.110	8588077 Meridian Tv	KINAWA	Side-Swipe Opposite	Injury		08AM-09AM	2	6	-	Wednesday	Cloudy	Daylight	ਣ	On Road
1869009 184000 150 184000	8.110	8166397 Meridian Tv	KINANA	Rear-End Straight	lnjury	10/24/2008	08AM-10AM	7	7	-	Tuesday	Cloudy	Daylight	፩	On Road
5560022 Ministant Tugh 575 SOMER Final Object PDO 5100000 60HL/JOHN 1 5 multiplied Chould	8.120	8166099 Meridian Tv	BENNETT	Rear-End Straight	90		05PM-06PM	7	60	0	Tuesday	Ologe	Daylight	5	Depooun
Seesand interfaint Tupy SCORRES Anaple Straight PDA 2672006 GAMA-GAMA 2 Sunday Storm Day Day 7.56008073 Merchain Tupy 5.6 N WOODFELD Maca Straight PDA 7177000 GSPA-GAMA-GAMA 2 3 Monday Charge Day 7.56008073 Merchain Tupy 10.5 WOODFELD Maca Straight PDA 5177000 GSPA-GAMA-GAMA 2 2 Monday Charge Day 7.560080 Merchain Tupy 10.5 SCIENCE Reacted Simplify PDA 517000 GSPA-GAMA-GAMA-CAMA 2 1 Munday Chee Day/gat DAY 6566917 Merchain Tupy 10.7 SCIENCE Reacted Simplify PDA 517000 GSPA-GAMA-CAMA-CAMA 2 1 Munday Chee Day/gat DAY 6566917 Merchain Tupy 10.7 SCIENCE Reacted Simplify PDA 417000 GSPA-GAMA-CAMA-CAMA-CAMA-CAMA-CAMA-CAMA-CAM	8.461	7550022 Meridian Tv	SOWER	Fixed Object	800	1	09PM-10PM	-	_ا	0	Thursday	Cloudy	Dark, Lighted	£	On Road
Seedest 3 Manchain Top S20° N. SOWER Reak-End Strught PDD 7/17/2006 GoPH-QoPM 2 1 Thrustay Clark Daylgott DAY 7550020 Manchain Top 15 S. WOODPELD Reak-End Strught PDO 5/18/2000 LIPH-QoPM 2 0 Thrustay Clark Daylgott DAY 86696910 Manchain Top 20' S. SCIENCE SCIENCE SCIENCE Reak-End Strught Injury 3/18/2000 2 0 Injury 2 0 Injury 2 0 Injury 0 0 1/18/2000 0	8.488	8566895 Meridian Tv	SOWER	Angle Straight	8		03AM-04AM	2	60	0	Sunday	Snow	Derk	Snowy	On Road
75500200 Manclain Top 105 S MODDPIELD Make Single Vertide Injury 77207200 GAM-GAM, M. 1 1 Thursday Cloudy Daylight	8.570	8566973 Meridian Tv	SOWER	Rear-End Straight	8		05PM-08PM	2			Monday	0	Daylight	è	On Road
65669050 Marchian Tupp 107 S SCIENCE Reser-End Straght PDO \$110,200 170,402PM 2 0 Thunday Ran Daylight Myn 754006-16 Marrian Tupp 20 S SCIENCE SIGENCE Reser-End Straght Injuy 1712,2000 0 PHA-LAPM 2 1 Thunday Chee Daylight	8.659	7550020 Mendian Tv	WOODFIELD	Misc. Single Vehicle	Injury		08AM-09AM	-	-	-	Thursday	Cloudy	Daylight	ક	Out Show/Curb
5566410 Mendlem Tuyp 27 S SCIENCE Rae-End Simphit Injury 11222000 GPM-ADPH 2 1 Verdnessey Clear Daylyth Dry 756964 Mendlem Tuyp 27 S SCIENCE Rae-End Simphit Injury 11222000 GPM-ADPH 2 1 Verdnessey Clear Daylyth Dry 869610 Mendlem Tuyp 10 W SCIENCE Angel Angel 2 1 Verdnessey Clear Daylyth Dry 869610 Mendlem Tuyp 10 W SCIENCE Rae-End Simphit Injury 922000 GDM-ADPH 2 0 Monday Clear Daylyth Dry 869610 Mendlem Tuyp 10 N SCIENCE Rae-End Simphit PDO 7172000 GDM-ADPH 2 2 1 Monday Clear Daylyth Dry 869690 Mendlem Tuyp 45 NW SCIENCE Rae-End Simphit PDO 7172000 GDM-ADPH 2 2 1 Turnsky Clear Daylyth Dry 869690 Mendlem Tuyp 45 NW SCIENCE <td>8.740</td> <th>8566906 Meridian Tv</th> <td>SCIENCE</td> <td>Rear-End Straight</td> <td>8</td> <td></td> <td>01PM-02PM</td> <td>7</td> <td>7</td> <td>0</td> <td>Thursday</td> <td>Z.</td> <td>Daylight</td> <td>Vet</td> <td>On Road</td>	8.740	8566906 Meridian Tv	SCIENCE	Rear-End Straight	8		01PM-02PM	7	7	0	Thursday	Z.	Daylight	Vet	On Road
75.690-66 Meridian Tupp 27.5 SCIENCE Rear-End Straight Injury 117222008 0PPM-07PM 2 1 Vivedneeds Cheer Dark Lighted Dry 8568010 Meridian Tupp 10° SCIENCE Peddestrien Injury 97282000 07PM-09PM 2 1 Thursday Cleer Dark Dark Dark Dark Dark Dark Dark Dark Dark Dark Dark Dark Dark Dark Dark	8.755	8568416 Meridian Tv	SCIENCE	Side-Swipe Same	8		11AM-NOON	2	4	0	Thursday	0	Daylight	Ę	Uncoded
6566101 Meridian Tuyp 10° SCIENCE Paddestian Injury 9282000 GPH4-QRM 2 0 1 Thurdiday Clear Duylight Dry 6566971 Meridian Tuyp 10° W SCIENCE Angel Tum PDO 7/17/2006 GPH4-QRM 2 2 0 Monday Clear Duylight Dry 6566973 Meridian Tuyp 10° W SCIENCE Rear-End Straight PDO 7/17/2006 GPH4-QRM 2 2 0 Monday Clear Duylight Dry 7548338 Meridian Tuyp 35°NM SCIENCE Rear-End Straight PDO 12/22/2006 GPH4-GPM 2 2 1 Thurdidy Clear Duylight Dry 8606507 Meridian Tuyp 35°NM SCIENCE Science Science Science Science Science Duylight Dry 8606507 Meridian Tuyp 10°N HULL Angel Straight PDO 12/22/2006 GPH4-GPM 2 2 0 Friday Duylight Dry 8166538 Meridian Tuyp 10°N HULL	8.755	7549946 Meridian Tv	SCIENCE	Reer-End Straight	Injury			2	7	-	Wednesday		Dark, Lighted	È	On Road
6569637 Maridian Twp 10 W SCIENCE Angle Tum PDO 71/12006 GPM-AGPW 2 0 Monday Clear Daylight DV 5569637 Maridian Twp 10 N SCIENCE Rear-End Straight PDO 41/12006 GPM-GPW 2 2 0 Monday Clear Daylight DV 7549838 Maridian Twp 35 NW SCIENCE Rear-End Straight PDO 41/12006 GPM-GPW 2 2 7 Thuriday Clear Daylight DV 6806590 Maridian Twp 45 NW SCIENCE Rear-End Straight PDO 2/2/2006 GPM-GPW 2 2 Thuriday Clear Daylight DV 8665900 Maridian Twp 100 N SCIENCE Rear-End Straight PDO 2/2/2006 GPM-GPW 2 2 Thuriday Clear Daylight DV 8166336 Maridian Twp 50 N HULUTT Rear-End Straight PDO 7/2/2/2006 GPM-GPW-GPW 2 2 0 Thuriday	8.757	8586101 Meridian Tv	SCIENCE	Pedestrian	Injury		07PM-08PM	7	0	-	Thursday	Clear	Dusk	કે	On Road
85696378 Warrdian Twp 10 N SCIENCE Raar-End Straight PDO 44772008 GPM-06PM 2 2 7 Turnday Class Daylight DV 7549938 Warrdian Twp 35 NW SCIENCE Raar-End Straight Injuny 86312008 GPM-06PM 2 2 7 Turnday Class Daylight DV 8980599 Warrdian Twp 45 NW SCIENCE State-End Straight PDO 9172000 GPM-06PM 2 2 7 Turnday Ran Daylight Warrdian 8166376 Warrdian Twp 100 N SCIENCE State-Swipe Same PDO 9172000 GPM-06PM 2 2 7 Turnday Ran Daylight Warrdian 8166386 Warrdian Twp 20 N HULLTT Ange Straight PDO 7202006 GPM-06PM 2 2 7 Turnday Class Daylight	8.758	8586971 Meridian Tv	SCIENCE	Angle Tum	8		03PM-04PM	7	7	0	Monday	0	Daylight	ક	On Road
7549928 Maridian Twp 35 NW SCLENCE Rear-End Straight Pipo 6712008 GPM-GPW 2 2 2 1 Thurnday Clear Dayight PV 6806590 Maridian Twp 45 NW SCIENCE Rear-End Straight PDO 6172006 GPM-GPW 2 2 2 2 3 0 Thurnday Clear Dayight Wet 6166376 Maridian Twp 100 N SCIENCE SIGENCE SIGENCE <td>8.761</td> <th>8586575 Meridian Tv</th> <td>SCIENCE</td> <td>Rear-End Straight</td> <td>8</td> <td></td> <td>04PM-05PM</td> <td>2</td> <td>2</td> <td>0</td> <td>Monday</td> <td>Close</td> <td>Daylight</td> <td>કે</td> <td>On Road</td>	8.761	8586575 Meridian Tv	SCIENCE	Rear-End Straight	8		04PM-05PM	2	2	0	Monday	Close	Daylight	કે	On Road
8180379 Maridam Twp 45 NW SCIENCE Reas-End Straight PDO 91220200 GPM-0SPM 2 3 0 Treaded Rain Dayight Wet 8180378 Maridam Twp 107 N SCIENCE Side-Swipe Same PDO 122222000 GPM-0SPM 2 3 0 Fhiday Rain Dayight Wet 8580800 Maridam Twp 20 S RIVERWOOD Fbad Object PDO 1082000 GPM-0SPM 2 2 2 0 Wedneaded Brylight Pylight	8.766	7549938 Meridian Tv	SCLENCE	Rear-End Straight	Injury		05PM-06PM	7	7	2	Thursday	Clear	Daylight	È	On Road
8186379 Maridan Twp 100 N SCIENCE Side-Swipe Same PDO 127222009 OFM-U2PM 2 3 0 Friday Rain Daylight Wet 858890 Maridan Twp 20 S RIVERWOOD Fload Object PDO 12622009 OFM-U2PM 1 1 0 Wednesday Snow Daylight PO 8186398 Maridan Twp 30 W HULETT Angle Straight PDO 1262009 OFM-U2PM 2 2 0 Friday Clear Daylight Dry 8186398 Maridan Twp 50 W HULUTT Rear-End Straight PDO 17202009 OFM-U2PM 2 2 0 Friday Clear Daylight Dry 8586480 Maridan Twp 150 W HULUTT Rear-End Straight PDO 1720200 12 Z 2 0 Trunsday Cloudy Daylight Dry 8185827 Maridan Twp 150 S SHAWNEE Rear-End Straight PDO 17182009 QPM-U-DPM 2 2 2 0 Wednesday Cloudy	8.788	6808599 Meridian Tv	SCIENCE	Rear-End Straight	80	8/12/2006	05PM-06PM	7	6	0	Tuesday	Ref	Deylight	¥et ¥	On Road
9569900 Maridian Tupp 20'S RIVERWOOD Fload Object PDO 20x2006 0.4M-AGPM 1 1 0 Wednasday Snow Daylyght by 8165386 Maridian Tup 30'W HULETT Angle Straight PDO 10x82006 0.7PM-02PM 2 2 2 0 Friday Clear Daylight Dry 8166386 Maridian Tup 50'N HULUTT Rear-End Straight PDO 2x22006 0.7PM-08PM 2 2 0 Friday Clear Daylight Dry 8566516 Maridian Tup 150'N KEWANE Rear-End Straight PDO 2x22006 17AM-NOON 2 2 0 Mredray Cloudy Daylight Dry 8166621 Maridian Tup 5'S SHAWNE Rear-End Straight PDO 2x32006 6PM-0APM 2 2 0 Mredray Cloudy Daylight Dry 8166821 Maridian Tup 5'S SHAWNE Rear-End Straight PDO 2x32006 6PM-0APM-0APM	8.778	8166376 Meridian Tv	SCIENCE	Side-Swipe Same	S	12/22/2006	01PM-02PM	7	6	0	Friday	R	Daylight	¥et	On Road
8166336 Maridian Twp 30 W HULETT Angle Straight PDO 106/2006 0 17M-02PM 2 2 2 2 6 Friday Clear Daylight Dry 8166336 Maridian Twp 50 N HULUTT Rear-End Straight PDO 7/20/2006 0 PM-03PM 2 1 0 Thurday Cloudy Daylight Dry 8566430 Maridian Twp 150°N RCKWANE Rear-End Straight PDO 2/8/2006 1748-09PM 2 0 Thurday Cloudy Daylight Dry 8166824 Maridian Twp 50°S KEWANIE Rear-End Straight Injury 4/25/2006 1/18/2006 0 PM-0PM 2 2 0 Wednesday Cloudy Daylight Dry 8165827 Maridian Twp 10°S MT HOPE Angle Straight PDO 7/21/2006 0 PM-0PM 2 2 0 Wednesday Cloudy Daylight Dry 816576 Maridian Twp 10°S MT HOPE Angle Straight PDO 7/21/2006<	8.838	8568900 Meridian Tv	RIVERWOOD	Fixed Object	8	1	04PM-05PM	-	-	0	Wednesday	Snow	Daylight	ō	On Road
8166136 Manidian Twp SG N Manidian Twp SG N Manidian Twp Road-End Straight PDO 77202006 0.7 PM-03PM 2 1 0 Thunday Cloudy Daylight Dry Name 8566416 Manidian Twp 150°N RVACAME Rear-End Straight PDO 2/8/2006 17 MA-MOON 2 2 0 Thunday Cloudy Daylight Dry Name 1/18/2006 0.8 PM-07PM 2 0 1 1 Lighted Dry Name Daylight Dry Name 1/18/2006 0.8 PM-07PM 2 0 1 1 0 1 0 1 0 1 0 0 1 0 1 0	8.856	8166386 Meridian Tv	HULETT	Angle Straight	P00		01PM-02PM	2	7	0	Friday	Clear	Daylight	ર્કે	On Road
8566430 Mandlan Tuyp 150'N RIVERWOOD Rear-End Straight PDO 28/25/2006 0.7 PM-08PM 2 2 0 Thursday Cloudy Dearl, Lighted Dry 8566516 Mandlan Tuyp 150'S KEWANNE Rear-End Straight Injury 4/25/2006 619M-05PM 2 1 Tuesday Cloudy Dearl, Lighted Dry 8165627 Mandlan Tuyp 50'S SHAWANNE Rear-End Straight PDO 1/18/2006 65PM-05PM 2 1 Friday Cloudy Dearl, Lighted Snowy 7549627 Mandlan Tuyp 100'S MT HOPE Angle Straight PDO 1/11/2006 0.5PM-05PM 2 2 1 Friday Cloudy Dearl, Lighted Snowy 8165716 Mandlan Tuyp 15'W MOUNT HOPE Angle Straight PDO 1/11/52/2006 0.7PM-05PM 2 2 0 Saturday Cloudy Dearlight Dry 8165746 Mendlan Tuyp 15'W MOUNT HOPE Animat PDO 1/11/52/2006 0.7PM-05PM	8.865	8166136 Meridian Tv	HULUTT	Rear-End Straight	8		02PM-03PM	2	_	0	Thursday	Clear	Daylight	È	On Road
8568518 Maridian Tuyp 150'S KEWANEE Rear-End Straight Injury 4252006 11AB-MONN 2 2 1 Tuesday Cloudy Daylight Dry 8166824 Maridian Tuyp 75'N KEWANNE WAY Angle Straight PDO 1/182006 05PM-07PM 2 2 0 Wednesday Cloudy Dark Lighted Snowy 7549827 Maridian Tuyp 100'S MT HOPE Angle Straight PDO 7/21/2006 05PM-05PM 2 1 Friday Cloudy Dark Lighted Not 8165716 Maridian Tuyp 15'W MOUNT HOPE Angle Straight PDO 7/1/15/2006 05PM-05PM 2 2 0 Saturday Cloudy Dark Darkight Dry 8165746 Maridian Tuyp 15'W MOUNT HOPE Animal PDO 1/1/52/2006 07PM-05PM 1 1 0 Saturday Cloudy Dark Dry Dark	8.870	8566480 Meridian T	RIVERWOOD	Rear-End Straight	90		07PM-08PM	2	2	0	Thursday	Cloudy	Dark, Lighted	ğ	On Road
8168624 Manidian Twp 75 N KEWANNE WAY Angle Straight PDO 1/18/2006 6PM-07PM 2 2 0 Wednesday Cloudy Dark Lighted Snowy 8165627 Manidian Twp 50°S SHAMME Rear-End Straight Injuny 2/3/2006 0.54M-05PM 2 2 1 Friday Cloudy Durk Wet 8165716 Manidian Twp 100°S MT HOPE Angle Straight PDO 7/21/2006 0.84M-10AM 3 1 0 Friday Cloudy Durk Wet 8165716 Manidian Twp 15°W MOUNT HOPE Angle Straight PDO 7/1/15/2006 0.84M-10AM 3 1 0 Saturday Clear Daylight Dry 8165142 Mendlam Twp 10° N MT HOPE Animal PDO 1/1/15/2006 0.84M-05PM 1 1 0 Wednesday Cloudy Daylight Dry 8165142 Mendlam Twp 150° N MOUNT HOPE Animal PDO 1/1/15/2006 0.84M-05PM 1	8.907	8586516 Meridian Tv	KEWANEE	Rear-End Straight	Injury	4/25/2008	11AM-NOON	7	7	-	Tuesday	Cloudy	Deylight	È	On Road
8165827 Mendian Twp 50'S SHAWNEE Rear-End Straight Injury 23/2006 65PM-06PM 2 2 1 Friday Cloudy Dusk Wet 7549827 Mendian Twp 100'S MT HOPE Angle Tum PDO 7/21/2006 0APM-05PM 2 2 2 0 Saturday Clear Daylight Dry 8165716 Mendian Twp 100 N MT HOPE Animal PDO 3/11/2006 0APM-05PM 2 0 Saturday Clear Daylight Dry 8165142 Mendian Twp 100 N MT HOPE Animal PDO 1/1/5/2006 0APM-05PM 1 1 0 Wednesday Clear Daylight Dry 8165142 Mendian Twp 150 N MOUNT HOPE Animal PDO 1/1/5/2006 0APM-05PM 1 0 Saturday Clear Daylight Dry 8165142 Mendian Twp 150 N MOUNT HOPE Animal PDO 1/1/5/2006 0APM-05PM 1 0 Saturday	8.849	8168624 Meridien Tv	KEWANNE WAY	Angle Straight	80	1/18/2006	08PM-07PM	2	7		Wednesday	Cloudy	Dark, Lighted	Snowy	On Road
7549827 Mendian Twp 100 S MT HOPE Angle Straight PDO 7721/2006 0.4M-05PM 3 1 0 Friday Clear Daylight Dry 8165716 Mendian Twp 15 W MOUNT HOPE Animal PDO 3/1/2006 0.4PM-05PM 2 2 0 Saturday Clear Daylight Dry 8166346 Mendian Twp 100 N MT HOPE Animal PDO 11/15/2006 0.4PM-05PM 1 1 0 Wednesday Clear Daylight Dry 8166142 Mendian Twp 150 N MOUNT HOPE Animal PDO 11/18/2006 0.2AM-03AM 1 1 0 Wednesday Cloudy Dry Dry 8166142 Mendian Twp 150 N MOUNT HOPE Animal PDO 11/18/2006 0.2AM-03AM 1 1 0 Wednesday Cloudy Dry Dry Dry	9.001	8165827 Meridian Tv	SHAWNEE	Rear-End Straight	Injury		05PM-08PM	7	7	-	Friday	Cloudy	Dusk	Xet	On Road
8185716 Mandlan Twp 15°W MOUNT HOPE Angle Tum PDO 311/2008 GAPM-05PM 2 2 0 Saturday Clear Daylight Dry 8186348 Mandlan Twp 100°N MT HOPE Animal PDO 11/15/2006 GAPM-05PM 1 1 0 Wednesday Clear Daylight Dry 8186142 Mandlan Twp 150°N MOUNT HOPE Animal PDO 11/18/2006 GAPM-05PM 1 1 0 Saturday Clear Daylight Dry 8610033 Mandlan Twp 1320°S CLINTON Rear-End Straight PDO 92/20/2006 GAPM-05PM 3 5 0 Thurnday Clear Daylight Dry	9.097	7549927 Meridian Tv	MT HOPE	Angle Straight	P00	7/21/2008	09AM-10AM	က	-	0	Friday	Clear	Daylight	ર્ક	Out ShourCurb
8166346 Mendlem Twp 100° N MT HOPE Animal PDO 11/15/2006 GAPM-05PM 1 0 Wednesday Clear Daylight Dry 8166142 Mendlem Twp 150° N MOUNT HOPE Animal PDO 11/16/2006 GAPM-03AM 1 1 0 Saturday Cloudy Dark Dry 8610033 Mendlem Twp 1320° S CLINTON Rear-End Straight PDO 928/2006 GAPM-05PM 3 5 0 Thurnday Clear Daylight Dry	9.116	8165716 Meridian Tv	MOUNT HOPE	Angle Tum	8	3/11/2006	04PM-05PM	7	7	0	Saturday	Clear	Daylight	£	On Road
8166142 Meridien Twp 150'N MOUNT HOPE Animal PDO 11/18/2006 02AM-03AM 1 0 Saturday Cloudy Dark Dry 6810033 Meridien Twp 1320'S CLINTON Rear-End Straight PDO 9/28/2006 GAPM-05FM 3 5 0 Thurnday Clear Dayight Dry	9.135	8186346 Mendian Tv	MT HOPE	Animal	PD0	11/15/2006	04PM-05PM	-	-	0	Wednesday	Clear	Daytight	፩	On Road
6810033 Meridian Twp 1320'S CLINTON Rear-End Straight PDO 9/28/2006 04PM-05PM 3 5 0 Thursday Clear Daylight Dry	9.144	8166142 Meridian Tv	MOUNT HOPE	Animal	80	11/18/2006	02AM-03AM	-	-	0	Saturday	Cloudy	Derk	£	On Road
	9.155	6810033 Mendlen Tv		Rear-End Straight	8	9/28/2006	04PM-05PM	٣	9		Thursday	Clear	Daylight	Š	On Road

UD-16 Cresh			Hour of	Number of:				Relettonship
MilePoint UD10 # UD10 City/Township Location UD-18 Crossroad Reference Cresh	Type Creek	h Severity Det	• Occurence	Crash Type Crash Severity Date Occurence Veh. Occup. Inj. Weekday Weather Lighting Surface On Road	. Weekday	Weather Lig	httng Surface	On Road
Total crashes for PR 0362602: 68			Total	Total Fatal Crashes: 0 Total Injury Crashes: 19 Total PDO Crashes: 46	O Total Inju	ry Crashes:	19 Total PDC	Crashes: 49

