

Rapid City Area
Metropolitan Planning Organization

**PEDESTRIAN/BICYCLIST
CRASH REPORT
2002 – 2008**



Prepared in cooperation with:

City of Rapid City
Engineering Services Division
Public Works Department

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INTRODUCTION/PURPOSE

In 2007, 4,454 pedestrians were killed in traffic crashes in the United States and another 70,000 were injured. Most of the fatalities occurred in urban areas, at non-intersection locations and at night. Also in 2007, 698 bicyclists were killed in crashes and 44,000 more were injured. With rising energy costs and a nation-wide emphasis on improving the fitness level of our citizens, the number of pedestrians and bicyclists is expected to increase significantly. Accordingly, traffic engineering professionals, urban planners and law enforcement officials are all being challenged to identify locations of concern and to implement appropriate mitigation measures to enhance pedestrian and bicyclist safety.

The Pedestrian & Bicyclist Crash Report is designated in the Rapid City Area Metropolitan Planning Organization's Operations Plan as one of the transportation products to be presented to the MPO's three transportation process committees. The purposes of this document are:

1. To present an overview of those reported crashes that involved pedestrians and bicyclists.
2. To present the results of trend analyses of the available crash data.
3. To identify any appropriate mitigation measures that would reduce the frequency of crashes involving pedestrians or bicyclists.

In accomplishing these three purposes, the report is clearly consistent with three of the eight planning process factors specified in the Safe, Accountable, Flexible, Efficient Transportation Equity Act – A Legacy for Users (SAFETEA-LU), specifically:

- Increasing the safety of the transportation system for motorized and non-motorized users.
- Increasing the accessibility and mobility options available to people and for freight.
- Protecting and enhancing the environment, promoting energy conservation, and improving quality of life;

DATA & METHODOLOGY

Using data furnished by the Rapid City Police Department and the South Dakota Department of Public Safety, the dates and locations of pedestrian and bicyclist crashes within the MPO boundary were identified. The actual law enforcement crash report was then reviewed to determine the type of crash, contributing factors, and other pertinent facts. Excluded from this analysis were crashes that involved a passenger exiting a moving vehicle or an individual riding or hanging onto a moving vehicle. The location of each crash was then mapped using the City's Geographic Information System (GIS).

The analysis considered seven years of data, which is a departure from the typical traffic engineering practice of considering average annual crash experience in a three year period. Due to the limited number of data points within a three-year period, the addition of four years increases statistical significance and furthers the identification of crash trends.

Crash type descriptors were developed based on criteria presented in the Federal Highway Administration's PEDSAFE: Pedestrian Safety Guide and Countermeasure Selection System (September 2004) and in the National Highway Traffic Safety Administration's Pedestrian & Bicycle Crash Analysis Tool software. The crash types used in this report are defined below; note that not every crash type was necessarily represented in the reviewed seven five years of data.

Pedestrian Crash Types

Backing Vehicle - The pedestrian was struck by a backing vehicle on a street, in a driveway, on a sidewalk, in a parking lot, or at another location.

Bus Related - The pedestrian was struck by a vehicle while: (1) crossing in front of a commercial bus stopped at a bus stop; (2) going to or from a school bus stop; or (3) going to or from, or waiting near a commercial bus stop.

Dart/Dash - The pedestrian walked or ran into the roadway at an intersection or mid-block location and was struck by a vehicle. The motorist's view of the pedestrian may have been blocked until an instant before the impact.

Driverless Vehicle – The pedestrian was struck by a driverless vehicle that was left in gear or one that rolled forward or back.

Multiple Threat/Trapped - The pedestrian entered the roadway in front of stopped or slowed traffic and was struck by a multiple threat vehicle in an adjacent lane after becoming trapped in the middle of the roadway.

Non-Roadway - The pedestrian was standing or walking near the roadway edge, on the sidewalk, in a driveway or alley, or in a parking lot when struck by a vehicle.

Other - Pedestrian struck after a vehicle/vehicle collision, pedestrian struck by falling cargo, emergency vehicle striking a pedestrian, pedestrian lying in the road, etc.

Thru Vehicle No Traffic Control - The pedestrian was struck at an unsignalized intersection or mid-block location. Either the motorist or the pedestrian may have failed to yield.

Thru Vehicle, Traffic Control - The pedestrian was struck at a signalized intersection or mid-block location by a vehicle that was traveling straight ahead.

Turning Vehicle - The pedestrian was attempting to cross at an intersection, driveway or alley and was struck by a vehicle that was turning right or left.

Unique Mid-block – The pedestrian was struck while crossing the road to/from a mailbox, newspaper box, or ice cream truck, or while getting into or out of a stopped vehicle.

Unknown – The crash report did not provide adequate information to type the crash.

Walking Along Roadway - The pedestrian was moving along the roadway and was struck from the front or from behind by a vehicle.

Working/Playing in Road - A vehicle struck a pedestrian who was: (1) standing or walking near a disabled vehicle, (2) riding a play vehicle that was not a bicycle, (3) playing in the road or (4) working in the road.

Bicycle Crash Types

Assault with Vehicle – The bicyclist was intentionally struck by a vehicle.

Backing Vehicle – The bicyclist was struck by a backing vehicle on a street, in a driveway, on a sidewalk, in a parking lot, or at another location.

Bicyclist Ride Out - The bicyclist was struck at a location where the bicyclist was facing a traffic control device or the bicyclist entered the roadway from an alley or driveway.

Head On – The bicyclist and vehicle directly collided while traveling in opposite directions.

Overtaking Vehicle – The bicyclist was struck by a vehicle that was traveling in the same direction.

Thru Vehicle No Traffic Control - The bicyclist was struck at an unsignalized intersection or mid-block location. Either the motorist or the bicyclist may have failed to yield.

Thru Vehicle, Traffic Control - The bicyclist was struck at a signalized intersection or mid-block location by a vehicle that was traveling straight ahead.

Turning Bicyclist - The bicyclist made a right or left turn in front of a vehicle.

Turning Vehicle - The motorist made a right or left turn in front of a bicyclist.

Vehicle Pull Out - The bicyclist was struck at a location where the vehicle was facing a traffic control device or the vehicle exiting from an alley or driveway.

Other – The bicyclist was struck under unusual circumstances.

Unknown – The crash report did not provide adequate information to type the crash.

ANALYSIS

Due to the limited amount of data points available outside of Rapid City, the following discussion limits its focus to crashes that occurred in Rapid City. Appendix A includes a discussion of crashes that occurred outside of Rapid City.

Pedestrian Crashes

Fatal Crashes

2002 – Fifth Street, north of Omaha Street, Non-Roadway crash. This crash was caused by a minor-aged driver losing control of the vehicle and leaving the roadway, striking the pedestrian on the sidewalk. The crash occurred during daylight conditions, on dry pavement and no alcohol or drug usage was involved.

2005 – Haines Avenue, north of Lawrence Drive, Walking Along Road crash. This crash was caused by a driver driving under the influence of alcohol. The crash occurred during the dawn hours, on dry pavement within a construction zone. The pedestrian was struck when the driver crossed the centerline.

2005 – Mt. Rushmore Road, south of St. Cloud Street, Dart/Dash crash. This crash was caused by a pedestrian stepping into a travel lane mid-block. The crash occurred at dusk on dry pavement; alcohol use by the pedestrian was a factor in the crash.

2005 – I-90 near I-190, Dart/Dash crash. This crash was caused by a pedestrian stepping into a travel lane. The crash occurred at night on dry pavement; it is unknown whether or not alcohol or drug use by the pedestrian was a factor in the crash.

2008 – E. Omaha Street, west of Cambell Street, Other crash. The pedestrian was lying in the roadway and was run over by a vehicle. The crash occurred at night on dry pavement; alcohol use by the pedestrian was a factor in the crash.

2008 – Fifth Street at Oakland Street, Thru Vehicle No Traffic Control crash. The pedestrian was hit while crossing Fifth Street at an unmarked crosswalk. The crash occurred at night on dry pavement; neither alcohol nor drug use was a factor in the crash.

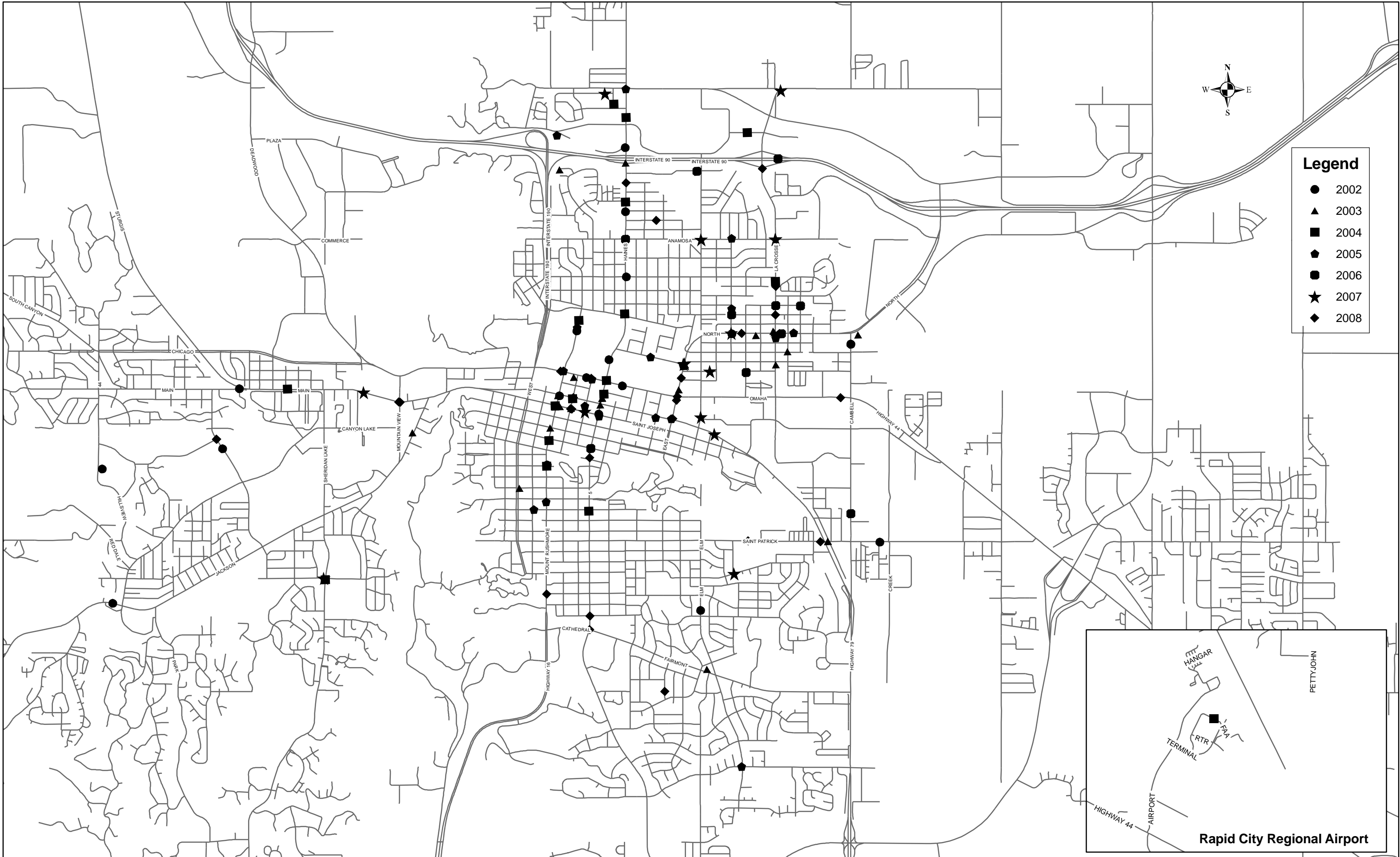
Crash Location

Figure 1 is a mapping of Rapid City pedestrian crashes occurring in the seven-year review period. The map illustrates that a majority of pedestrian crashes occur within the central business district (CBD) and along the Mt. Rushmore Road, 5th Street/Haines Avenue, and East Boulevard/East North Street corridors. Possible reasons for this include:

- The amount of commercial development along the corridors
- The relatively high population densities adjacent to each corridor.
- The volume of pedestrians within the CBD.

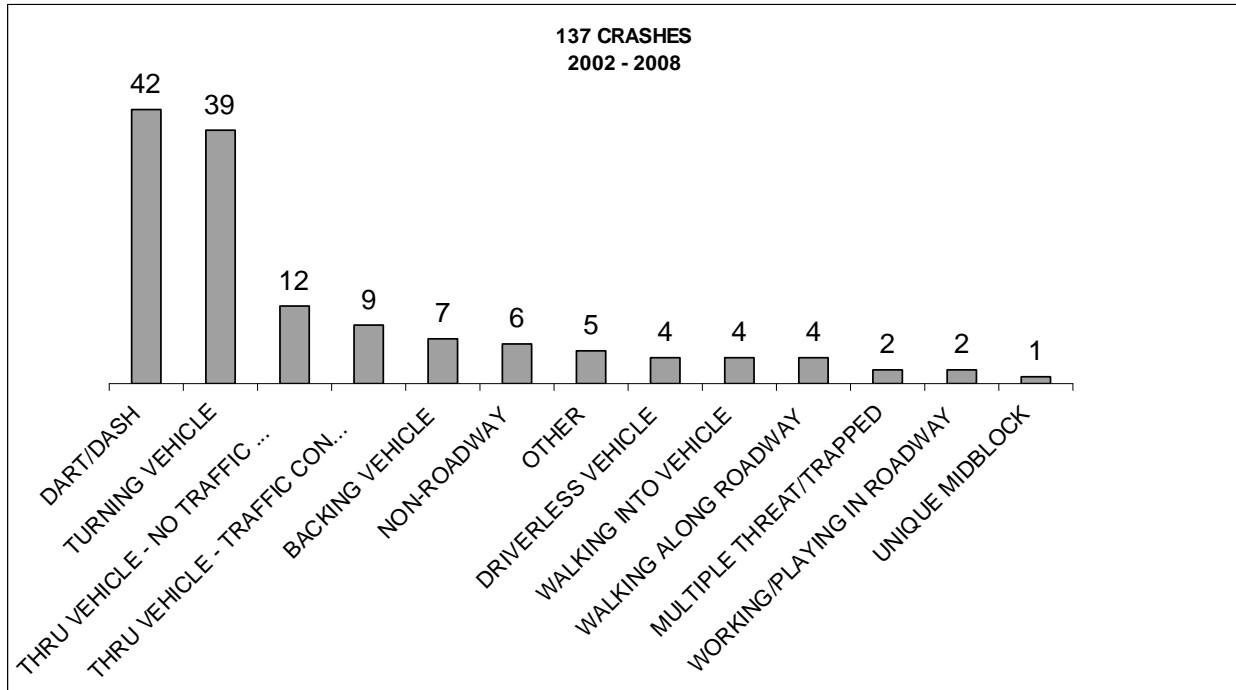
2002 - 2008 Pedestrian/Motor Vehicle Crashes

Figure 1



Crash Type

**Figure 2 – Rapid City Pedestrian Crash Types
By Frequency
(2002 – 2008)**



Each community is expected to have a unique distribution of crash types owing to the unique context (driver/pedestrian behavior, socio-economic data, etc.) of each study area. While stressing the importance of local analysis in identifying problematic patterns, the Federal Highway Administration suggests that nationwide, approximately 75% of pedestrian crashes fall into one of the following seven crash-type categories: Backing Vehicle, Dart/Dash, Non-roadway, Turning Vehicle, Thru Vehicle – No Traffic Control, Thru Vehicle – Traffic Control or Walking Along Roadway. Rapid City’s experience has approximately 87% of all crashes falling into one of these types.

The Dart/Dash and Turning Vehicle crashes were chosen to be reviewed in detail based on the number of each that occurred in the seven-year period (together, these crash types represented approximately 59% of Rapid City's pedestrian crashes). Key findings of the review follow below.

Dart/Dash

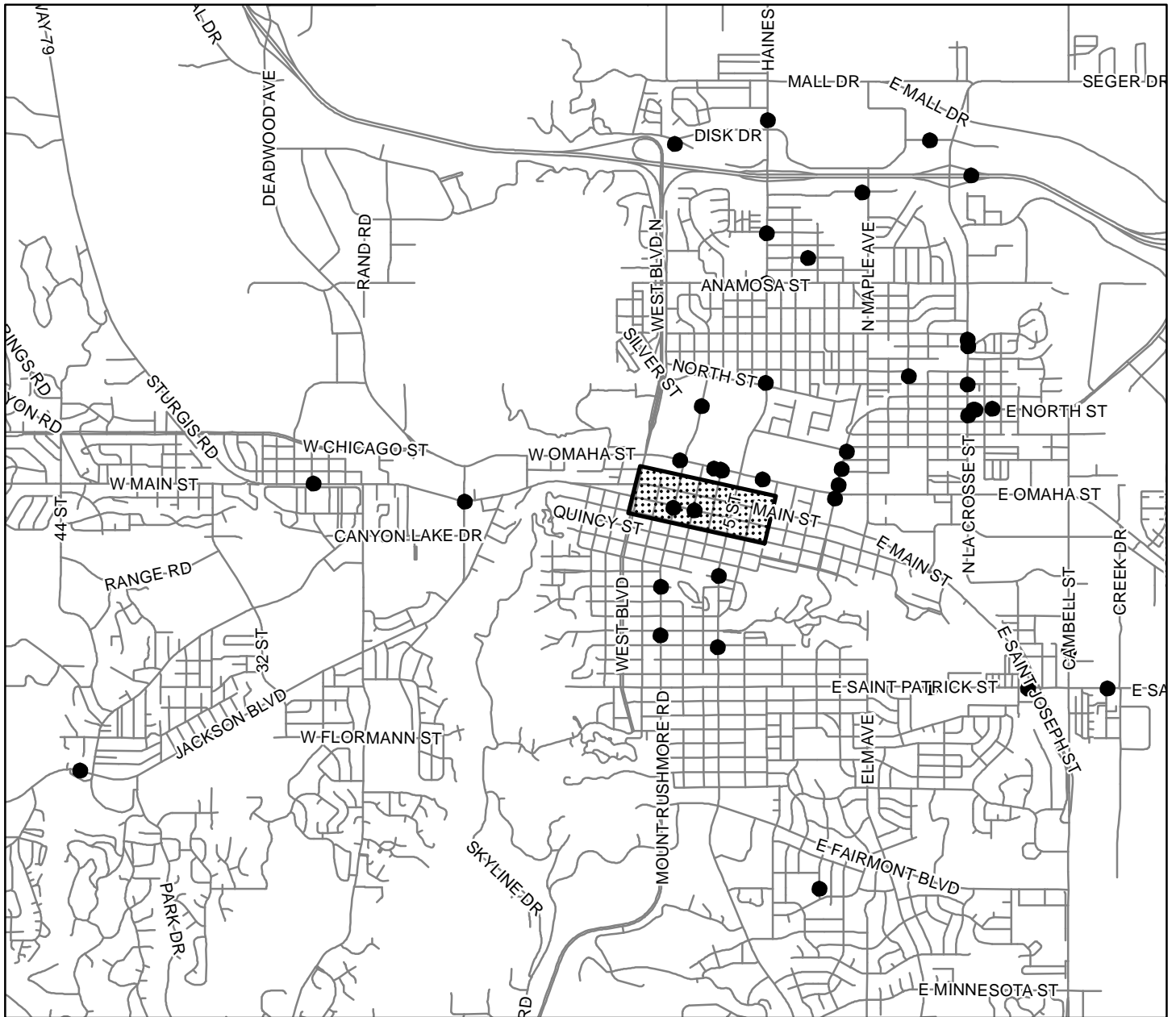
- Dart/Dash crashes were responsible for three of the seven pedestrian fatalities occurring in the seven-year analysis period.
- 100% of the crashes were judged to be the fault of the pedestrian.
- 79% of the crashes occurred at mid-block locations.
- 95% of the crashes occurred under clear or cloudy conditions.
- 64% of the crashes occurred at dusk or at night.
- 40% of the crashes involved pedestrians in the 0 to 19 year old age group.
- 43% of the crashes involved alcohol or drug usage by the pedestrian. No alcohol or drug usage was cited on the part of the identified drivers.
- 7% of the crashes were hit & run cases.
- Figure 3 is a detailed mapping of Dart/Dash crashes. The map shows a general trend towards crashes occurring along the Mt. Rushmore Road, 5th Street/Haines Avenue, Omaha Street and East Boulevard/East North Street corridors.

Turning Vehicle

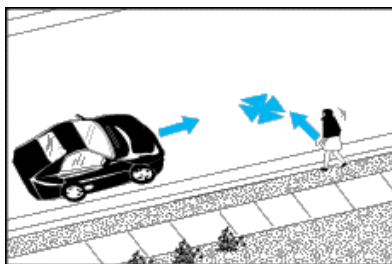
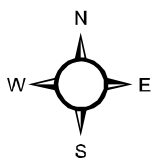
- 90% of the crashes were judged to be the fault of the driver.
- 90% of the crashes occurred at locations with marked crosswalks.
- 82% of the crashes occurred during daylight conditions; 18% of the drivers cited glare as a contributing factor to the crash.

Figure 3

2002 - 2008
Pedestrian Dart/Dash Crashes



Dart/Dash Crash



- None of the crashes involved alcohol or drug usage by the pedestrian. No alcohol or drug usage was cited on the part of the identified drivers.
- 18% of the crashes were hit and run cases.
- 21% of the crashes involved pedestrians in the 0 to 19 year old age group.
- 16% of the crashes involved drivers less than 19 years old.
- 26% of the crashes occurred in the CBD.
- Figure 4 is a detailed mapping of Turning Vehicle crashes. No clear trends can be identified from the map.

Crash Rates

Table 1 – Comparison of Pedestrian Crash Rates

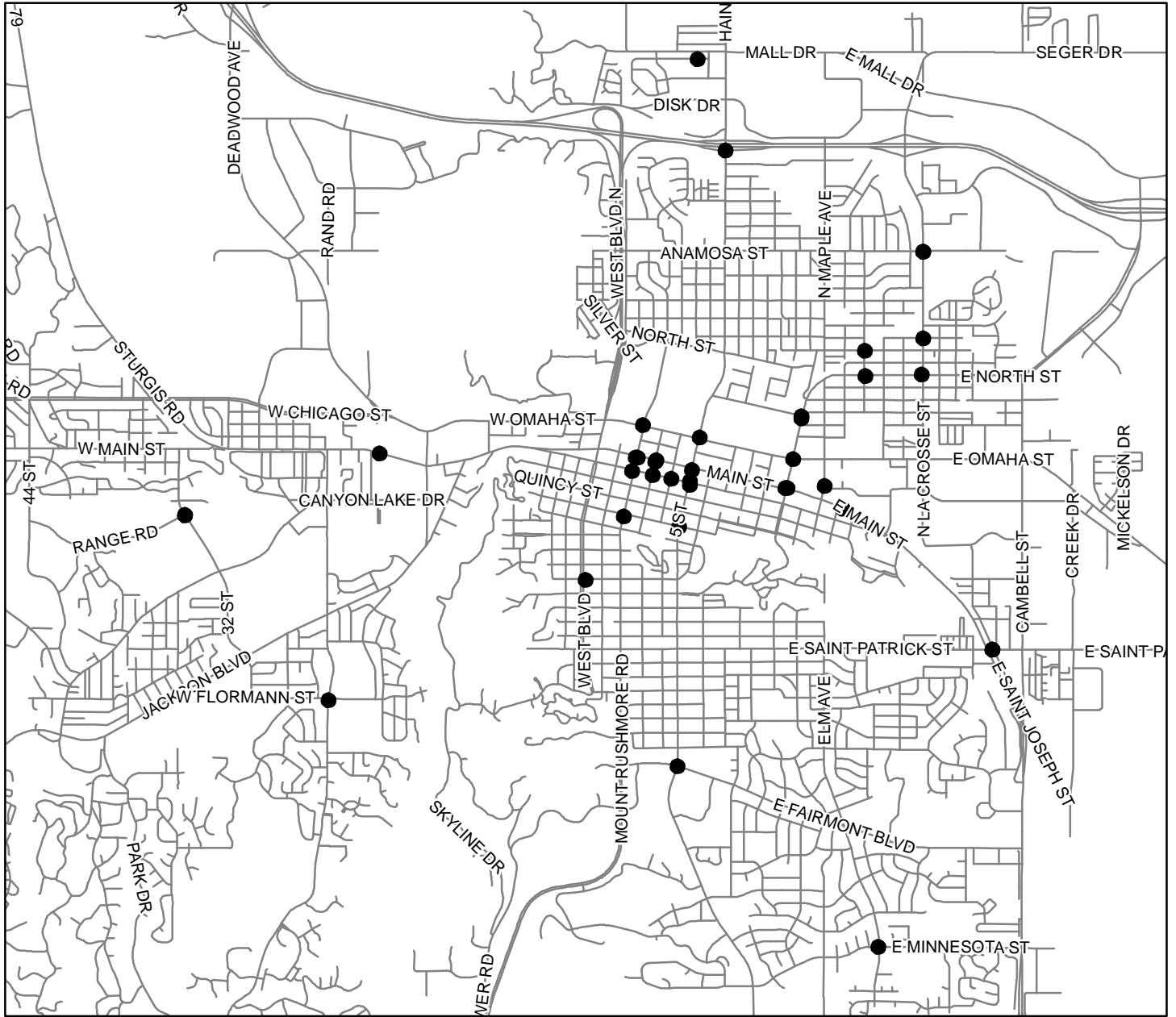
Year	Rapid City		South Dakota		United States	
	Injury Rate*	Fatality Rate*	Injury Rate*	Fatality Rate*	Injury Rate*	Fatality Rate*
2002	29.1	1.6	13.7	1.1	24.7	1.7
2003	38.1	0	11.9	1.3	24.1	1.6
2004	28.1	0	12.3	1.2	23.2	1.6
2005	26.2	4.6	11.5	1.9	22.0	1.7
2006	15.2	0	14.5	0.9	20.2	1.6
2007	23.4	0	13.8	0.9	23.2	1.5
2008	45.3	3.1	N/A	N/A	N/A	N/A

* Rates expressed as crashes per 100,000 of population.

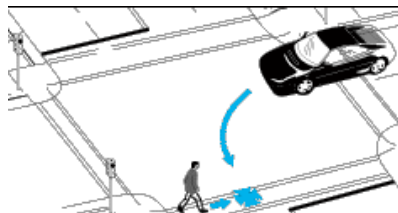
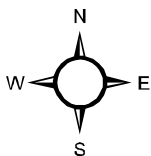
Rapid City's injury crash rate generally exceeds both the statewide and national rates. One factor that must be considered when considering Rapid City versus the entire state is that of urbanization. Rapid City's typically higher traffic volumes, higher population densities and increased opportunities for pedestrian travel may account for such a significant difference. The influence of urbanization is diminished however when

Figure 4

2002 - 2008
Pedestrian Turning Vehicle Crashes



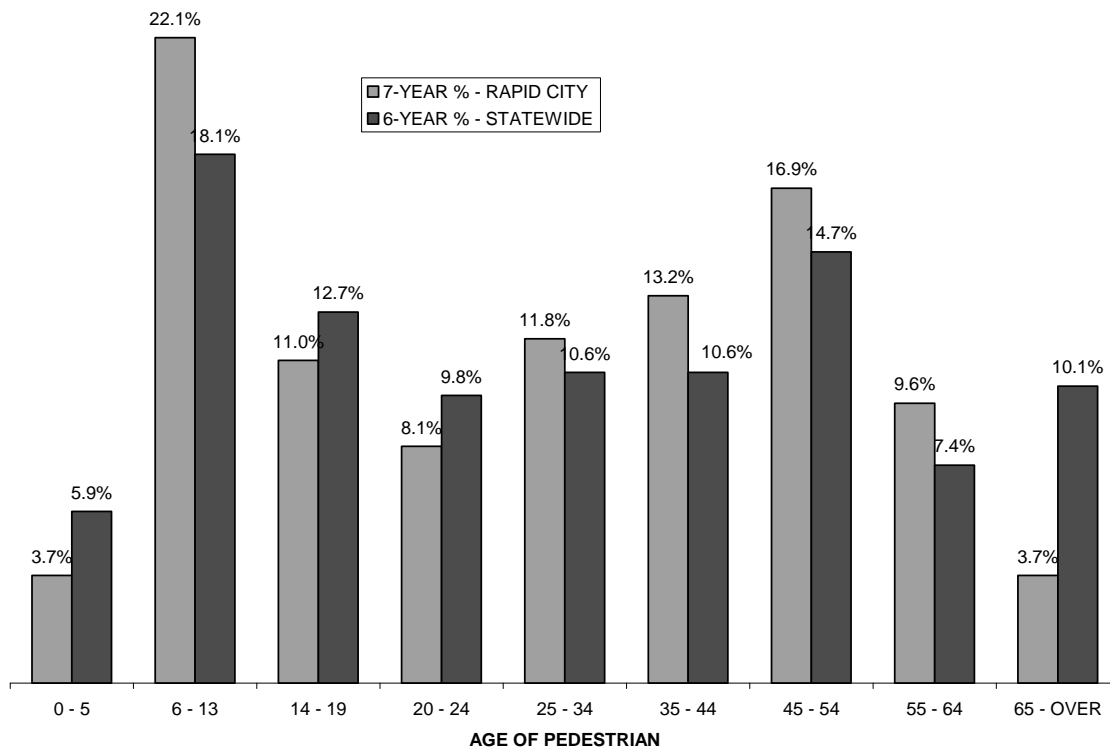
Turning Vehicle Crash



comparing Rapid City to the entire nation. A second factor that must be considered was pedestrians being under the influence of alcohol or drugs when involved in a crash. For the seven-year analysis period, approximately 15.5% of Rapid City's pedestrian crashes cited alcohol or drug usage by the pedestrian; this is consistent with the statewide rate of approximately 16% and the national rate of 15% (as estimated by the Federal Highway Administration).

Pedestrian Age

**Figure 5 – Age of Pedestrians in Crashes
Rapid City vs. Statewide
(2002 – 2008)**



National data was not included in the analysis of pedestrian age since the age ranges cited by the National Highway Traffic Safety Administration do not correspond to those used by South Dakota. In general, Rapid City's pedestrian crash experience corresponds well with the statewide data. The data points out the vulnerability of the under 19 year old group as they represent 37% of pedestrians involved in crashes yet represent only 22% of Rapid City's total population. One significant difference between

Rapid City and the statewide percentages is that of the 65 and over year old group. One possible reason for this positive trend is the public and private transit options that exist in Rapid City.

Disabled Pedestrian Crashes

There were two crashes in the seven-year analysis period that involved disabled pedestrians. The first was a Walking Along Roadway crash in 2002. The pedestrian was in the middle of the road at night and was struck by a through vehicle. The crash report did not include any explanation as to why the pedestrian was in the middle of the road, but the report included a witness statement that the individual had been exhibiting this behavior for some time and that “it was bound to happen sooner or later.”

The second was a Turning Vehicle crash in 2005. The pedestrian was struck during daylight hours in a marked crosswalk across a free-flow right turn lane. The driver was responsible for the crash and the pedestrian’s use of a wheelchair was not a contributing factor.

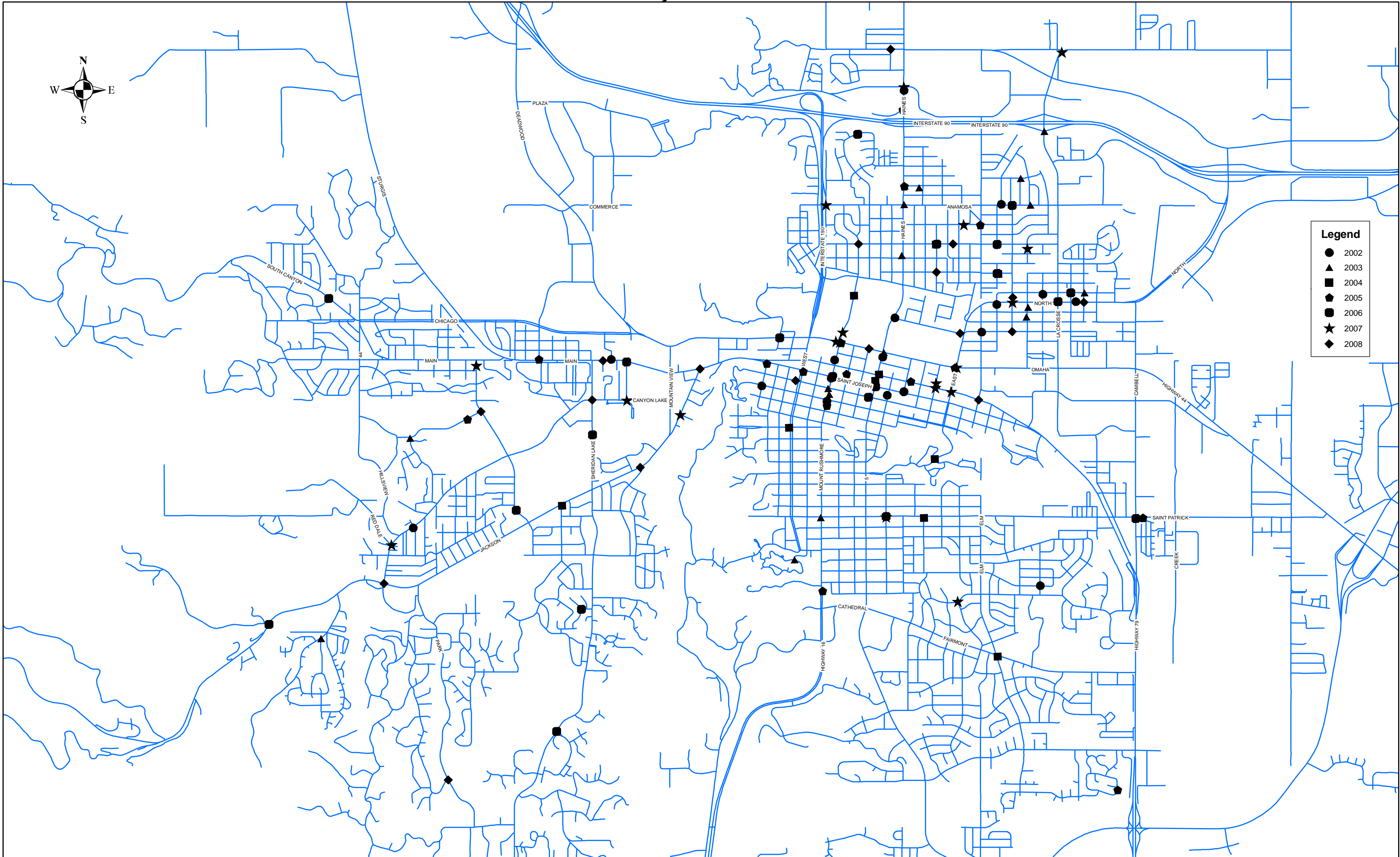
Bicycle Crashes

Fatal Crashes

There were no fatal bicyclist crashes in the seven-years of data analyzed.

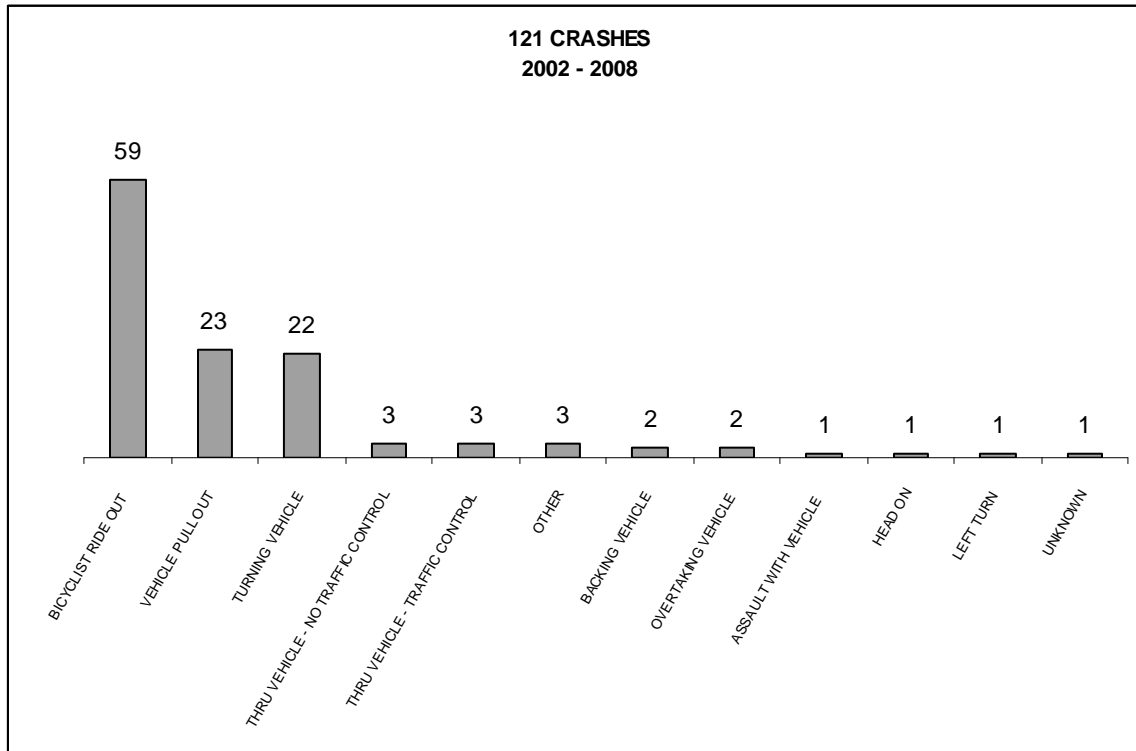
Crash Location

Figure 6 is a mapping of bicyclist crashes occurring in the seven-year review period. Similar to pedestrian crashes, the map illustrates that a majority of bicyclist crashes are occurring along the Mt. Rushmore Road and 5th Street/Haines Avenue corridors and in the central business district (CBD).



Crash Type

**Figure 7 – Rapid City Bicyclist Crash Types
By Frequency
(2002 – 2008)**



While stressing the importance of local analysis in identifying problematic patterns, the Federal Highway Administration suggests that nationwide, approximately 80% of bicyclist crashes fall into one of the following five crash-type categories: Bicyclist Ride Out, Overtaking Vehicle, Turning Bicyclist, Turning Vehicle, or Vehicle Pull Out. Rapid City's experience has approximately 88% of all crashes falling into one of these types.

The Bicyclist Ride Out, Vehicle Pull Out and Turning Vehicle crashes were chosen to be reviewed in detail based on the number of each that occurred in the seven-year period. Key findings of the review follow below.

Bicyclist Ride Out

- 100% of the crashes were judged to be the fault of the bicyclist.
- 68% of the crashes involved bicyclists in the 0 to 19 year old age group.
- 80% of the crashes occurred at an intersection.
- One crash involved alcohol or drug usage on the part of the driver; one crash involved alcohol or drug usage on the part of the bicyclist.
- Two crashes were hit & run crashes.
- 80% of the crashes occurred during daylight hours.
- Figure 8 is a detailed mapping of Bicyclist Ride Out crashes. No crash location trends were identified.

Vehicle Pull Out

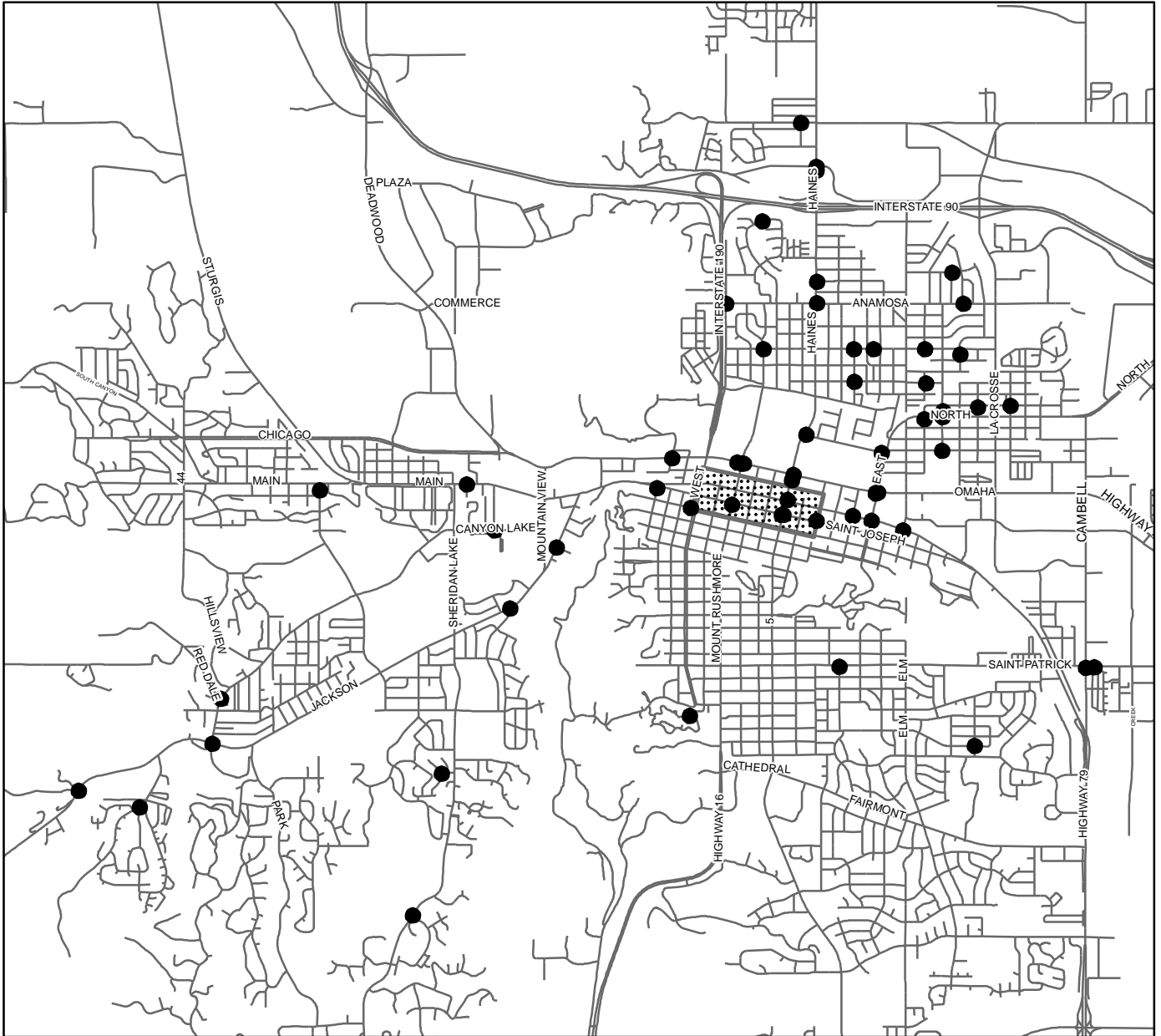
- 91% of the crashes were judged to be the fault of the driver.
- 43% of the crashes involved a bicyclist riding on the sidewalk.
- 61% of the crashes involved bicyclists in the 0 to 19 year old age group.
- No alcohol or drug usage on the part of the drivers; alcohol or drug usage was cited on the part of the bicyclist in one crash.
- One crash was a hit & run.
- 100% of the crashes occurred during daylight hours.
- Figure 9 is a detailed mapping of Vehicle Pull Out crashes. Nine of the twenty crashes occurred within, or in near proximity to, the CBD.

Turning Vehicle

- 55% of the crashes were judged to be the fault of the driver.
- Eleven of the sixteen crashes involved the bicyclist riding on the sidewalk and entering the intersection area.
- 59% of the crashes involved bicyclists in the 0 to 19 year old age group.

Figure 8

2002 - 2008
Bicyclist Rideout Crashes



Bicyclist Rideout Crash

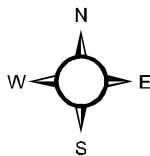
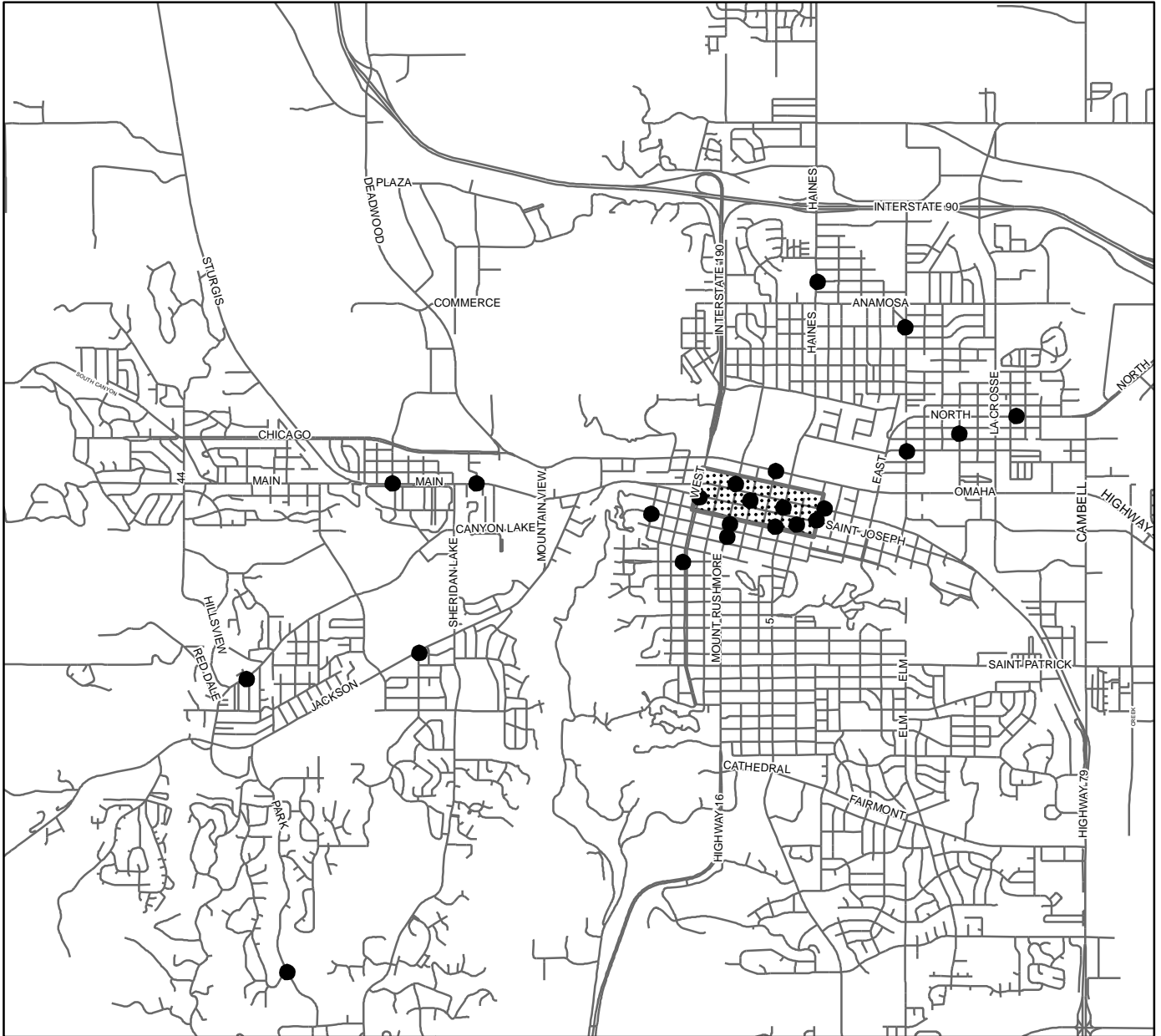
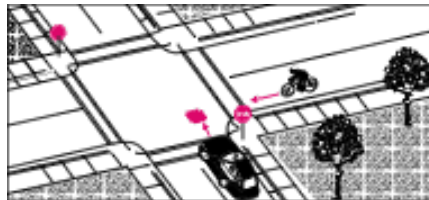
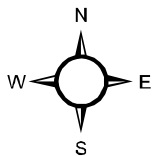


Figure 9

2002 - 2008
Vehicle Pull Out Crashes



Vehicle Pull Out Crash



- 82% of the crashes occurred at an intersection.
- One crash involved alcohol or drug usage by the driver.
- 82% of the crashes occurred during daylight hours.
- One crash was a hit and run.
- Figure 10 is a detailed mapping of Turning Vehicle crashes. No crash location trend was identified.

Crash Rates

Table 2 – Comparison of Bicyclist Crash Rates

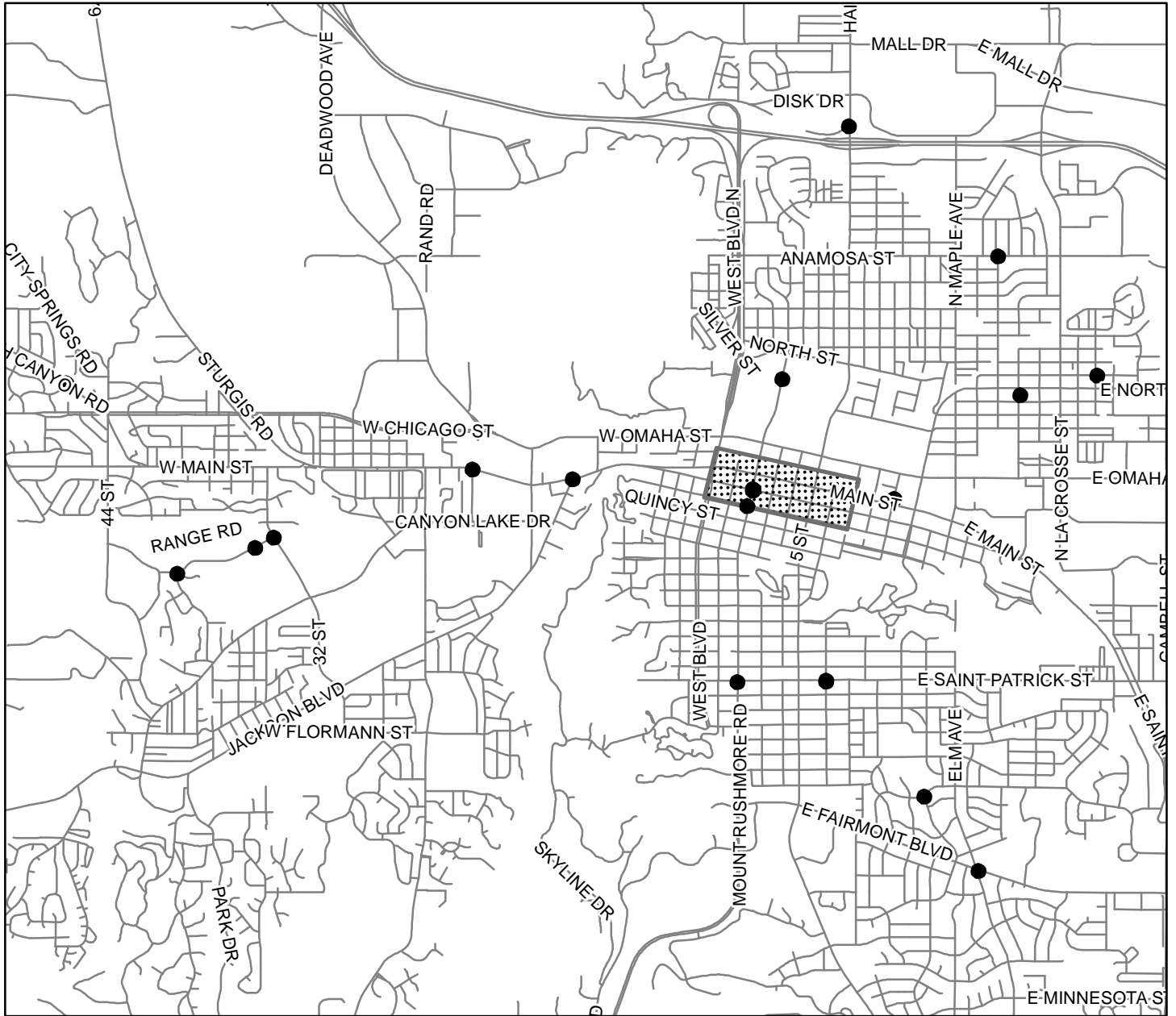
Year	Rapid City		South Dakota		United States	
	Injury Rate*	Fatality Rate*	Injury Rate*	Fatality Rate*	Injury Rate*	Fatality Rate*
2002	29.1	0	11.4	0.13	16.7	0.23
2003	27.5	0	14.3	0.13	15.8	0.21
2004	15.6	0	10.0	0.13	14.0	0.25
2005	24.7	0	12.5	0	15.2	0.27
2006	31.9	0	12.9	0.13	14.6	0.26
2007	29.7	0	12.7	0	14.4	0.23
2008	29.7	0	N/A	N/A	N/A	N/A

* Rates expressed as crashes per 100,000 of population.

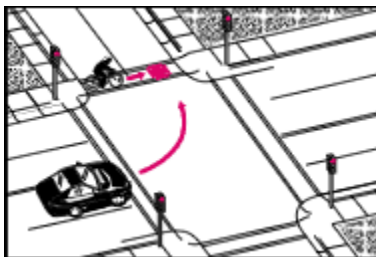
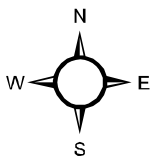
As with pedestrian crashes, Rapid City’s injury crash rate generally exceeds both the statewide and national rates. With respect to the comparison with statewide values, Rapid City’s urbanization is certainly a factor. Urbanization fails however to explain Rapid City’s rates exceeding national data.

Figure 10

2002 - 2008
Turning Vehicle Crashes

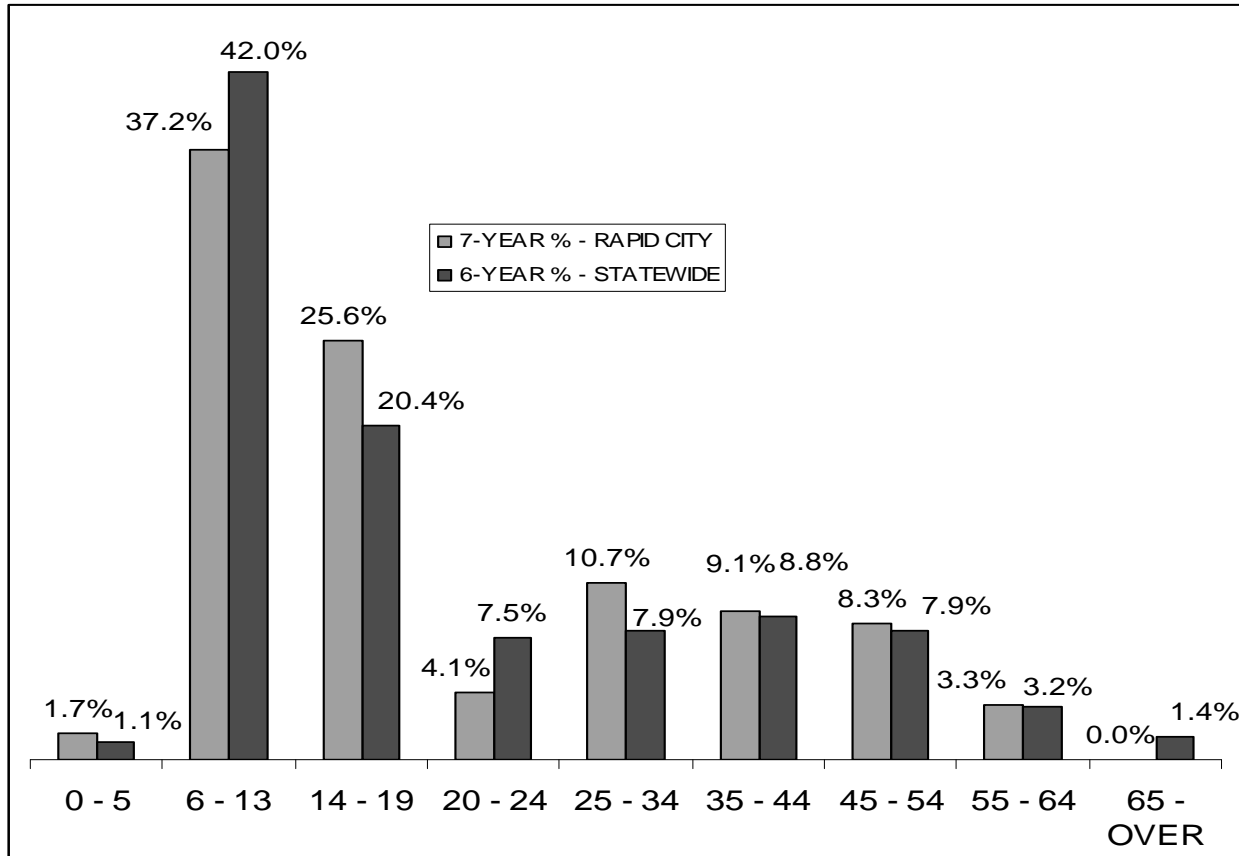


Turning Vehicle Crash



Bicyclist Age

**Figure 11 – Age of Bicyclists in Traffic Crashes
Rapid City vs. Statewide
(2002 – 2008)**



National data was not included in the analysis of bicyclist age since the age ranges cited by the National Highway Traffic Safety Administration do not correspond to those used by South Dakota. In general, Rapid City's bicyclist crash experience corresponded very well with the statewide data. The data points out the vulnerability of the under 19 year old group as they represent 65% of bicyclists involved in crashes yet represent only 22% of Rapid City's total population.

CONCLUSIONS

- Rapid City's pedestrian and bicyclist injury crash rates are generally higher than corresponding statewide and national rates.
- No *location* specific trends were identified for pedestrian or bicyclist crashes.
- There is a general trend for pedestrian crashes to occur within the central business district (CBD) and along the Mt. Rushmore Road, 5th Street/Haines Avenue, and East Boulevard/East North Street corridors
- The age distribution of Rapid City pedestrians and bicyclists involved in crashes is consistent with statewide data.
- The most frequently occurring pedestrian crash types are Dart/Dash and Turning Vehicle.
- Alcohol use by pedestrians is a significant factor in Dart/Dash pedestrian crashes.
- The most frequently occurring bicyclist crash types are Bicyclist Pull Out, Vehicle Pull Out and Turning Vehicle.
- A significant number of bicyclist crashes involved bicyclists who were using the sidewalk at an intersection. Most of the bicyclists involved in crashes at intersections demonstrated a lack of understanding of South Dakota law specifically that bicyclists must stop before entering a crosswalk or highway from a sidewalk or sidewalk area. Failure to comply with this law is a direct cause of crashes since the higher operating speed of bicycles versus pedestrians (1) makes it difficult for drivers to judge the necessity of yielding to bicyclists who do not stop, and, (2) allows for bicyclists to pass slowing vehicles approaching an intersection leading to drivers being "surprised" by crossing bicycle traffic at the intersection.

RECOMMENDATIONS

- A priority should be placed on efforts to educate pedestrians, bicyclists and drivers about safety practices associated with non-motorized modes of transportation. A particular emphasis should be placed on programs to effectively reach the under 19 year-old age group. Additional consideration should be given to educational efforts related to the risks associated with pedestrians under the influence of alcohol.

APPENDIX A

RAPID CITY AREA METROPOLITAN PLANNING ORGANIZATION
PEDESTRIAN & BICYCLIST CRASHES
OUTSIDE RAPID CITY
2004-2008

INTRODUCTION/PURPOSE

The continued growth of Rapid City and the surrounding area make it important to consider the effects on pedestrian and bicyclist safety. Due to data limitations, the focus of the 2002-2005 Pedestrian/Bicyclist Crash Report was limited to those crashes occurring in Rapid City. As a result of enhanced data access via the South Dakota Department of Transportation's crash reporting software, crash data for the entire Metropolitan Planning Organization (MPO) area can now be compiled. Data is not available for the seven-year period analyzed for Rapid City and therefore is considered in this Appendix.

As with the Rapid City data, the purpose of this review is threefold:

1. To present an overview of those reported crashes that involved pedestrians and bicyclists.
2. To present the results of trend analyses of the available crash data.
3. To identify, if appropriate, mitigation measures that would reduce the frequency of crashes involving pedestrians or bicyclists.

ANALYSIS

Table A-1 presents a summary of the pedestrian and bicyclist crashes occurring between 2004 and 2008. The data was not mapped due to the limited number of data points available.

Pedestrian Crashes

Fatal Crashes

2007 – I-90, east of West Gate Road, Dart/Dash crash. This crash was caused by a pedestrian stepping into a travel lane. The crash occurred at night on dry pavement; alcohol use by the pedestrian was a factor in the crash.

There were no fatal crashes between 2004 and 2008.

Crash Location

No trends can be determined due to limited data points.

Crash Type

No trends can be determined due to limited data points.

Crash Rate

No rate calculations were performed due to the limited number data points.

Pedestrian Age

No trends can be determined due to limited data points.

Bicyclist Crashes

Fatal Crashes

There were no fatal crashes between 2004 and 2008.

Crash Location

No trends can be determined due to limited data points.

Crash Type

As with Rapid City's crashes, the bicyclist ride out crash is the most common crash type (4 of 6 crashes). The limited number of data points precludes identifying this as a trend.

Crash Rate

No rate calculations were performed due to the limited number data points.

Bicyclist Age

No trends can be determined due to limited data points.

TABLE A-1
 RAPID CITY AREA METROPOLITAN
 PLANNING ORGANIZATION
 PEDESTRIAN BICYCLIST CRASHES
 OUTSIDE RAPID CITY
 2004 - 2008

PED OR BICYCLIST	MONTH	DAY	YEAR	DAY OF WEEK	TIME	LOCATION	WEATHER	LIGHT	DRIVER VISION OBSTRUCTED	AGE-D	AGE-P	SEX-D	SEX-P	INJ-D (1)	INJ-P (1)	ALCOHOL/DR UGS-D	ALCOHOL/DR UGS-P	FAULT	LOCATION	CROSSWALK	TRAFFIC CONTROL DEVICE	CRASH TYPE (2)	COMMENTS
PED	7	4	2004	SUN	2113	I-90, E OF EXIT 48 SCHROEDER RD, W OF NEMO RD	RAIN	DUSK	N	HR	21	HR	M	5	2	HR	N	D	MIDBLOCK	NO	NONE	WORKING IN ROAD	PED STRUCK WHILE ASSISTING VEHICLE CRASH
PED	9	30	2005	FRI	750	I-90, EAST OF WEST GATE ROAD	CLEAR	DAYLIGHT	Y	35	36	M	F	5	3	N	N	D	MIDBLOCK	NO	NONE	WALKING ALONG ROADWAY	
PED	11	15	2007	THURS	2030	I-90, EAST OF WEST GATE ROAD	CLEAR	DARK	N	52	48	M	F	5	1	N	Y	P	MIDBLOCK	NO	NONE	WALKING ALONG ROADWAY	
PED	12	24	2007	TUES	1645	TWILIGHT DR AT DOROTHY DR	CLOUDY	DARK	N	56	54	M	F	5	4	N	N	B	INTERSECTION	NO	YES	TURNING VEHICLE	
BIKE	7	7	2004	SAT	1317	SD44 .6 MILES W OF MRM 38 DOUGLAS RD .3 MILES E OF GUMBO DR	CLEAR	DAYLIGHT	N	60	35	M	F	5	2	N	N	D	MIDBLOCK	NO	NONE	OVERTAKING VEH	
BIKE	8	4	2004	WED	1333	ELKHORN LN 50' S OF COUNTRY RD AVE A AT AURORA DR	CLEAR	DAYLIGHT	N	36	12	M	M	5	3	N	N	B	INTERSECTION	NO	YES	BICYCLIST RIDE OUT	
BIKE	8	23	2004	TUE	1855	ELKHORN LN 50' S OF COUNTRY RD AVE A AT AURORA DR	CLEAR	DAYLIGHT	N	44	5	F	M	5	3	N	N	D	MIDBLOCK	NO	NONE	PLAYING IN ROAD	BIKE WAS BACKED INTO
BIKE	9	13	2004	TUE	1750	GUMBO DR AT BOXELDER HWY	CLEAR	DAYLIGHT	N	19	12	F	M	5	4	N	N	B	INTERSECTION	NO	YES	BICYCLIST RIDE OUT	
BIKE	8	1	2005	MON	2100	TWILIGHT DR AT SWEERBRIAR ST	CLEAR	DARK	N	53	14	M	F	5	3	N	N	B	INTERSECTION	NO	YES	BICYCLIST RIDE OUT	
BIKE	9	29	2006	FRI	1445	SWEERBRIAR ST	CLEAR	DAYLIGHT	N	22	6	M	M	5	3	N	N	B	INTERSECTION	NO	YES	BICYCLIST RIDE OUT	

(1) INJURY CODES
 1 FATAL
 2 INCAPACITATING
 3 NON-INCAPACITATING
 4 POSSIBLE INJURY
 5 NONE

(2) SEE PAGE 3 FOR DEFINITIONS