

EXECUTIVE SUMMARY

Intersection of State Route 32 & State Route 220 / Germany Road in Pike County

This intersection has been selected for analysis and study upon a ranking of 183 in the 2003 Highway Safety Program. The intersection was ranked 105 in 2002 and it was ranked 219 in 2001. The purpose of the study is to determine safety issues at the intersection and to determine possible countermeasures to address the safety issues.

EXISTING CONDITIONS

State Route 32 is a four lane divided highway that travels from west to east across southern Ohio. State Route 220 is a local road that intersects State Route 32 from the north. Germany Road is also a local road that intersects from the south across from State Route 220. State Route 220 and Germany Road both stop for State Route 32. State Route 32 is the through roadway with a speed limit of 60 miles per hour. This intersection was newly constructed in the mid 1990's with the project that upgraded State Route 32 from two lanes to four lanes. The intersection obviously meets ODOT design standards. However, there is some sight restriction east of the intersection because of a vertical curve in the pavement for a bridge structure over the CSX railroad. This structure is situated approximately 800 feet east of the intersection. The vertical curve causes some sight restriction for motorists approaching the intersection and for the motorists at the intersection observing the approaching vehicles. An overhead flasher was installed in October of 2002 to address these sight concerns. This flasher was recommended as the result of a safety study. The average daily traffic volume for State Route 32 is just under 10,000 vehicles per day. The average daily traffic volume for State Route 220 is just under 4000 vehicles per day.

CRASH ANALYSIS

A three year period of crashes is required to be analyzed for the HSP study. The three years used for this study are 2001, 2002, and 2003. There were 23 accidents that occurred in the intersection during these three years. Most of the accidents were angle collisions. 83 percent or 19 of the 23 accidents were angle collisions. There was 1 left turn accident, 2 right turn accidents, and 1 rear end accident. Of the 19 angle collisions, 11 of them involved vehicles approaching from the east which is the side where the sight is restricted by the vertical curve in the pavement. 56 percent or 13 of the accidents were injury accidents. 83 percent or 19 of the accidents occurred on dry pavement. 87 percent or 20 of the accidents occurred during daylight hours. The main contributing factor of the accidents was failure to yield which usually is the contributing factor for angle collisions. Of the 19 angle collisions, all of the accident reports were coded as failure to yield. None of the accident reports were coded as running the stop sign.

POSSIBLE CAUSES OF THE ACCIDENTS

- The speeds are high on the through roadway. The speed limit on State Route 32 is 60 miles per hour. The actual observed 85 percentile speeds were 63 miles per hour for eastbound traffic and 65 miles per hour for westbound traffic.
- The sight distance is restricted on the east approach of the intersection due to the vertical curve in the pavement on the railroad overpass.
- There are additional conflict points when crossing a four lane highway versus crossing a two lane highway. Essentially, there are two intersections to cross.

POSSIBLE COUNTERMEASURES

- Install a stop and go traffic control signal. (The intersection does not meet a required warrant to install a stop and go traffic control signal. Furthermore, there would be a safety concern with a traffic control signal because of the sight issue on the east approach of the intersection. There would be potential for rear end collisions on this approach).
- Construct an interchange. (An interchange would be cost prohibitive at this intersection especially with the railroad being situated 800 feet from the intersection).
- Reroute State Route 220 across Shuster Road which already intersects with State Route 32. Currently State Route 220 intersects with Shuster Road approximately one half mile from State Route 32. From this intersection, State Route 220 turns 90 degrees and travels 1.56 miles before it intersects with State Route 32. If Shuster Road were utilized as State Route 220 it would be a straight alignment directly to State Route 32 that would be one mile shorter in length. The benefit would be that this intersection does not have any sight restrictions. However, this benefit would have limited effectiveness if the existing State Route 220 access to State Route 32 remains connected. The existing one half mile of Shuster Road would have to be upgraded to ODOT specifications before it can become a state route.

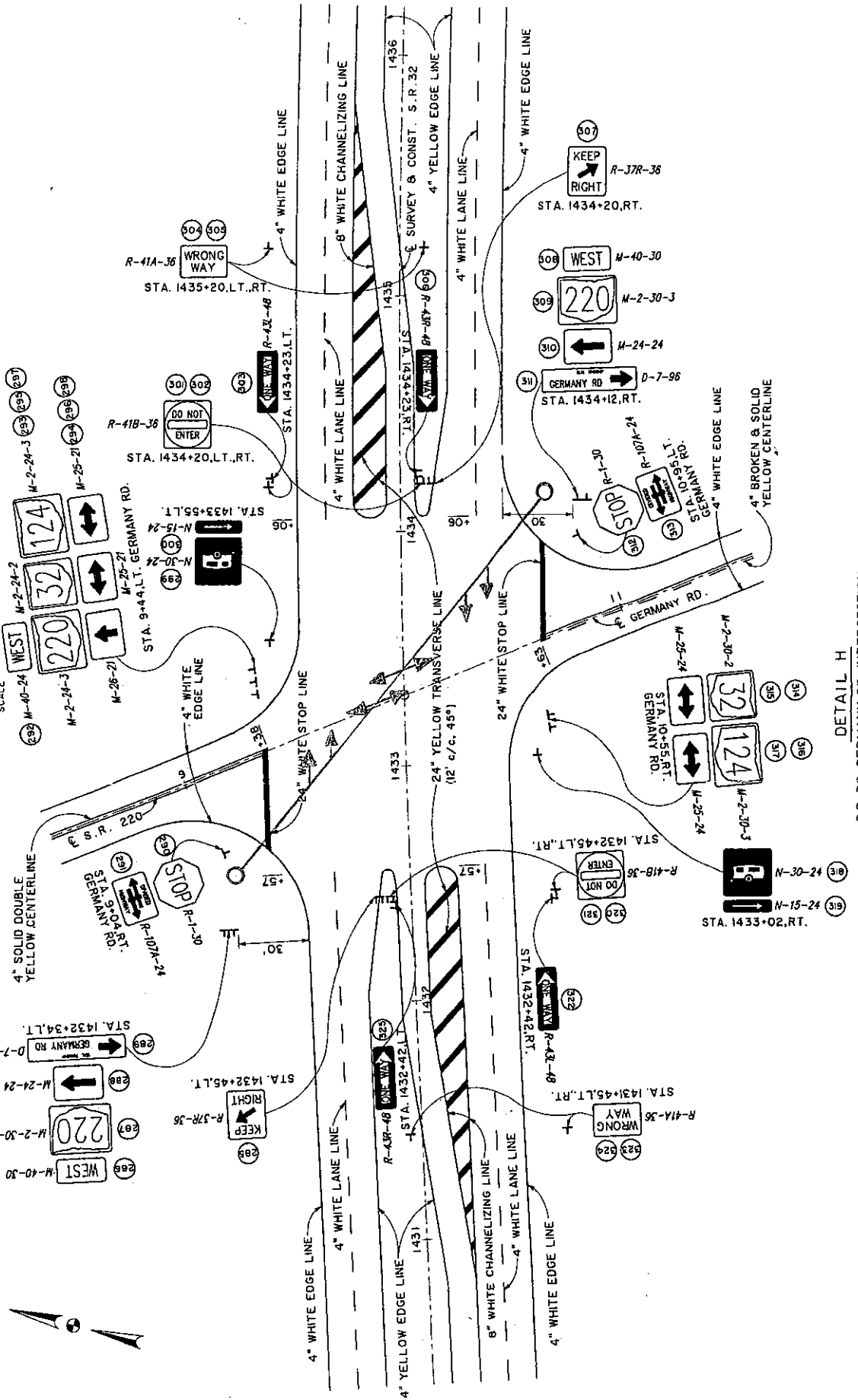
RECOMMENDATION

| | | | |
|-------------|-------|-------------|--------------|
| FORMA | STATE | PROJECT | DATE |
| 5 | OHIO | PIKE COUNTY | 1962-1963 |
| PIKE COUNTY | | | PIK-32-16.05 |

SIGNING AND PAVEMENT MARKING

414
517

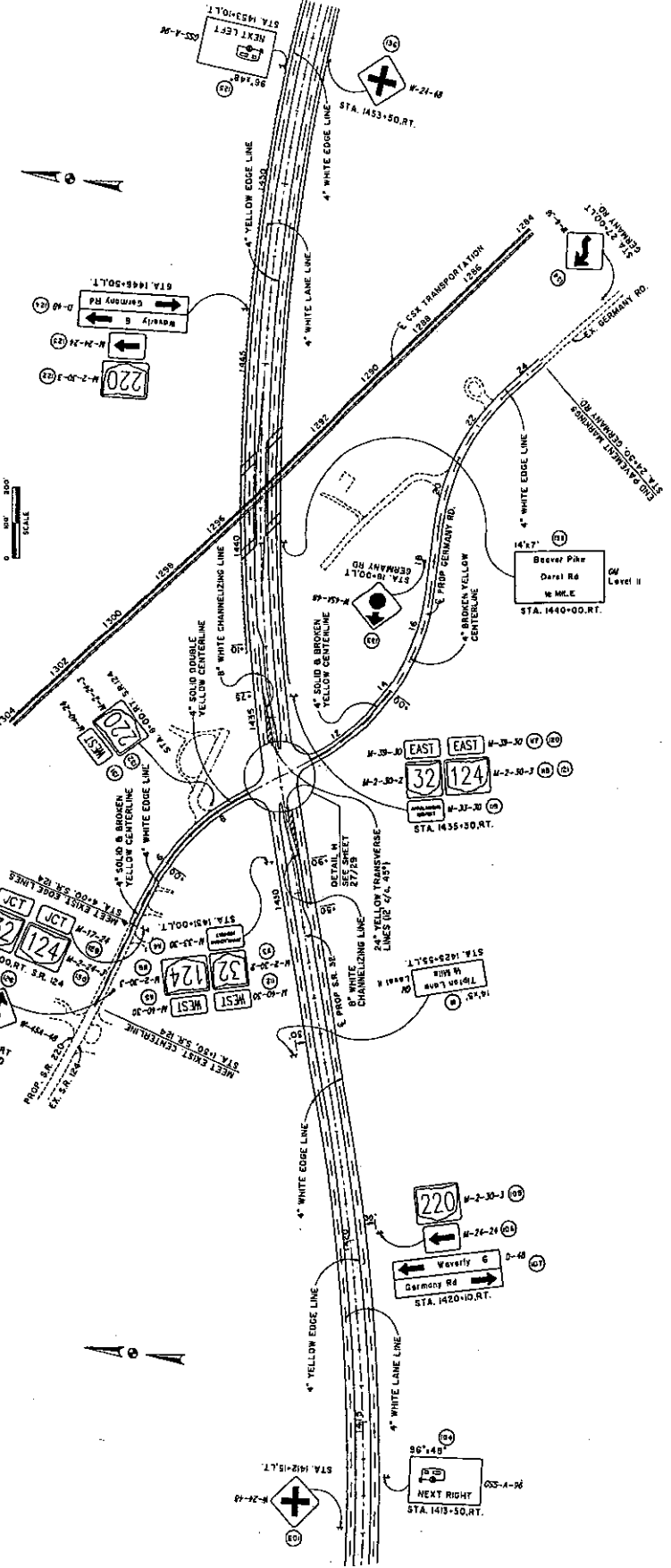
27
29

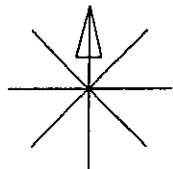


DETAIL H
S.R. 32-GERMANY RD. INTERSECTION

| | | | |
|-----|---------|-----|----------|
| NO. | DATE | BY | REVISION |
| 1 | 3/20/03 | ... | ... |
| 2 | ... | ... | ... |
| 3 | ... | ... | ... |
| 4 | ... | ... | ... |
| 5 | ... | ... | ... |

SIGNING AND PAVEMENT MARKING





INDICATE NORTH

COLLISION DIAGRAM

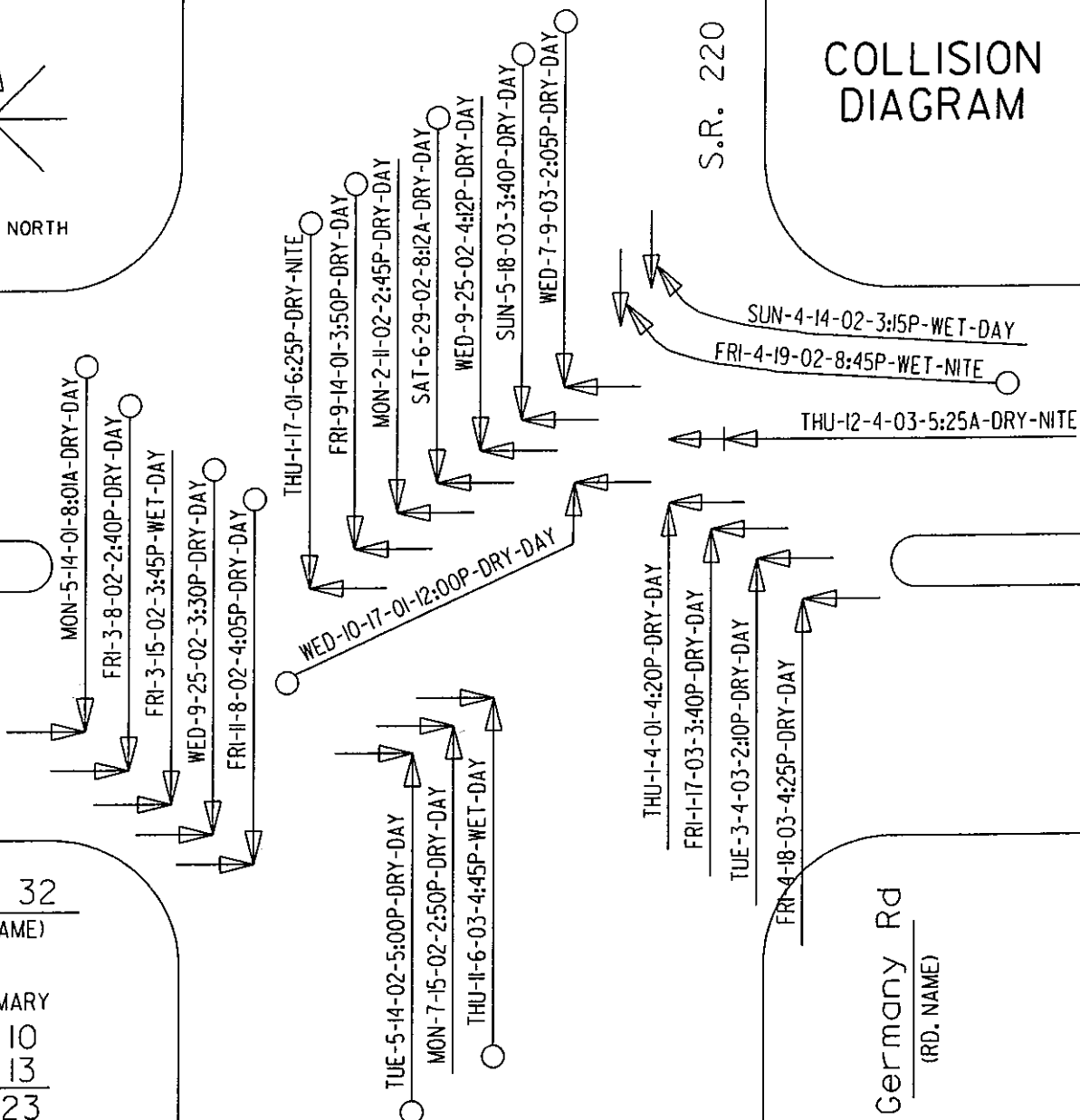
S.R. 220

S.R. 32
(RD. NAME)

ACC SUMMARY

| | |
|-------|----|
| PD | 10 |
| INJ | 13 |
| TOTAL | 23 |

Germany Rd
(RD. NAME)



SYMBOLS

- MOVING VEHICLE
- BACKING VEHICLE
- NON-INVOLVED VEHICLE
- PEDESTRIAN
- PARKED VEHICLE
- FIXED OBJECT
- FATAL ACCIDENT
- INJURY ACCIDENT

TYPES OF COLLISIONS

- REAR END
- HEAD ON
- SIDE SWIPE
- OUT OF CONTROL
- LEFT TURN
- RIGHT ANGLE

SHOW FOR EACH ACCIDENT

1. DAY, DATE, AND TIME
2. WEATHER AND ROAD SURFACE - IF UNUSUAL CONDITION EXISTED
3. NITE - IF BETWEEN DUSK AND DAWN

INTERSECTION S.R. 32 AND S.R. 220
 PERIOD 3 YEARS : FROM 1-1-01 TO 12-31-03

TRAFFIC CRASH ANALYSIS

Office of Traffic Engineering

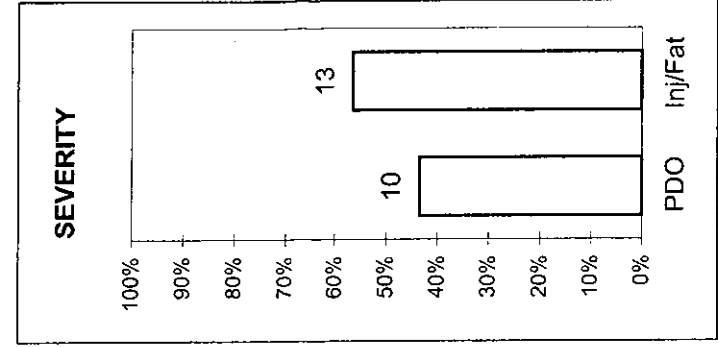
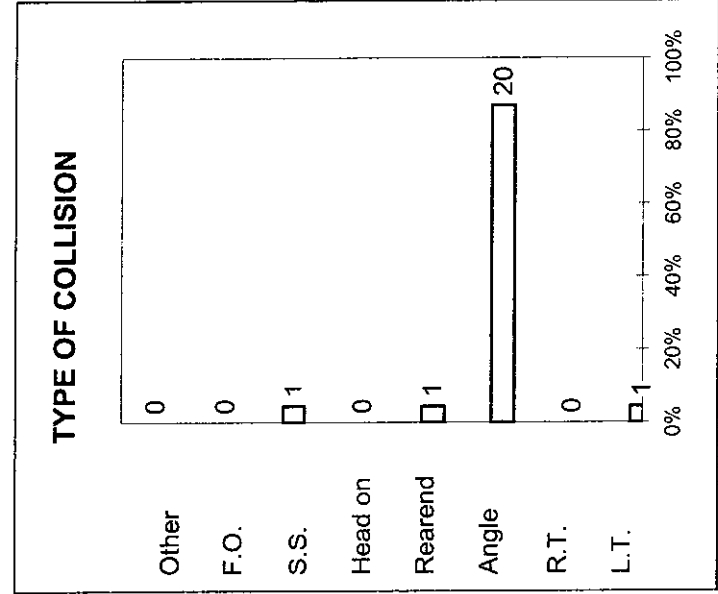
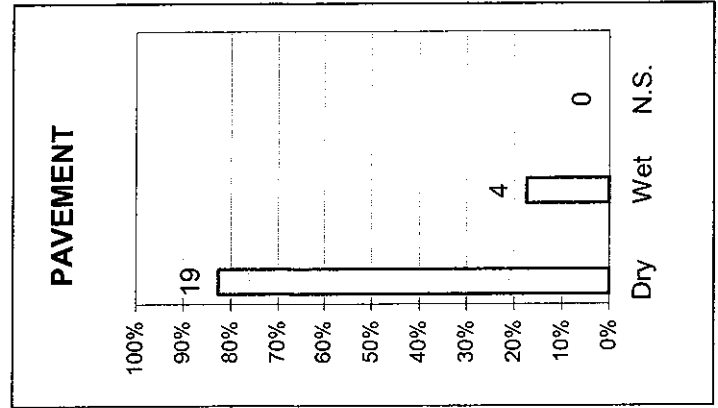
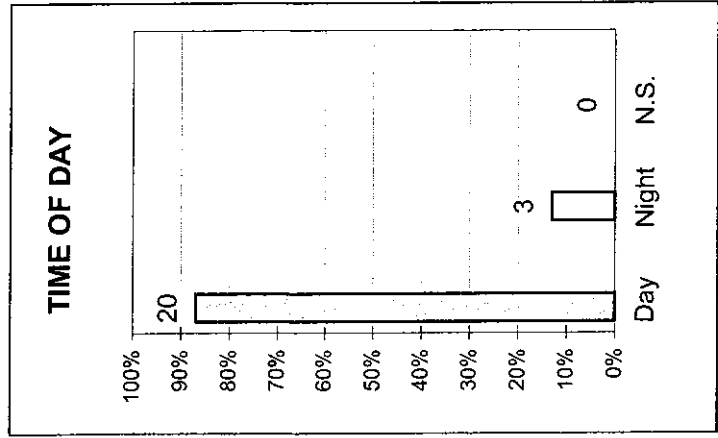
2001 - 2003

County Pike Main Roadway S.R. 32 Intersecting Roadway S.R. 220

Begin SLM 20.00 End SLM 0

Prepared by R. Chaffin Date 08/26/04

| Year | TIME OF DAY | | | | | | ROADWAY CONDITION | | | | | | CRASH TYPE | | | | | | | | | | | | | | | | | | |
|----------|-------------|-----|------|-----|------|-----|-------------------|-----|-----|-----|------|-----|------------|-----|------|-----|-------|-----|---------|-----|---------|-----|------|-----|------|-----|-------|-----|-------|-----|-----|
| | DAY | | NITE | | N.S. | | DRY | | WET | | N.S. | | L.T. | | R.T. | | ANGLE | | REAREND | | HEAD ON | | S.S. | | F.O. | | OTHER | | Total | | |
| | PDO | I/F | PDO | I/F | PDO | I/F | PDO | I/F | PDO | I/F | PDO | I/F | PDO | I/F | PDO | I/F | PDO | I/F | PDO | I/F | PDO | I/F | PDO | I/F | PDO | I/F | PDO | I/F | PDO | I/F | PDO |
| 2001 | 1 | 3 | 0 | 1 | 0 | 0 | 1 | 4 | 0 | 0 | 0 | 0 | 1 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 4 | |
| 2002 | 5 | 5 | 0 | 1 | 0 | 0 | 3 | 5 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 5 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 5 | 6 | |
| 2003 | 3 | 3 | 1 | 0 | 0 | 0 | 4 | 2 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 3 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 3 | | |
| Subtotal | 9 | 11 | 1 | 2 | 0 | 0 | 8 | 11 | 2 | 2 | 0 | 0 | 1 | 0 | 0 | 9 | 11 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 10 | 13 | | |
| Total | 20 | 3 | 0 | 0 | 0 | 0 | 19 | 4 | 4 | 0 | 0 | 1 | 0 | 0 | 20 | 20 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 23 | 23 | | |



(BEFORE OVERHEAD FLASHERS)

SPEED CHECK

RADAR TYPE SPEED METER

Location S.R. 32 @ 220 Intersection (1000' in advance of Intersection)
 Date 11-13-00 Day Monday County Pike
 Observer R. Chaffin, G. Manson
 Type Pavement Bituminous Dry Wet Condition Good Width 48'
 Weather Cloudy Temperature 45°

85 Percentile - 65 mph / Pace 56-66 mph

85 Percentile - 63 mph / Pace 54-64 mph

| W bound, Time <u>9:00 A M to 9:52 A M</u> | | | | | M.P.H. | E bound, Time <u>9:00 A M to 9:52 A M</u> | | | | |
|---|------------|-----|----------------|------------|--------|---|------------|--------|----------------|------------|
| Cum. % | Cum. Total | No. | Vehicles | | | No. | Cum. Total | Cum. % | | |
| | | | Passenger Cars | Commercial | | | | | Passenger Cars | Commercial |
| | | | | | Over | | | | | |
| | | | | | 90.0 | | | | | |
| | | | | | 88.0 | | | | | |
| | | | | | 86.0 | | | | | |
| | | | | | 84.0 | | | | | |
| | | | | | 82.0 | | | | | |
| | | | | | 80.0 | | | | | |
| | | | | | 78.0 | | | | | |
| | | | | | 76.0 | | | | | |
| 100 | 101 | 1 | | | 74.0 | | | | | |
| 99 | 100 | 1 | | | 72.0 | | | | | |
| 98 | 99 | 2 | | | 70.0 | | | | | |
| 96 | 97 | 5 | | | 68.0 | | | 6 | 100 | |
| 91 | 92 | 5 | | | 66.0 | | | 8 | 94 | |
| 86 | 87 | 6 | | | 64.0 | | | 9 | 86 | |
| 80 | 81 | 19 | | | 62.0 | | | 12 | 77 | |
| | 62 | 9 | | | 60.0 | | | 10 | 65 | |
| | 53 | 15 | | | 58.0 | | | 23 | 55 | |
| | 38 | 15 | | | 56.0 | | | 13 | 32 | |
| | 23 | 9 | | | 54.0 | | | 13 | 19 | |
| | 14 | 6 | | | 52.0 | | | 5 | 6 | |
| | 8 | 5 | | | 50.0 | | | 1 | 1 | |
| | | | | | 48.0 | | | | | |
| | 3 | 2 | | | 46.0 | | | | | |
| | | | | | 44.0 | | | | | |
| | 1 | 1 | | | 42.0 | | | | | |
| | | | | | 40.0 | | | | | |
| | | | | | 38.0 | | | | | |
| | | | | | 36.0 | | | | | |
| | | | | | 34.0 | | | | | |
| | | | | | 32.0 | | | | | |
| | | | | | 30.0 | | | | | |
| | | | | | 28.0 | | | | | |
| | | | | | 26.0 | | | | | |
| | | | | | 24.0 | | | | | |
| | | | | | 22.0 | | | | | |
| | | | | | 20.0 | | | | | |
| | | | | | 18.0 | | | | | |
| | | | | | 16.0 | | | | | |
| | | | | | 14.0 | | | | | |
| | | | | | Below | | | | | |
| | | | | | Totals | | | | | |

(AFTER OVERHEAD FLASHERS)

Flasher Installed 10-2-02

OHIO DEPARTMENT OF HIGHWAYS

BUREAU OF TRAFFIC

SPEED CHECK

RADAR TYPE SPEED METER

Location S.R. 32 @ S.R. 220

Date 8-25-04 Day Wednesday County Pike

Observer R. Chaffin, G. Baird

Type Pavement Asphalt Dry Wet Condition Good Width 4 Lane

Weather Cloudy Temperature 85°

| WB bound, Time <u>12:05 P M</u> to <u>1:05 P M</u> | | | | | EB bound, Time <u>12:05 P M</u> to <u>1:05 P M</u> | | | | | |
|--|------------|-----|----------------|------------|--|----------------|------------|-----|------------|--------|
| Cum. % | Cum. Total | No. | Vehicles | | M.P.H. | Vehicles | | No. | Cum. Total | Cum. % |
| | | | Passenger Cars | Commercial | | Passenger Cars | Commercial | | | |
| | | | | | Over | | | | | |
| | | | | | 90.0 | | | | | |
| | | | | | 88.0 | | | | | |
| | | | | | 86.0 | | | | | |
| | | | | | 84.0 | | | | | |
| | | | | | 82.0 | | | | | |
| | | | | | 80.0 | | | | | |
| | | | | | 78.0 | | | | | |
| | | | | | 76.0 | | | | | |
| | | | | | 74.0 | | | | | |
| | | | | | 72.0 | | | | | |
| 100 | 120 | 1 | | | 70.0 | | | 1 | 155 | 100 |
| 99 | 119 | 3 | | | 68.0 | | | 7 | 154 | 99 |
| 97 | 116 | 8 | | | 66.0 | | | 8 | 147 | 95 |
| 90 | 108 | 10 | | | 64.0 | | | 16 | 139 | 90 |
| 82 | 98 | 23 | | | 62.0 | | | 38 | 123 | 79 |
| | 75 | 21 | | | 60.0 | | | 29 | 85 | |
| | 54 | 19 | | | 58.0 | | | 29 | 56 | |
| | 35 | 15 | | | 56.0 | | | 13 | 27 | |
| | 20 | 11 | | | 54.0 | | | 10 | 14 | |
| | 9 | 6 | | | 52.0 | | | 3 | 4 | |
| | 3 | 2 | | | 50.0 | | | 1 | 1 | |
| | 1 | 1 | | | 48.0 | | | | | |
| | | | | | 46.0 | | | | | |
| | | | | | 44.0 | | | | | |
| | | | | | 42.0 | | | | | |
| | | | | | 40.0 | | | | | |
| | | | | | 38.0 | | | | | |
| | | | | | 36.0 | | | | | |
| | | | | | 34.0 | | | | | |
| | | | | | 32.0 | | | | | |
| | | | | | 30.0 | | | | | |
| | | | | | 28.0 | | | | | |
| | | | | | 26.0 | | | | | |
| | | | | | 24.0 | | | | | |
| | | | | | 22.0 | | | | | |
| | | | | | 20.0 | | | | | |
| | | | | | 18.0 | | | | | |
| | | | | | 16.0 | | | | | |
| | | | | | 14.0 | | | | | |
| | | | | | Below | | | | | |
| | | | | | Totals | | | | | |

face 56-60 mph

85 percentile - 63 mph

face 54-64 mph

85 Percentile - 63 mph

9

SIGNAL WARRANT DATA SHEET

Pik 32 & 220 / Germany Rd

Study By: R Chaffin

Date: 09/20/04

Date of Counts: 09/15/04

| Condition A - Minimum Vehicular Volume | | | |
|--|--------------------------------|---|--------------------------------|
| Vehicles per hour on MAJOR street (total of both approaches) | Combination / Crash Experience | Vehicles per hour on higher-volume MINOR-street approach (one direction only) | Combination / Crash Experience |
| 70% 420 | 56% 335 | 70% 105 | 56% 94 |
| Condition B - Interruption of Continuous Traffic | | | |
| Vehicles per hour on MAJOR street (total of both approaches) | Combination / Crash Experience | Vehicles per hour on higher-volume MINOR-street approach (one direction only) | Combination / Crash Experience |
| 70% 630 | 56% 504 | 70% 53 | 56% 42 |

Comments:

For this analysis, the number of lanes used for moving traffic on each approach for the Major street was 2 or more.

The number of lanes used for moving traffic on each approach for the Minor street was 1.

The volume requirements were reduced 70% since the speed limit on the Major street exceeds 40 mph OR this location is within an isolated community with a population of less than 10,000.

| HOUR | MAJOR STREET | MINOR APPROACH | MINOR APPROACH | Condition A | Condition B | Condition A Crash Experience | Condition B Crash Experience |
|-------------------------|----------------|-----------------|-------------------|--------------------------------|-------------|------------------------------|------------------------------|
| | S.R. 32 Volume | S.R. 220 Volume | Germany Rd Volume | | | | |
| 6-7 AM | 610 | 33 | 94 | NO | NO | YES | YES |
| 7-8 AM | 599 | 65 | 76 | NO | NO | NO | YES |
| 8-9 AM | 485 | 45 | 56 | NO | NO | NO | NO |
| 9-10 AM | 402 | 34 | 32 | NO | NO | NO | NO |
| 10-11 AM | 400 | 50 | 37 | NO | NO | NO | NO |
| 11-12 AM | 406 | 57 | 39 | NO | NO | NO | NO |
| 12-1 PM | 434 | 59 | 41 | NO | NO | NO | NO |
| 1-2 PM | 484 | 69 | 46 | NO | NO | NO | NO |
| 2-3 PM | 589 | 96 | 47 | NO | NO | YES | YES |
| 3-4 PM | 698 | 134 | 39 | YES | YES | YES | YES |
| 4-5 PM | 725 | 168 | 45 | YES | YES | YES | YES |
| 5-6 PM | 596 | 149 | 33 | YES | NO | YES | YES |
| Hours that met warrant: | | | | 3 | 2 | | 6 |
| | | | | NO | NO | NO | NO |
| | | | | Combination Warrant: NO | | | |

*This indicates that the volumes meet the requirements set for the Crash Experience Warrant. It does not indicate that the warrant is met. Please see OMTCD Section 4C.08 for other necessary criteria.

OHIO DEPARTMENT OF TRANSPORTATION

District 9 Planning
 650 Eastern Ave., Chillicothe, OH 45601
 1-888-819-8501

File Name : Pik-32-220
 Site Code : 00005566
 Start Date : 09/15/2004
 Page No : 1

Groups Printed- Unshifted - Bank 1

| Start Time | S.R. 220 From North | | | | | | S.R. 32 From East | | | | | | S.R. 32 From South | | | | | | S.R. 32 From West | | | | | | | |
|------------|---------------------|------|------|------|------------|--------|-------------------|------|------|------|------------|--------|--------------------|------|------|------|------------|--------|-------------------|------|------|------|------------|--------|-----|-----|
| | Right | Thru | Left | Peds | App. Total | Factor | Right | Thru | Left | Peds | App. Total | Factor | Right | Thru | Left | Peds | App. Total | Factor | Right | Thru | Left | Peds | App. Total | Factor | | |
| | 06:00 AM | 0 | 0 | 2 | 0 | 2 | 0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 0 | 12 | 8 | 0 | 0 | 20 | 0 | 1.0 | 1.0 | 1.0 | 1.0 | 0 | 27 |
| 06:15 AM | 0 | 2 | 11 | 0 | 13 | 0 | 33 | 48 | 0 | 0 | 0 | 0 | 0 | 20 | 6 | 0 | 0 | 26 | 0 | 3 | 39 | 0 | 0 | 0 | 42 | 199 |
| 06:30 AM | 0 | 0 | 6 | 0 | 6 | 0 | 78 | 81 | 0 | 0 | 0 | 0 | 0 | 27 | 7 | 0 | 0 | 34 | 0 | 0 | 36 | 1 | 0 | 0 | 37 | 236 |
| 06:45 AM | 1 | 3 | 8 | 0 | 12 | 0 | 37 | 70 | 0 | 0 | 0 | 0 | 0 | 9 | 5 | 0 | 0 | 14 | 0 | 3 | 36 | 0 | 0 | 0 | 39 | 172 |
| Total | 1 | 5 | 27 | 0 | 33 | 0 | 190 | 275 | 0 | 0 | 0 | 0 | 0 | 68 | 26 | 0 | 0 | 94 | 0 | 7 | 137 | 1 | 0 | 0 | 145 | 737 |
| 07:00 AM | 0 | 5 | 10 | 0 | 15 | 0 | 24 | 72 | 1 | 0 | 0 | 0 | 0 | 9 | 13 | 0 | 0 | 22 | 0 | 5 | 43 | 0 | 0 | 0 | 48 | 182 |
| 07:15 AM | 0 | 3 | 13 | 0 | 16 | 0 | 31 | 53 | 0 | 0 | 0 | 0 | 0 | 8 | 12 | 0 | 0 | 20 | 0 | 5 | 55 | 0 | 0 | 0 | 60 | 180 |
| 07:30 AM | 0 | 2 | 17 | 0 | 19 | 0 | 36 | 89 | 0 | 0 | 0 | 0 | 0 | 11 | 9 | 0 | 0 | 20 | 0 | 3 | 33 | 0 | 0 | 0 | 36 | 200 |
| 07:45 AM | 0 | 2 | 13 | 0 | 15 | 0 | 30 | 72 | 0 | 0 | 0 | 0 | 0 | 4 | 10 | 0 | 0 | 14 | 0 | 3 | 44 | 0 | 0 | 0 | 47 | 178 |
| Total | 0 | 12 | 53 | 0 | 65 | 0 | 121 | 286 | 1 | 0 | 0 | 0 | 0 | 32 | 44 | 0 | 0 | 76 | 0 | 16 | 175 | 0 | 0 | 0 | 191 | 740 |
| 08:00 AM | 1 | 5 | 6 | 0 | 12 | 0 | 31 | 67 | 0 | 0 | 0 | 0 | 0 | 5 | 4 | 0 | 0 | 9 | 0 | 5 | 55 | 1 | 0 | 0 | 61 | 180 |
| 08:15 AM | 0 | 4 | 4 | 0 | 8 | 0 | 23 | 47 | 0 | 0 | 0 | 0 | 0 | 8 | 3 | 0 | 0 | 11 | 0 | 2 | 43 | 0 | 0 | 0 | 45 | 134 |
| 08:30 AM | 0 | 4 | 5 | 0 | 9 | 0 | 21 | 43 | 1 | 0 | 0 | 0 | 0 | 12 | 7 | 0 | 0 | 19 | 0 | 6 | 39 | 0 | 0 | 0 | 45 | 138 |
| 08:45 AM | 1 | 6 | 9 | 0 | 16 | 0 | 24 | 44 | 1 | 0 | 0 | 0 | 0 | 9 | 6 | 0 | 0 | 17 | 0 | 2 | 32 | 0 | 0 | 0 | 32 | 134 |
| Total | 2 | 19 | 24 | 0 | 45 | 0 | 99 | 201 | 2 | 0 | 0 | 0 | 0 | 34 | 20 | 0 | 0 | 56 | 0 | 13 | 169 | 1 | 0 | 0 | 183 | 586 |
| 09:00 AM | 0 | 2 | 6 | 0 | 8 | 0 | 16 | 36 | 1 | 0 | 0 | 0 | 0 | 2 | 4 | 0 | 0 | 6 | 0 | 7 | 47 | 0 | 0 | 0 | 54 | 121 |
| 09:15 AM | 0 | 3 | 6 | 0 | 9 | 0 | 14 | 37 | 0 | 0 | 0 | 0 | 0 | 8 | 4 | 0 | 0 | 14 | 0 | 4 | 42 | 0 | 0 | 0 | 46 | 120 |
| 09:30 AM | 0 | 1 | 11 | 0 | 12 | 0 | 13 | 39 | 0 | 0 | 0 | 0 | 0 | 2 | 3 | 0 | 0 | 6 | 0 | 2 | 42 | 0 | 0 | 0 | 44 | 114 |
| 09:45 AM | 0 | 1 | 4 | 0 | 5 | 0 | 16 | 50 | 0 | 0 | 0 | 0 | 0 | 3 | 3 | 0 | 0 | 6 | 0 | 3 | 32 | 0 | 1 | 0 | 36 | 113 |
| Total | 0 | 7 | 27 | 0 | 34 | 0 | 59 | 162 | 1 | 0 | 0 | 0 | 0 | 15 | 14 | 0 | 0 | 32 | 0 | 16 | 163 | 0 | 1 | 0 | 180 | 468 |
| 10:00 AM | 0 | 3 | 9 | 0 | 12 | 0 | 21 | 38 | 1 | 0 | 0 | 0 | 0 | 3 | 3 | 0 | 0 | 7 | 0 | 1 | 41 | 0 | 0 | 0 | 42 | 121 |
| 10:15 AM | 0 | 2 | 16 | 0 | 18 | 0 | 15 | 30 | 0 | 0 | 0 | 0 | 0 | 6 | 4 | 0 | 0 | 10 | 0 | 6 | 52 | 2 | 0 | 0 | 60 | 133 |
| 10:30 AM | 1 | 2 | 7 | 0 | 10 | 0 | 18 | 31 | 0 | 0 | 0 | 0 | 0 | 9 | 3 | 0 | 0 | 12 | 0 | 5 | 36 | 0 | 0 | 0 | 41 | 112 |
| 10:45 AM | 1 | 1 | 8 | 0 | 10 | 0 | 13 | 35 | 2 | 0 | 0 | 0 | 0 | 6 | 1 | 0 | 0 | 8 | 0 | 3 | 50 | 0 | 0 | 0 | 53 | 121 |
| Total | 2 | 8 | 40 | 0 | 50 | 0 | 67 | 134 | 3 | 0 | 0 | 0 | 0 | 24 | 11 | 0 | 0 | 37 | 0 | 15 | 179 | 2 | 0 | 0 | 196 | 487 |
| 11:00 AM | 0 | 5 | 9 | 0 | 14 | 0 | 8 | 40 | 1 | 0 | 0 | 0 | 0 | 2 | 3 | 0 | 0 | 6 | 0 | 1 | 56 | 1 | 0 | 0 | 58 | 127 |
| 11:15 AM | 1 | 4 | 11 | 0 | 16 | 0 | 10 | 39 | 0 | 0 | 0 | 0 | 0 | 6 | 4 | 0 | 0 | 10 | 0 | 8 | 38 | 0 | 0 | 0 | 46 | 121 |
| 11:30 AM | 1 | 3 | 9 | 0 | 13 | 0 | 11 | 40 | 0 | 0 | 0 | 0 | 0 | 9 | 3 | 0 | 0 | 14 | 0 | 6 | 38 | 0 | 0 | 0 | 44 | 122 |
| 11:45 AM | 1 | 2 | 11 | 0 | 14 | 0 | 14 | 48 | 0 | 0 | 0 | 0 | 0 | 5 | 4 | 0 | 0 | 9 | 0 | 2 | 44 | 1 | 0 | 0 | 47 | 132 |
| Total | 3 | 14 | 40 | 0 | 57 | 0 | 43 | 167 | 1 | 0 | 0 | 0 | 0 | 3 | 22 | 14 | 0 | 39 | 0 | 17 | 176 | 2 | 0 | 0 | 195 | 502 |
| 12:00 PM | 0 | 6 | 14 | 0 | 20 | 0 | 21 | 36 | 0 | 0 | 0 | 0 | 0 | 4 | 4 | 0 | 0 | 8 | 0 | 2 | 54 | 1 | 0 | 0 | 57 | 142 |
| 12:15 PM | 0 | 3 | 8 | 0 | 11 | 0 | 13 | 33 | 2 | 0 | 0 | 0 | 0 | 3 | 4 | 0 | 0 | 7 | 0 | 7 | 40 | 0 | 0 | 0 | 47 | 113 |
| 12:30 PM | 0 | 2 | 13 | 0 | 15 | 0 | 15 | 41 | 1 | 0 | 0 | 0 | 0 | 5 | 6 | 0 | 0 | 12 | 0 | 4 | 50 | 0 | 0 | 0 | 54 | 138 |
| 12:45 PM | 0 | 5 | 8 | 0 | 13 | 0 | 19 | 40 | 0 | 0 | 0 | 0 | 0 | 7 | 6 | 0 | 0 | 14 | 0 | 8 | 47 | 0 | 0 | 0 | 55 | 141 |
| Total | 0 | 16 | 43 | 0 | 59 | 0 | 68 | 150 | 3 | 0 | 0 | 0 | 0 | 2 | 19 | 20 | 0 | 41 | 0 | 21 | 191 | 1 | 0 | 0 | 213 | 534 |

OHIO DEPARTMENT OF TRANSPORTATION - DIVISION OF MULTI-MODEL PLANNING & PROGRAMS -
OFFICE OF TECHNICAL SERVICES

INTERSECTION TRAFFIC COUNT SHOWING TURNING MOVEMENTS

Co. Station Route Log Location City/Town FC Count No. Year
 No. *Pike 5566 S.R. 32 19.23 @ S.R. 220/Germany Rd.* *02 A* *2004*

| Recorder | Hour | Period | Day | Date | Weather | Road Condition |
|----------|------|--------|-----|------|---------|----------------|
| | : | : | | / / | | |
| | : | : | | / / | | |
| | : | : | | / / | | |

Leg Names: S.R. 32 West Counter No. _____

S.R. 32 East Expansion Factor: P&A _____

S.R. 220 North Expansion Factor: B&C _____

Germany Rd. South Seasonal Factor: _____

TRAFFIC ACCIDENT ANALYSIS

Division No. 09 Report No. _____ Time Period: From 1-1-01 to 12-31-01 Page No. 1 of 1

Location S.R. 32 & 220 County Pike State OH

| LOCATION OF ACCIDENT | | | | WEATHER | ROAD COND. | TYPE DAY | VEH. | DRIVERS | | | VIOLATIONS | COLLISION DIAGRAM | |
|----------------------------------|---------|-------|----|---------|------------|-------------|----------|---------|------|------|------------|----------------------|-------|
| DATE OF ACCIDENT | TIME | LIGHT | K. | | | | | INJ. | PD - | DIR. | | | SPEED |
| 018025712 | P 4:20 | D | 0 | 0 | Clear | Dry | 97 Jeep | 1 | W | 60 | N | None | |
| <p>#2, 24, M, Lucasville, OH</p> | | | | | | | | | | | | | |
| 028010683 | P 6:25 | N | 0 | 1 | Cloudy | Dry | 89 Dodge | 1 | W | 15 | N | Failure To Yield | |
| <p>#1, 39, F, Jackson, OH</p> | | | | | | | | | | | | | |
| 018102203 | A 8:01 | D | 0 | 1 | Clear | Dry | 95 Ford | 1 | S | 5 | N | Failure To Yield | |
| <p>#1, 20, M, Lucasville, OH</p> | | | | | | | | | | | | | |
| 018255090 | P 3:50 | D | 0 | 2 | Cloudy | Dry | 94 Ford | 1 | S | 60 | N | None | |
| <p>#2, 26, F, Minford, OH</p> | | | | | | | | | | | | | |
| 018275196 | P 12:00 | D | 0 | 3 | Clear | Dry | 92 Volvo | 1 | W | 55 | N | None | |
| <p>#2, 22, M, Picketon, OH</p> | | | | | | | | | | | | | |
| | | | | | | | 92 Ford | 2 | N | ? | N | Failure To Yield | |

LEGEND

DIRECTIONAL ANALYSIS

Motor vehicle movement before accident: Sidewalk:

Vehicle movement after accident: Head-on collision:

Pedestrian movement: Rear-end collision:

Skidding vehicle: Vehicle struck fixed object:

Vehicle overturning: Parked vehicle:

Vehicle out of control:

Form TS-AR-12 Ohio Department of Highways-Bureau of Traffic

TRAFFIC ACCIDENT ANALYSIS

Division No. 09 Report No. Time Period: From 1-1-02 to 12-31-02 Page No. 1 of 3

Location S.R. 32 & 220 County Pike

| DATE OF ACCIDENT | TIME | LOCATION OF ACCIDENT | | | WEATHER | ROAD COND. | TYPE & DAY | VEH. | DRIVERS | | | VIOLATIONS | COLLISION DIAGRAM |
|----------------------------|--------|----------------------|---|------|---------|------------|------------|----------|---------|-------|-------|----------------|-------------------|
| | | LIGHT | X | INJ. | | | | | DIR. | SPEED | COND. | | |
| 028043612 | P 2:45 | D | 0 | 0 | Clear | Dry | Angle | 99 Jeep | W | 59 | N | None | |
| ? Left the scene | | | | | | | | | | | | | |
| 028152544 | P 2:40 | D | 0 | 2 | Cloudy | Dry | Angle | 67 Ford | E | 60 | N | None | |
| #2, 23, M, Oak Hill, OH | | | | | | | | | | | | | |
| 028068352 | P 3:45 | D | 0 | 0 | Rain | Wet | Angle | 92 Ford | E | 60 | N | None | |
| #2, 25, M, Fortsmouth, OH | | | | | | | | | | | | | |
| 028144232 | P 3:15 | D | 0 | 0 | Rain | Wet | Angle | 95 Dodge | S | 0 | N | None | |
| #2, 17, F, Piketon, OH | | | | | | | | | | | | | |
| 028112979 | P 8:45 | N | 0 | 1 | Rain | Wet | Head On | 90 Ford | S | 0 | N | None | |
| #2, 46, M, Chillicothe, OH | | | | | | | | | | | | | |
| 02819-02 | P 8:45 | N | 0 | 1 | Rain | Wet | Fri | 90 Dodge | W | 35 | DUI | Left of Center | |

LEGEND

DIRECTIONAL ANALYSIS

Motor vehicle movement before accident:

Vehicle movement after accident:

Pedestrian movement:

Striking vehicle:

Vehicle overturning:

Vehicle out of control:

Sidewipe:

Head-on collision:

Rear-end collision:

Vehicle struck fixed object:

Parked vehicle:

CONDITION OF DRIVER

N - Normal

D - Drinking

I - Intoxicated

A - Asleep or Fatigued

PD - Physical defect

TRAFFIC ACCIDENT ANALYSIS

Division No. 09 Time Period: From 1-1-02 to 12-31-02 Report No. _____
 Location S.R. 32 & 220 County Pike Page No. 2 of 3

| LOCATION OF ACCIDENT | | | | REMARKS | WEATHER | ROAD COND | TYPE B DAY | VEH. | DRIVERS | | | COLLISION DIAGRAM | |
|----------------------------|------|-------|---------|---------|---------|-----------|------------------|----------|---------|------|-------|----------------------|-------|
| DATE OF ACCIDENT | TIME | LIGHT | K. INJ. | | | | | | PD - \$ | DIR. | SPEED | | COND. |
| 028129851 | P | | | | | | | 90 | E | C | N | None | |
| 5-14-02 | 5:00 | D | 0 | 2 | Cloudy | Dry | Angle | 98 Ford | N | C | N | Failure To Yield | |
| #2, 67, F, Minford, OH | | | | | | | | | | | | | |
| 028189519 | A | | | | | | | 90 | W | C | N | None | |
| 6-29-02 | 8:12 | D | 0 | 1 | Fog | Dry | Angle | 00 Ford | S | 40 | N | Failure To Yield | |
| #2, 30, M, Chillicothe, OH | | | | | | | | | | | | | |
| 028205359 | P | | | | | | | 00 | N | Van | N | Failure To Yield | |
| 7-15-02 | 2:50 | D | 0 | 0 | Clear | Dry | Angle | 86 Buick | E | 40 | N | None | |
| #1, 33, F, Beaver, OH | | | | | | | | | | | | | |
| 028265308 | P | | | | | | | 99 | E | Van | N | None | |
| 9-25-02 | 3:30 | D | 0 | 2 | Cloudy | Dry | Angle | 93 Chevy | S | 5 | N | Failure To Yield | |
| #2, 17, F, Beaver, OH | | | | | | | | | | | | | |
| 028265309 | P | | | | | | | 98 | W | Van | N | None | |
| 9-25-02 | 4:12 | D | 0 | 0 | Clear | Dry | Angle | 95 Ford | S | 5 | N | Failure To Yield | |
| #2, 28, F, Beaver, OH | | | | | | | | | | | | | |

LEGEND

DIRECTIONAL ANALYSIS

Motor vehicle movement before accident:

Vehicle movement after accident:

Pedestrian movement:

Sliding vehicle:

Vehicle overturning:

Vehicle out of control:

CONDITION OF DRIVER

N - Normal

O - Drunk

I - Intoxicated

A - Asleep or Fatigued

PD - Physical defect

Form TS-AR-12 Ohio Department of Highways - Bureau of Traffic

TRAFFIC ACCIDENT ANALYSIS

Division No. 09 Report No. _____ Time Period: From 1-1-03 to 12-31-03 Page No. 1 of 2
 Location S.R. 32 & 220 County Pike

| DATE OF ACCIDENT | TIME | LOCATION OF ACCIDENT | | | WEATHER | ROAD COND. | TYPE OF DAY | VEH. | DRIVERS | | | COLLISION DIAGRAM | |
|------------------------------|--------|----------------------|----|------|---------|------------|-------------|---------|---------|--------|-------|-------------------|------------|
| | | LIGHT | K. | INJ. | | | | | DIR. | SPEED | COND. | | VIOLATIONS |
| 038015340 | P 3:40 | D | 0 | 0 | Cloudy | Dry | Angle | 00 Ford | W | C 53 | N | None | |
| # 2, 20, M, Piketon, OH | | | | | | | | | | | | | |
| 038076276 | P 2:10 | D | 0 | 0 | Clear | Dry | Angle | 84 Ford | W | C 55 | N | None | |
| # 2, 79, M, Piketon, OH | | | | | | | | | | | | | |
| 038137530 | P 4:25 | D | 0 | 0 | Cloudy | Dry | Angle | 87 Chev | N | Van 5 | N | Failure To Yield | |
| # 1, 34, M, West Chester, OH | | | | | | | | | | | | | |
| 038149537 | P 3:40 | D | 0 | 3 | Cloudy | Dry | Angle | 96 Miss | W | Pu. 65 | N | None | |
| # 2, 45, M, Batavia, OH | | | | | | | | | | | | | |
| 038199066 | P 2:05 | D | 0 | 2 | Clear | Dry | Angle | 93 Olds | W | C 60 | N | None | |
| # 1, 39, F, Lucasville, OH | | | | | | | | | | | | | |
| 038199066 | P 2:05 | D | 0 | 2 | Clear | Dry | Angle | 97 Merc | S | Van 10 | N | Failure To Yield | |

LEGEND

DIRECTIONAL ANALYSIS

Motor vehicle movement before accident _____
 Vehicle movement after accident _____
 Pedestrian movement _____
 Skidding vehicle _____
 Vehicle overturning _____
 Vehicle out of control _____

Sideswipe _____
 Head-on collision _____
 Rear-end collision _____
 Vehicle struck fixed object _____
 Parked vehicle _____

CONDITION OF DRIVER

N - Normal
 D - Drinking
 I - Intoxicated
 A - Asleep or Fatigued
 PD - Physical defect

TRAFFIC ACCIDENT ANALYSIS

Division No. 09 Time Period: From 1-1-03 to 12-31-03 Report No. _____
 Location S.R. 32 & 220 County Pike Page No. 2 of 2

| LOCATION OF ACCIDENT | | | | TYPE | | VEH. | DRIVERS | | | VIOLATIONS | COLLISION DIAGRAM | | | | | | | | |
|----------------------------|------|-------|---------|----------|---------|-------|------------|----------|-------------|------------|-------------------|---|---|-----|----|---------------------|------------------|--|--|
| DATE OF ACCIDENT | TIME | LIGHT | K. INJ. | PD. - \$ | WEATHER | | ROAD COND. | DIR. | SPEED COND. | | | | | | | | | | |
| 038311087 | P | 4:45 | D | 0 | 2 | Rain | Wet | Angle | 97 | 97 Dodge | 97 | 1 | N | Van | 10 | N | Failure To Yield | | |
| # 1, 31, F. Waverly, OH | | | | | | | | Thu | 96 | 96 Pontiac | 96 | 2 | E | 60 | N | None | None | | |
| 038352740 | A | 5:25 | N | 0 | 0 | Clear | Dry | Rear End | 94 | 94 Ford | 94 | 1 | W | 20 | N | None | None | | |
| 12-4-03 | | | | | | | | Thu | 01 | 01 Chevy | 01 | 2 | W | 55 | N | Following Too Close | None | | |
| # 2, 58, M. Middletown, OH | | | | | | | | | | | | 3 | | | | | | | |
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LEGEND

DIRECTIONAL ANALYSIS
 Motor vehicle movement before accident _____
 Vehicle movement after accident _____
 Pedestrian movement _____
 Sliding vehicle _____
 Vehicle overturning _____
 Vehicle out of control _____
 Sidewalk _____
 Head-on collision _____
 Rear-end collision _____
 Vehicle struck fixed object _____
 Parked vehicle _____

CONDITION OF DRIVER
 N - Normal
 D - Drinking
 I - Intoxicated
 A - Asleep or Fatigued
 PD - Physical defect