OUTLINE

• Introduction of the Crash Analysis
• Step-by-Step Process
• Example Intersections
• Challenges and Next Steps
PROCESS OF ANALYSIS

2007-2015 DATA FROM SAFE-T, OKLAHOMA’S CRASH ANALYSIS DATABASE.

3,205 TOTAL BICYCLE AND PEDESTRIAN RELATED CRASHES

<table>
<thead>
<tr>
<th>162</th>
<th>667</th>
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<tbody>
<tr>
<td>162</td>
<td>667</td>
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<tr>
<td>FATALITIES</td>
<td>INCAPACITATING INJURIES</td>
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</table>

LEGEND
- Crash Locations 2007-2015

0  2.5  5  10 MILES

acog
CRASH STATISTICS

TOTAL CRASHES IN OCARTS AREA INVOLVING A BICYCLIST OR PEDESTRIAN PER YEAR

BICYCLE-RELATED CRASHES

PEDESTRIAN-RELATED CRASHES
Driving while distracted by a cellphone has killed 3 pedestrians and incapacitated 8 others and 2 bicyclists.

**DISTRACTIONS IN BIKE RELATED CRASHES**
- 30
- 16
- 11
- 9

**DISTRACTIONS IN PEDESTRIAN RELATED CRASHES**
- 56
- 33
- 26
- 6

- Electronic Communication Devices
- Other Inside Vehicle
- Other Electronic Devices
- Other Outside Vehicle
Most crashes involving a pedestrian or bicyclist occur during the day.
WHAT WENT WRONG

CAUSE OF BIKE RELATED CRASHES

*Listed as improper bicyclist or pedestrian action or no improper action by driver

CAUSE OF PEDESTRIAN RELATED CRASH

- Bike/Ped Action*
- Failure to Yield
- Follow too Closely
- Unsafe Speed
- Improper Turn
- Fail to Stop
- Unsafe Vehicle
- Left of Center
- Improper Overtaking
- Inattention
- Wrong way
- DUI (alcohol/drugs)
- Other

CRASH STATISTICS

WHAT WENT WRONG
STEP 2
PROCESS OF ANALYSIS

LEGEND
- Bike Crashes 2007-2015

Bicycle Routes 2015
- Bike Lane
- Multimodal Path
- Mountain
- Shoulder
- Sign on Road

LEGEND
BIKE KERNEL DENSITY
- 0 - 2,081
- 2,082 - 6,659
- 6,660 - 13,318
- 13,319 - 22,058
- 22,059 - 32,047
- 32,048 - 45,782
- 45,783 - 65,343
- 65,344 - 85,320
- 85,321 - 106,130

LOCATIONS OF BICYCLE-RELATED CRASHES
AREAS OF HIGH RATES OF BICYCLE-RELATED CRASHES
STEP 2
PROCESS OF ANALYSIS

LEGEND 2007-2015
● Pedestrian Crashes
— Sidewalks

LEGEND PEDESTRIAN KERNEL DENSITY

LOCATIONS OF PEDESTRIAN-RELATED CRASHES

AREAS OF HIGH RATES OF PEDESTRIAN-RELATED CRASHES
### STEP 3
PROCESS OF ANALYSIS
IDENTIFIED AREAS OF HIGH CRASH RATES

<table>
<thead>
<tr>
<th>LOCATION</th>
<th>TOTAL BICYCLE CRASHES</th>
<th>FATALITIES</th>
<th>INCAPACITATING INJURIES</th>
<th>NON INCAPACITATING INJURIES</th>
<th>POSSIBLE INJURY</th>
<th>PROPERTY DAMAGE</th>
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NORMAN
12TH AVE NE & ALAMEDA ST.

- WALGREENS
- MR SHORTSTOP GAS
- HOMELAND
- CLEVELAND COUNTY HEALTH DEPT
  - JUST TO THE NORTH
- ALAMEDA SQUARE
- SEVERAL RESTAURANTS

SPEED LIMIT: 40
TOTAL LANES: 20
TOTAL DRIVEWAYS: 20
DAILY TRAFFIC: 22,482
MIDWEST CITY
AIR DEPOT BLVD FROM EDDIE DR TO FAIRCHILD DR

- CVS & WALGREENS
- ONCUE GAS
- HOMELAND
- MIDWEST CITY DEPOT APARTMENTS
- AGATEWAY PLAZA
- SEVERAL BUSINESSES

SPEED LIMIT: 40
TOTAL LANES: 20
DAILY TRAFFIC: 21,569
### IDENTIFIED AREAS OF HIGH CRASH RATES

<table>
<thead>
<tr>
<th>LOCATION</th>
<th>TOTAL PEDESTRIAN CRASHES</th>
<th>FATALITIES</th>
<th>INCAPACITATING INJURIES</th>
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OKC

SW 59TH ST: BLACKWELDER TO WALKER

• SPORADIC SIDEWALKS
• RESIDENCES OFF 59TH ST
• SEVERAL BUSINESSES
• MANY BUSINESSES RELATING TO AUTOS (AUTO REPAIR, CAR DEALERSHIPS, ETC)
• 3 GAS STATIONS
OKC
SW 59TH ST: BLACKWELDER TO WALKER

SEVERITY
- Fatalities
- Non Incapacitating Injuries
- Property Damage
- Incapacitating Injuries
- Possible Injury

COUNT

HIT AND RUNS

Yes
No

LIGHTING CONDITION
- DYLGH
- DARK
- DAWN
- DUSK

SPEED LIMIT: 40
TOTAL LANES: 20
DAILY TRAFFIC: 17,292
OKC
PENNSYLVANIA AVE & SW 59TH ST

• CONOCO GAS STATION
• ST ANTHONY’S
• STRIP MALL
• ALDI’S
• WALMART NEIGHBORHOOD MARKET
• WALGREENS

SPEED LIMIT: 40
TOTAL LANES: 20
TOTAL DRIVEWAYS: 27
DAILY TRAFFIC: 18,303
MOORE
EASTERN AVE & MAIN ST

- MOORE HIGH SCHOOL
- PLATT COLLEGE
- VALERO GAS STATION
- CENTRAL CHURCH OF CHRIST
- LYONS ESTATES APARTMENTS
- KIWANIS PARK

SPEED LIMIT: 40 (25 SCHOOL ZONE)
TOTAL LANES: 20
TOTAL DRIVEWAYS: 13
DAILY TRAFFIC: 16,690
CHALLENGES

- Human error in crash reporting
- Inaccurate, incomplete, or no crash addressing
- Not enough detail in report about pedestrian or bicyclist actions
NEXT STEPS

• Work with ACOG members to identify high crash areas
• Monitor those areas over time
• Analyze other aspects – time of crash, transit stops, intersection inventory
QUESTIONS?

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