Knoxville Police Department
Annual Vehicle Flight Analysis
2017

Prepared by
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This is the 2017 Vehicle Flight Response (VFR) Analysis report that is required by CALEA Standards and Knoxville Police Department Policy. The report is an overview for the department and training staff to examine Police Officers actions during VFR's in 2017 to evaluate performance and discover areas where officers and supervisors may show deficiencies and improve.

During 2017, there were thirty four (34) vehicle flight response reports documented by the Knoxville Police Department. This is a decrease of six (6) VFR’s from the 2016 VFR report. The analysis also reflects an increase in officer “Initiated Only” reports. In 2016 the department documented only eighteen (18) “initiated only” reports compared to fifty one (51) in 2017.

The following report will display graphs, charts and a brief synopsis that will give you a breakdown of the statistics concerning the actions and conditions officers face in a vehicle flight. From this report, staff can analyze areas where the department demonstrates proficiencies as well as areas of concern that need to be addressed. The staff can also monitor trends and compare past years’ reports.
During the calendar year of 2017, there were thirty four (34) documented Vehicle Flight Response (VFR) reports by the Knoxville Police Department. It should be stated that the number of VFRs in this report does not include the “initiated only” reports. Twenty three (23) of the VFR’s occurred in the East District compared to the West District’s eleven (11).

VFR Yearly Comparison

In 2016, the department had only eighteen (18) “Initiated Only” reports compared to fifty one (51) one in 2017. Initiated only is defined as an interaction with a vehicle by a police unit that resulted in the vehicle fleeing, but the officer not giving chase, only initiating emergency equipment. The increase in “Initiated Only” reports show the officers and supervisors are responding positively to the pursuit management training they receive during their annual in-service training.

District Comparison

2017 West District (11) 32.4% - East District (23) 67.6%

2016 West District (15) 37.5% - East District (25) 62.5%

Yearly Initiated Only Comparison

2016 (18)

2017 (51)
VFR by Month in which they occurred

In 2017, December was the highest with six (6), which was followed by February with five (5). March, May and August all had four (4) VFR’s reported. Fourth place was tied between October and November with three (3), the remaining months either had one (1) or 0. In comparison in 2016, the highest month was tied between February, March and July with five (5). Second place was tied between August and December with (4).

VFR By Day

In 2017, Wednesday had the highest number of documented VFR reports of eight (8), followed by Friday with seven (7). Tuesday had six (6), Saturday had five (5), Thursday and Sunday were tied with three (3) and Monday with two (2). In 2016, Tuesday had the highest number of incidents with eleven (11) documented.
VFR By Time

In 2017, the time frame of 1201–1800 hours had the highest number of VFR reports with fifteen (15). The time period from 1801-2359 hours was second place with ten (10) VFR’s. Compared with 2016, the time frame between 1801-2359 had the highest number of VFR’s with fifteen (15) followed by 0000-0600 with twelve (12).

VFR by minutes

In 2017, twenty two (22) VFR’s were two (2) minutes or under in length, which accounts for 65% of the VFR reports for the entire year. Only one (1) VFR was over ten (10) minutes in which the officers were pursuing a wanted person for felony warrants, aggravated assault and DUI.
Distance of VFR

The longest VFR in 2017 was 17.6 miles. In 2017, fifty percent (50%) or (17) vehicle flights were 1 mile or less. Eight (8) VFR’s accounted for (24%) of VFR’s between 2.1 to 5 miles in distance. Five (5) VFR’s accounted for 15% of VFR’s between 1 to 2 miles in length.

### VFR Distance Comparison 2016 to 2017

<table>
<thead>
<tr>
<th>Distance</th>
<th>2016</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; than 1 mile</td>
<td>15</td>
<td>17</td>
</tr>
<tr>
<td>1-2 mMiles</td>
<td>12</td>
<td>5</td>
</tr>
<tr>
<td>2.1-5 Miles</td>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td>5.1-10 Miles</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>Beyond 10 Miles</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

MPH VFR

During 2017, the speed of VFR’s ranged from unknown low speed to 121 mph. The greatest number of VFR’s were represented in the 51 mph to 60 mph range with eight (8), the same amount as 2016. VFR’s from 70 mph and below represented twenty four (24) of the total incidents (70.5%). There were nine (9) VFR’s that were greater than 81 mph (26.4%) in 2017, which is a decrease from fifteen (15) reported in 2016.

### VFR’s Speed Comparisons 2016 to 2017

<table>
<thead>
<tr>
<th>MPH Range</th>
<th>2016</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-10 mph</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>11-20 mph</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>21-30 mph</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>31-40 mph</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>41-50 mph</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>51-60 mph</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>61-70 mph</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>71-80 mph</td>
<td>8</td>
<td>6</td>
</tr>
<tr>
<td>81-90 mph</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>91-100 mph</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>101-110 mph</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>111-120 mph</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>121-150 mph</td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>
Age of Officers involved in VFR

The largest number of officers involved in VFR’s were in the age range of 30 – 39 years of age. Officers within the age range of 40- 49 and 51+ years of age reflected the lowest number of officers involved. Compared to 2016, the age range from 26 – 35 had the highest number of officers involved compared to the age range 41-45 that had the lowest. Though the age breakdown is wider, the demographic is very similar.

![2017 Age Breakdown of Officer Involved in VFR](image)

Years of Service of Primary officer in VFR

Officers between 0 – 5 years of service accounted for eleven (11) or 32% of the VFR’s in 2017, while officers between 6-10 years accounted for ten (10) or 29% of the VFR’s. Officers with 21 plus years accounted for eight (8) or 24% of the VFR’s in 2017. In 2016, 0-10 years of service accounted for 60% of the VFR’s. In 2017, the same demographic accounted for 62% of VFR’s.

![Years of Service Comparison 2016 to 2017](image)
Patrol Status Prior to VFR

In 2017, 56% of the VFR’s began when the officer was moving while on patrol. VFR’s were tied at seven (7) for en route to call for service and other, which represented 42%. Less than 3% occurred while the officer was stationary while on patrol, such as running radar or special assignment.

![Patrol Status Prior to VFR Comparison 2016 to 2017](image)

Type of Unit used in VFR

In 2017, of the 34 VFR’s, thirty (30) involved marked units, while only four (4) involved unmarked police cars. In 2016, the numbers were similar with forty (40) total VFR’s. Marked units represented thirty-eight (38) and unmarked units two (2).

![Types of Vehicles Used in VFR's Comparison 2016 to 2017](image)
Use of Siren

In 2017, only one (1) of the thirty four (34) VFR’s documented reflected the officer did not activate their siren immediately as they attempted to stop a suspect. This number is consistent with the numbers from 2016 where two officers were out of compliance. This is a 50% decrease from 2016.

Traffic Density

Of the thirty four (34) VFR’s for 2017, twenty seven (27) occurred when traffic conditions were light. Only four (4) VFR’s occurred when traffic conditions were considered to be medium and only three (3) occurred when condition were considered heavy. When compared to 2016, light traffic conditions decreased by four (4), moderate traffic conditions decreased by five (5) and finally heavy conditions increased by three (3).
Weather Conditions

The most common weather condition during the VFR’s in 2017 was during clear conditions, which occurred twenty five (25) times. There were seven (7) VFR’s when it was cloudy and two (2) VFR’s when it was raining. When compared to 2016, clear condition VFR’s decreased by three (3), cloudy condition VFR’s decreased by four (4) and finally, rainy condition VFR’s increased by one (1).

Surface Conditions

In 2017, of the thirty four (34) documented VFR’s, thirty (30) occurred when the roadway surface was dry, while only four (4) occurred while the surface was wet. These numbers are consistent with to 2016.
Event Termination VFR

In 2017, thirteen (13) of the thirty four (34) VFR’s were terminated by the police, which represented 38.2%. The suspect stopped their vehicle during seven (7) VFR’s. The suspect stopping their vehicle then fleeing on foot was next with five (5). There were three (3) VFR’s where the suspects had accidents and three (3) VFR’s where the suspects’ vehicle became disabled at some point during the chase. In 2016, twenty-six (26) VFR’s were terminated by a supervisor or terminated by the officer.

VFR Event Termination Comparison 2016 to 2017

Charges Prior to Traffic Stop

In 2017, outstanding warrant and DUI’s were tied for the primary charges prior to VFR. Carjacking came in second place, while Fleeing, Evading, and Other tied for the third. Speeding and Auto Theft were tied for fourth place.
Offender Apprehended

In 2017, the suspects were apprehended in twenty two (22) or 64.7% of the VFR’s. This is an increase in the apprehension rate from 2016 which was 45%.

Chart VFR Offender Arrests Comparison 2016 to 2017 Title

Sex and Race Comparison
**Accident as a Result from VFR**

In 2017 there were a total of three (3) accidents resulting from VFR’s. All three (3) of the accidents were from suspects. Officers accounted for 0 accidents resulting from VFR’s. When compared to 2016, there was a decrease of three (3) total accidents from suspects. There was a decrease in the number of accidents involving officers, from one (1) to zero (0).
**Officer Initiated Only**

There was an increase in “Officer Initiated Only” VFR’s in 2017, compared to 2016 and 2015.

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**Age of Officers in “Initiated Only”**

The graph concerning the age of the officers involved in initiating only reflect the demographics of the department. It shows that those that account for the highest number are the younger officers in the department. It also shows that training concerning pursuit driving is having an effect.
Years of Service Officer initiated only

Just as the graph above indicates, the age of the officers involved in “initiated only” VFR’s reflects that thirty three (33) of the fifty one (51) (64.7%) “Initiated Only” VFR’s involved officers with less than 10 years’ experience.

Initiated Only Officers Years of Service

<table>
<thead>
<tr>
<th>Years</th>
<th>2016</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-5 Years</td>
<td>7</td>
<td>18</td>
</tr>
<tr>
<td>6-10 Years</td>
<td>7</td>
<td>15</td>
</tr>
<tr>
<td>11-15 Years</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>16-20 Years</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>21+ Years</td>
<td>0</td>
<td>10</td>
</tr>
</tbody>
</table>

Policy Violations:

Of the thirty four (34) Vehicle Flight Reports in 2017, only one (1) resulted in a written reprimand for policy violation. Supervisors did not note in any of the VFR’s that officers failed to activate both primary equipment devices.

Policy Review

As part of the 2017 pursuit analysis, General Order 1.8 was reviewed as well to determine if any issues with policy or reporting procedure needed to be addressed. The review determined the policy met department needs in both areas and issues with policy violations are being addressed effectively with training and corrective actions.

Recommendations

As a result of this analysis, it is recommended that the Knoxville Police Department’s Vehicle Flight Response Policy (General Order 1.8) continue to be reviewed during in-service training. The focus should be on supervisor management of VFR’s, reasons for initiation, speeds, thorough documentation of the vehicle flight and officer’s tactics used during the VFR. Quarterly analysis and training may be a way to stay ahead of negative trends and address issues before they become problems. Quarterly training for supervisors would help to address promptness of reporting and documenting policy violations.