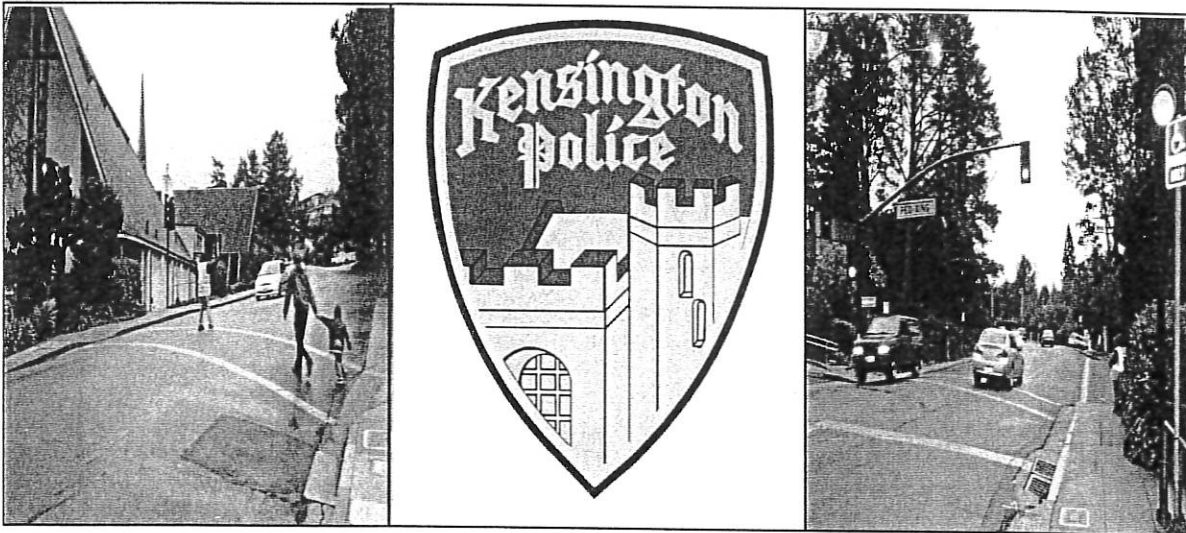


## KENSINGTON POLICE PROTECTION & COMMUNITY SERVICES DISTRICT TRAFFIC SAFETY EVALUATION



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March 2010

This report was produced in cooperation with the Kensington Police Protection and Community Services District. Funding for this program was provided by a grant from the California Office of Traffic Safety, through the National Highway Traffic Safety Administration. Opinions, findings, and conclusions are those of the authors and not necessarily those of the University of California and/or the agencies supporting or contributing to this report.

**KENSINGTON POLICE PROTECTION  
& COMMUNITY SERVICES DISTRICT  
TRAFFIC SAFETY EVALUATION**

**MARCH 2010**

**FINAL REPORT**

**EVALUATION TEAM**

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## **EXECUTIVE SUMMARY**

The Kensington Police Protection and Community Services District (KPPCSD), which is governed by five board members elected into office by the Kensington Community, requested that the Technology Transfer Program of the Institute of Transportation Studies at University of California, Berkeley conduct a Traffic Safety Evaluation (TSE) for vehicle traffic and pedestrian safety issues at a crosswalk on Arlington Avenue and Kensington Park Road. A team of two traffic safety experts consisting of a traffic engineer and a traffic enforcement expert conducted this evaluation in January 2010 and prepared this report. The primary objective of this TSE is to improve traffic safety in the unincorporated Community of Kensington.

Based on information provided through the California Highway Patrol's Statewide Integrated Traffic Reporting System (SWITRS) data recorded from 2004 - 2008, there were a total of 230 collisions in Kensington. Based on the same SWITRS data, the Primary Collision Factor (PCF) in collisions on Kensington's streets is improper turning movements. The other critical factors are unsafe starting/backing maneuvers and speed.

The Office of Traffic Safety (OTS) rankings by population group allow cities to compare themselves with all the other cities with similar populations in the State. There are 73 cities in the OTS rankings population group F (2,501 to 10,000);, however, Kensington is not an incorporated city, so the Community is not included in the OTS rankings. A comparison with five communities with similar demographics was created using information from the SWITRS data for the California Smaller Cities, Towns, and Villages (1,000 to 6000 residents) for 2004 through 2008.

*Chapter 1* provides an introduction to this report, evaluation objectives and approach, information used, and organization of the report.

*Chapter 2* provides an overview of collision data for Community of Kensington, including a map and pertinent charts and graphs illustrating the locations and the historical data of vehicular collisions in the area.

*Chapter 3* presents an engineering perspective for improving pedestrian safety at the intersection of Arlington Avenue and Kensington Park Road signalized crosswalk. Options for potential engineering safety improvements are presented.

*Chapter 4* focuses on law enforcement's perspective on enforceability issues surrounding the specific location studied in this TSE report. Analysis and suggestions for the improvement of traffic safety issues are presented.

As discussed at the initial meeting with the Police Chief and Contra Costa County Public Works Engineer, the dominant traffic problem appears to be drivers failing to stop for the red signal at the intersection of Arlington Avenue and Kensington Park Road. The Community of Kensington has not recorded any fatal collision in over five years, and it ranks as having the fewest injury collisions when compared to five other similar communities from 2004 through 2008. It had very few bicycle and pedestrian collisions during the same time period. Law enforcement efforts are challenged by a community attitude that local residents should receive verbal warnings rather than citations for traffic violations.

The suggestions presented in this report are based on limited field observations and time spent in the Kensington Community by the TSE evaluators. These suggestions, which are also based on general knowledge of best practices in traffic engineering operations and traffic enforcement, are intended to guide the KPPCSD staff in making decisions for future safety improvement projects in the community, and they may not incorporate all factors which may be relevant to the traffic safety issues in the area.

As this report is conceptual in nature, conditions may exist in the study areas that were not observed and may not be compatible with suggestions in this report. Before finalizing and implementing any physical changes, KPPCSD and Contra Costa County staff may choose to conduct more detailed studies or further analysis to refine or discard the suggestions in this report, if they are found to be contextually inappropriate or appear not to improve traffic safety or traffic operations due to conditions including, but not limited to, high vehicular traffic volume or speeds, physical limitations on space or sight distance, or other potential safety concerns.

## **1. INTRODUCTION**

The Kensington Police Protection and Community Services District (KPPCSD) requested that the Technology Transfer Program of the Institute of Transportation Studies at the University of California, Berkeley conduct a traffic safety evaluation (TSE) for the Community. A team of two traffic safety experts consisting of a traffic engineer and a traffic enforcement expert conducted the TSE and prepared this report.

### **1.1 Evaluation Objective**

The primary objective of this TSE is to evaluate the signalized crosswalk at the intersection of Arlington Avenue and Kensington Park Road to ascertain if motorists are given an adequate warning and clear direction to their responsibility for the safety of pedestrians crossing Arlington Avenue. The Police Chief and Contra Costa County Public Works representative were concerned about the potential for a serious injury collision resulting from drivers failing to stop for the red signal at Arlington Avenue and Kensington Park Road. During the initial meeting, the problem with high speed of traffic on Arlington Avenue was also discussed.

### **1.2 Evaluation Approach**

Prior to their visit to Kensington, the TSE team reviewed various traffic records and other traffic safety related information. This report presents the findings and suggestions of the TSE team to improve traffic safety and traffic operations in the community. The evaluation team determined that there was no prior TSE report completed for Kensington.

The suggestions presented in this report are based on the limited time spent in Kensington by the TSE evaluators, and they may not incorporate all factors which may be relevant to the traffic safety issues in the community. These suggestions are intended to guide the KPPCSD and Contra Costa County Public Works staff in making decisions for future safety improvement projects in Kensington, and they are based on limited field observations and general knowledge of best practices in traffic engineering operations and traffic enforcement. Conditions may exist in the focus areas that were not observed and may not be compatible with suggestions in this report. As this report is conceptual in nature, the Community and County staff may choose to conduct more detailed studies before finalizing and implementing any physical changes. They

may choose to conduct further analysis to refine or discard the suggestions in this report, if they are found to be contextually inappropriate or appear not to improve traffic safety or traffic operations due to conditions including, but not limited to, high vehicular traffic volume or speeds, physical limitations on space or sight distance, or other potential safety concerns.

### **1.3 Information Used in the Evaluation**

The following information was used in preparation of the study:

**Table 1: Information Used in Evaluation**

<b>Item</b>	<b>Period</b>	<b>Source</b>
Statewide Integrated Traffic Records System (SWITRS) Collision Data	2004 - 2008	SWITRS, and CA Highway Patrol (CHP)
Controller Location Detail	June 20, 2000	Contra Costa County Public Works
Traffic Counts Arlington Avenue 230 ft. north of Rincon Road	Jan. 6, 2010	Contra Costa County Public Works
Traffic Counts Arlington Avenue 170 ft. south of Rincon Road	Jan. 6, 2010	Contra Costa County Public Works
Traffic Counts Rincon Road 160 ft. west of Arlington Avenue	Jan. 6, 2010	Contra Costa County Public Works
Year End Traffic Citations	1994 to 2009	Kensington Police Dept.
Hazardous Violations	2007 to 2009	Kensington Police Dept.
Year End Statistics - Arrests	1993 to 2009	Kensington Police Dept.
Year End Statistics - Reports	1994 to 2009	Kensington Police Dept.

### **1.4 Organization of this Report**

*Chapter 2* provides the Community's historical background, a vicinity map of Kensington, the population, and the highway and street systems within the Community Service District. The traffic collision data obtained from Statewide Integrated Traffic Records System (SWITRS) and the Office of Traffic Safety (OTS) and the analysis of the data are discussed in this chapter.



*Chapter 3* presents traffic engineering evaluation and findings on existing traffic and safety concerns at the intersections and roadways requested for evaluation by the Community Service District, as well as suggestions on potential engineering safety improvement measures.

*Chapter 4* describes the law enforcement efforts for reducing traffic problems, analysis of the collision data obtained from the sources listed in Table 1, and suggested strategies to improve traffic safety.

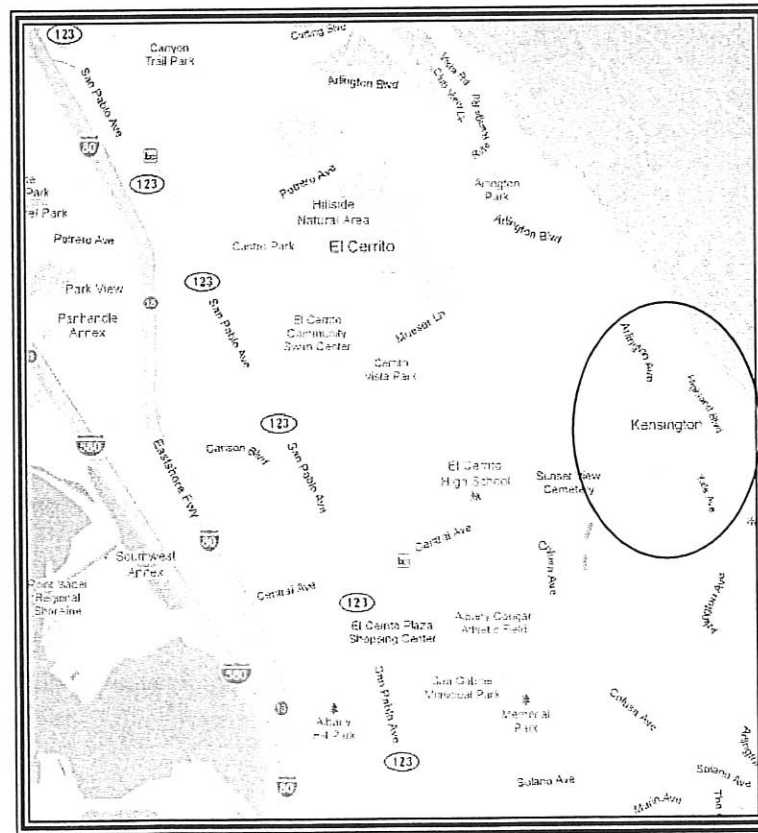
### **1.5 Acknowledgements**

Kensington Police Chief Gregory Harman and Contra Costa Public Works Senior Civil Engineer Jerry Fahy are acknowledged for their cooperation in providing the needed data and their input on local conditions.

## 2. BACKGROUND AND COLLISION HISTORY

Kensington is an unincorporated Contra Costa County community of about 2,200 homes. Located in the East Bay Hills between cities of Berkeley and El Cerrito, the 4,936 residents occupy a steep hillside area of approximately 1 square mile. Kensington maintains its own police department, as well as park and recreation programs for all ages, via the Kensington Police Protection & Community Services District. The Kensington Fire Protection District provides fire protection and emergency medical services via a contract with City of El Cerrito. Road maintenance is provided by the Contra Costa County Public Works Department.

**Figure 2-1: Map of Kensington Community Services District**

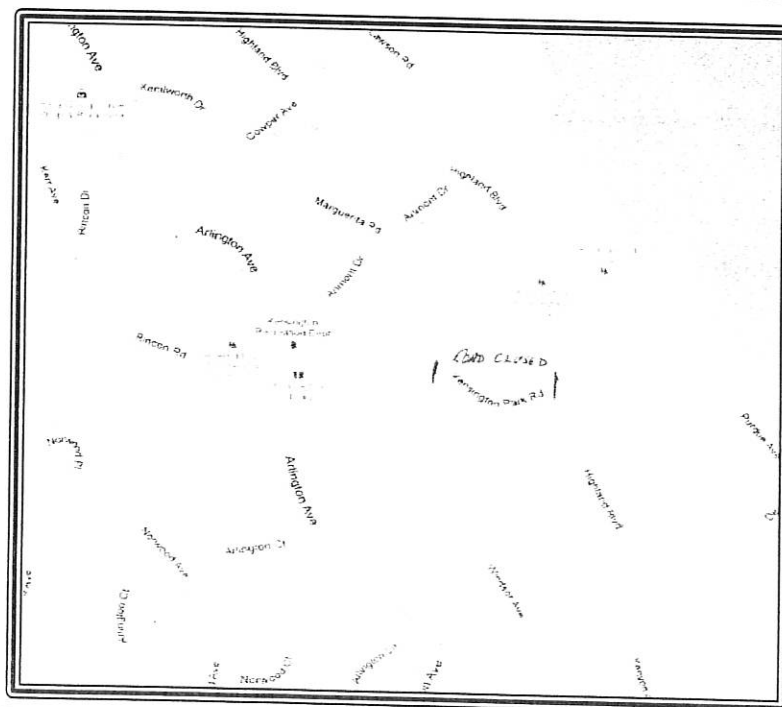


Arlington Avenue is the main road through Kensington and is a commuter route between the cities of Berkeley and El Cerrito. The north/south roadway is two lanes with parking generally allowed on both sides of the street and contains numerous horizontal and vertical curves due to

the hillside terrain. The speed limit is 25 miles per hour and there is only one traffic signal which is at the intersection of Arlington Avenue with Kensington Park Road/Rincon Road. This signal controls pedestrian traffic in a marked crosswalk crossing Arlington Avenue. During normal operations the signal on Arlington Avenue flashes yellow and the signals facing Kensington Park Road and Rincon Road flash red. The signal is actuated by the pedestrians wishing to cross Arlington Avenue.

Kensington Elementary School and the Library are on the east side of Arlington Avenue, and a church and a residential area are on the west side. The crosswalk is used throughout the day, although the peak pedestrian traffic periods are the AM and PM school commute periods. To assist about 70 students that use the crosswalk to get to school, Kensington has a crossing guard assigned from 7:45 am to 8:45 am, and for students returning home from school, the crossing guard is on duty from 2:00 pm to 3:00 pm. Pedestrians control the signal phase with a button located on a pole on the west and east side of Arlington Avenue. When the button is pushed the flashing yellow light changes to a solid yellow signal for about six seconds before changing to a solid red signal for all directions on Arlington Avenue and Kensington Park Road/Rincon Road.

**Figure 2-2: Map of Arlington Avenue & Area of Kensington Park Road & Rincon Road**



**2.1 Traffic Collision Investigating and Reporting**

Traffic Collision (TC) reports are prepared in compliance with the California Highway Patrol (CHP) Collision Investigation Manual (CIM). The Traffic Collision reports submitted by Kensington police officers are reviewed by the shift sergeant and entered into an automated information system prior to submission to the Statewide Integrated Traffic Records System (SWITRS).

**2.2 Statewide Integrated Traffic Records System (SWITRS) Statistical Data**

SWITRS processes all reported fatal and injury collisions which occur on California's state highways and all other roadways, excluding private property. The Kensington Community is below the statewide expected ratio of Property Damage Only (PDO) to Fatal and Injury Collisions of 2 to 1.

**Table 2: Collision Data for Kensington Community Services District**

<i>Collision Type</i>	<i># of Collisions</i>				
	<i>2004</i>	<i>2005</i>	<i>2006</i>	<i>2007</i>	<i>2008*</i>
Fatal	0	0	0	0	0
Injury	7	8	1	3	5
Property Damage	39	37	48	47	35
<b>Total</b>	<b>46</b>	<b>45</b>	<b>49</b>	<b>50</b>	<b>40</b>
<i>Bicycle Involved</i>	2	1	0	2	1
<i>Pedestrian Involved</i>	0	0	0	0	1

\* 2008 is preliminary data

An analysis of five years of SWITRS data reveals that the highest number of traffic collisions occurs on Mondays and Fridays, as shown on Chart 1.

**Chart 1: Collisions by Day of Week (2004 – 2008)**

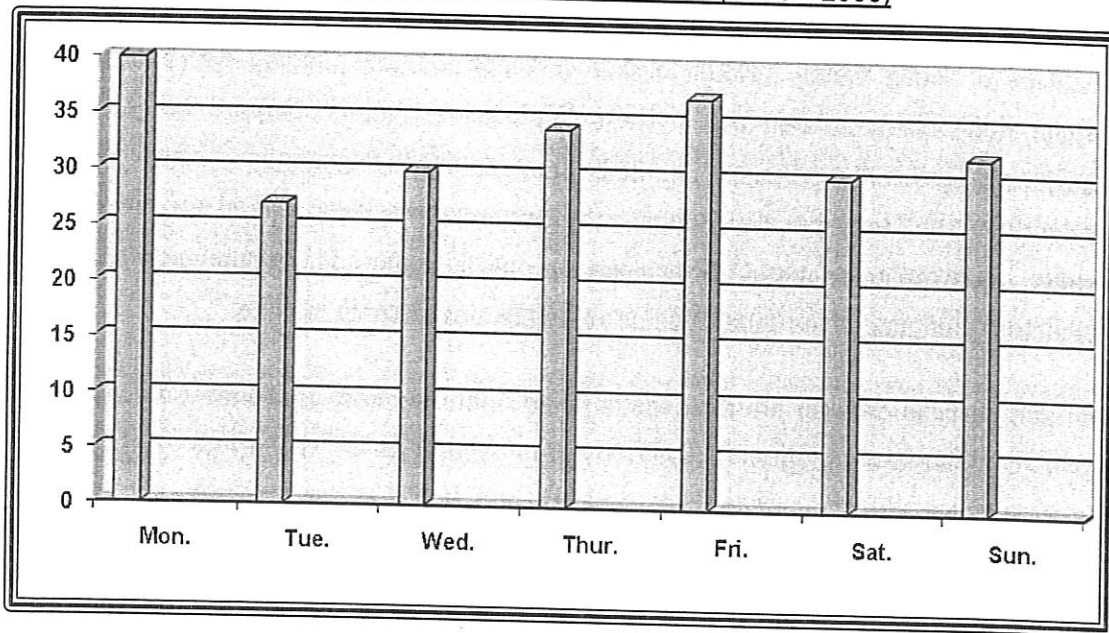
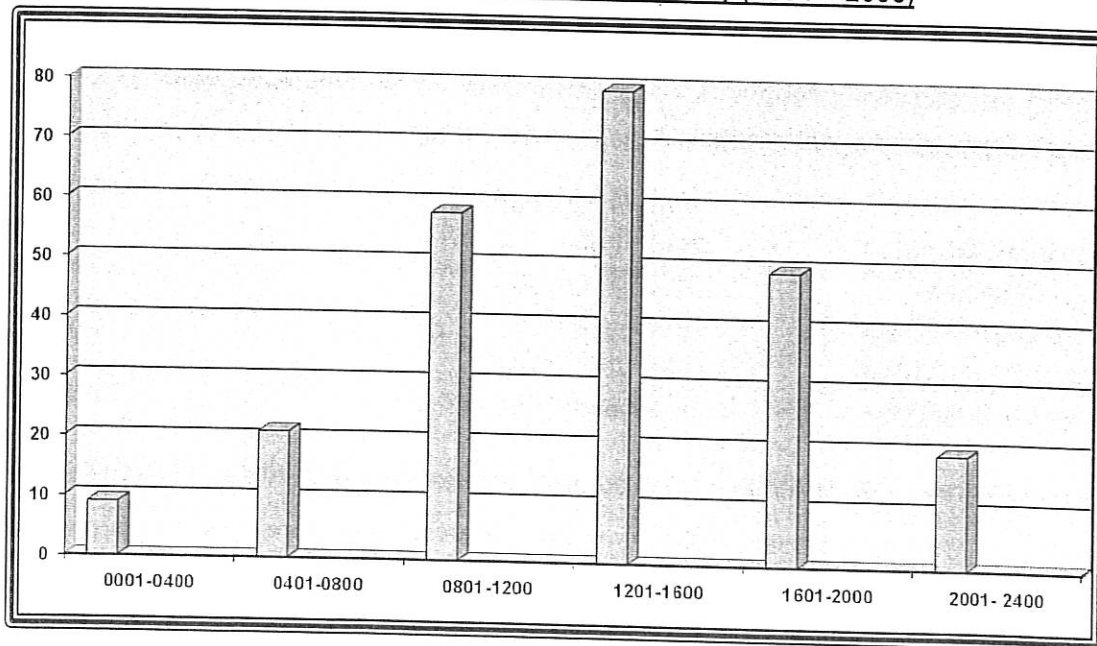


Chart 2 represents an analysis of five years of SWITRS data focusing on hours of the day. The period from 8:00 a.m. through 4:00 p.m. has the highest number of collisions.

**Chart 2: Collisions by Hours of the Day (2004 – 2008)**



The charts above can assist with scheduling enforcement personnel deployment by day of week and developing shift times to have maximum impact on preventing traffic collisions.

### **2.3 Office of Traffic Safety Ranking**

The Office of Traffic Safety (OTS) collision rankings facilitate funding decisions and identify emerging traffic safety problem areas. The rankings allow cities to compare themselves to other cities with similar-sized populations and help them identify their potential disproportionate traffic safety problem(s). They also allow counties to compare themselves with all the other counties in the state. It may be noted that OTS rankings are only indicators of potential problems; there are many factors that may either understate or overstate a city/county ranking.

Victim and collision data for the rankings is taken from the latest published California Highway Patrol (CHP) Statewide Integrated Traffic Records System (SWITRS) report. OTS provides two types of rankings: 1) victim and collision rankings, and 2) DUI arrest rankings.

Victim and collision rankings are based on rates of victims killed/injured or fatal/injury collisions per "1,000 daily-vehicle-miles-of-travel" (2008 CALTRANS) and per "1,000 average population" (2008-2009 Department of Finance) figures. Pedestrian, bicyclist and motorcycle victim rankings do not take into account the size or demographics of a city or county's pedestrian/bicyclist/motorcyclist population.

Counties are assigned statewide rankings, while cities are assigned population group rankings. Population groups using 2008 SWITRS data are as follows:

<b>Population Group</b>	<b>Victim/Collision Rankings</b>
A = over 250,000	13 cities ranked
B = 100,001 to 250,000	55 cities ranked
C = 50,001 to 100,000	103 cities ranked
D = 25,001 to 50,000	97 cities ranked

For example, for victim/collision rankings, a Population Group Ranking of "1/103" would be assigned to the city with the highest number of victims/collisions per 1,000 residents in

population group C, while a ranking of "103/103" would be assigned to the city with the lowest number of victims/collisions per 1,000 residents in population group C.<sup>1</sup>

The Office of Traffic Safety (OTS) does not rank Kensington with the 73 cities in the OTS rankings population group F (2,501 to 10,000) because it is not an incorporated city or town. A comparison with five communities with similar demographics was created using information from the SWITRS data for the California Smaller Cities, Towns, and Villages (1,000 to 6000 residents) data for 2004 through 2008.

**Table 3: Comparison of Similar Communities Ranked by Total Collisions**

City	Population	Fatal/Injury	PDO	Total	Bicycle	Pedestrian
Broadmoor	4,016	26	127	153	1	5
Woodside	5,352	65	92	157	8	0
Calistoga	5,179	57	168	225	10	5
Kensington	4,963	23	207	230	6	1
Del Mar	4,936	101	134	235	25	9
Carmel	4,081	57	455	512	5	15

Kensington Community has the lowest number of fatal/injury collisions (no fatal collisions in the 5 year period), has the 2<sup>nd</sup> fewest pedestrian collisions, and the 3<sup>rd</sup> fewest bicycle collisions in comparison with five other similar communities.

<sup>1</sup> Reference: California Office of Traffic Safety:  
[http://www.ots.ca.gov/Media\\_and\\_Research/Rankings/Explanation.asp](http://www.ots.ca.gov/Media_and_Research/Rankings/Explanation.asp)

## **2.4 Primary Collision Factors**

When a driver commits a traffic violation (e.g., speeding, running red light, running stop sign, turning, lane-changing, etc.) that is deemed the cause of a collision, the violation is coded as the Primary Collision Factor (PCF). If it is determined that such a driver is also driving under the influence, the PCF is coded as DUI instead, and the traffic violation is then coded as a secondary cause of collision.

An analysis of the 230 total collisions recorded in the 2004 – 2008 SWITRS data for the Kensington CSD reveals that 194 collisions (or 84% of total collisions) were caused by the four Primary Collision Factors listed in Table 4 below:

**Table 4: Primary Collision Factor and Percent of Total Year Data**

<b><i>PCF</i></b>	<b><i>2004</i></b>	<b><i>%</i></b>	<b><i>2005</i></b>	<b><i>%</i></b>	<b><i>2006</i></b>	<b><i>%</i></b>	<b><i>2007</i></b>	<b><i>%</i></b>	<b><i>2008</i></b>	<b><i>%</i></b>
Improper Turning	18	39	23	51	20	41	24	48	24	60
Unsafe Start/Back Maneuvers	10	22	8	18	14	29	13	26	6	15
Speed	9	20	4	9	5	10	4	8	5	13
DUI Involved	1	2	3	7	0	-	0	-	0	-
Unknown/Not Stated	2	4	3	7	9	18	5	10	0	0

It may be noted that the number of collision reports coded as “unknown or Not Stated” under PCF dropped from 18% in 2006 to 0% in 2008 after a leadership change in the Kensington Police Department.

## **2.5 Intersections with the Highest Collisions**

Based on the SWITRS data from 2004 - 2008, there were a total of 230 collisions in the Kensington CSD, with 45 (20%) of those collisions occurring at or in the proximity of an intersection, 150 (65%) not at an intersection and 35 (15%) not coded. Arlington Avenue



appears as the primary location in 59 (45%) of the collisions, and as the secondary location in 24 (18%) of the collisions.

**Table 5: High Collision Arlington Avenue Locations**

Intersection of Arlington Avenue at:	Total	Severity		Vehicle Involved with		HO	Collision Type			
		Inj.	PDO	MV	FO		SS	RE	BS	Other
Amherst Avenue	10	1	9	10	0	0	4	4	0	2
Ardmont Avenue	8	0	8	5	3	0	4	1	1	2
Sunset Drive	7	1	6	4	3	0	3	2	0	3
Rincon Road	5	4	1	3	2	0	0	3	0	2
Arlemont Drive	5	2	3	3	1	0	0	3	0	2
Kensington Park Road	3	0	3	2	1	0	1	0	0	2

Key:

- Inj.: Injury
- PDO: Property Damage Only
- MV: Motor Vehicle
- FO: Fixed Object
- HO: Head On
- SS: Sideswipe
- RE: Rear End
- BS: Broadside
- Other: Fixed Object, Pedestrian, Bicycle, Non-collision

Due to the low number of collisions at each location (a five year total), it was agreed to concentrate the efforts of this evaluation at the signalized crosswalk at the intersection of Arlington Avenue and Kensington Park Road/Rincon Road.

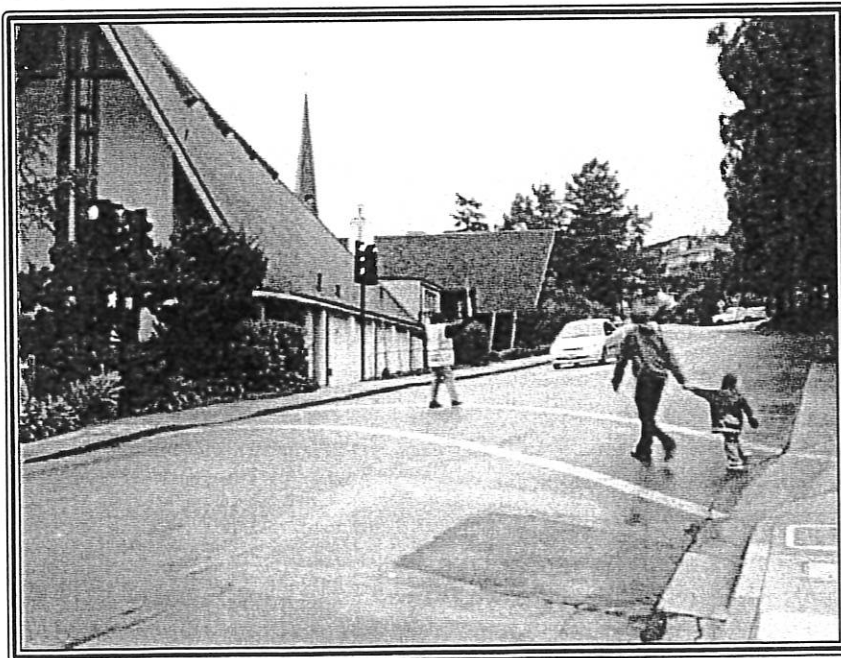
### 3. TRAFFIC ENGINEERING EVALUATION AND IMPROVEMENT MEASURES

This report focuses on a specific location in the Community of Kensington – the signalized pedestrian crossing at intersection of Arlington Avenue and Kensington Park Road/Rincon Road. The community is concerned that vehicles speed through the intersection and fail to stop when the red indication is displayed when pedestrians are crossing. The TSE team reviewed these concerns and identified potential improvements at this location. This chapter presents the findings and suggestions of the TSE team regarding traffic engineering issues.

#### 3.1 Existing Conditions

The signalized pedestrian crossing of Arlington Avenue at its intersection with Kensington Park Road/Rincon Road is the only traffic signal located in the Community of Kensington. The pedestrian crossing provides access across Arlington Avenue to the Kensington Hilltop Elementary School, the Kensington Library, an adjacent church and preschool, and area residences. A school crossing guard is on duty during school commute times from 7:45 to 8:45 am and 2:00 to 3:00 pm on weekdays. The crossing guard reported that approximately 70 pedestrians utilize the signalized crosswalk during each school commute period.

**Figure 3-1: Crosswalk on Arlington Avenue at Kensington Park Road**



Arlington Avenue carries 6,000 to 7,000 vehicles per day on weekdays. The roadway is located on a hillside and is curvilinear with mature vegetation and development on both sides throughout its length. The horizontal and vertical curvature of the roadway along with the vegetation impedes sight lines approaching the traffic signal; however, adequate sight distance is available to satisfy minimum standards for a roadway with 85<sup>th</sup> percentile speeds of up to 30 mph. A supplemental traffic signal head is visible for 315 feet in advance of the stop bar for northbound traffic, and a supplemental signal head is visible for 485 feet for southbound traffic.

The signal is pedestrian actuated and provides a protected pedestrian phase during which vehicles on Arlington Avenue, Kensington Park Road, and Rincon Road are given a solid red indication. Therefore, the signal provides an exclusive pedestrian phase. Kensington Park Road and Rincon Road are controlled by both stop signs and traffic signals. The operational characteristics of the signal are summarized below.

- When no pedestrian actuation has been received:
  - Flashing yellow indications are displayed for both directions of Arlington Avenue.
  - Flashing red indications are displayed for both Kensington Park Road and Rincon Road.
  - A steady don't walk (upraised hand) indication is displayed at the pedestrian crossing.
- When a pedestrian actuation is received:
  - A steady yellow indication is displayed followed by a solid red indication for both directions of Arlington Avenue.
  - Solid red indications are displayed to both Kensington Park Road and Rincon Road.
  - A walk (walking person) indication is displayed once the solid red indication is given for Arlington Avenue. A pedestrian clearance interval (flashing upraised hand) is then displayed.
- When the pedestrian clearance interval is complete:

- Flashing yellow indications are once again displayed to both directions of Arlington Avenue.
- Flashing red indications are once again displayed for both Kensington Park Road and Rincon Road.
- A steady don't walk (upraised hand) indication is once again displayed at the pedestrian crossing.

The intent of flashing yellow indication for Arlington Avenue is to allow vehicles to travel through the area freely when no pedestrians are present, while the flashing red indications and stop signs on Kensington Park Road and Rincon Road allow vehicles to proceed onto Arlington Avenue when it is safe to do so after coming to a complete stop. Drivers on Kensington Park Road and Rincon Road must identify acceptable gaps in vehicular traffic on Arlington Avenue to safely make their turns onto that roadway. To accomplish this, adequate sight distance is required, which is available for drivers on Kensington Park Road, but is not available for drivers on Rincon Road. The primary sight distance constraint for drivers on Rincon Road is parked vehicles along the west curb north of the intersection.

When pedestrians are present, the solid red indications on Arlington Avenue, Kensington Park Road, and Rincon Road are intended to stop vehicles on all approaches while pedestrians are crossing. However, the combination of stop signs and signal may provide mixed direction to drivers. A solid red signal means that a driver cannot proceed to make a left turn while a stop sign means that a driver can proceed when it is safe to do so. This issue is further discussed in the following section of this chapter.

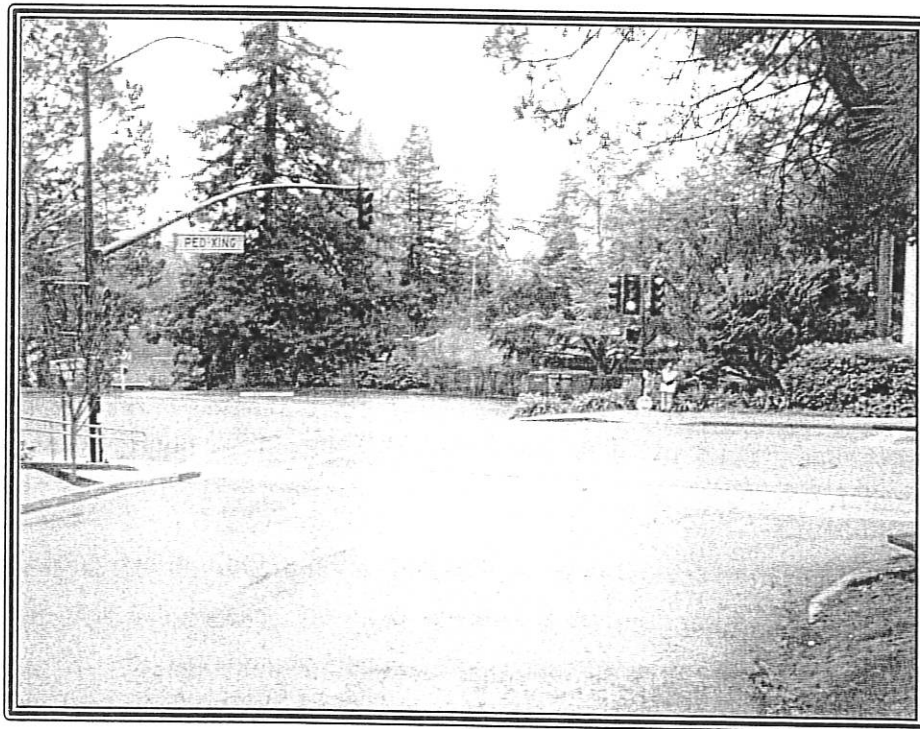
### **3.2 Compliance with California Code and Design Standards**

The signal system located on Arlington Avenue appears to be out of compliance with the California Vehicle Code and the California Manual on Uniform Traffic Control Devices (CAMUTCD). The non-compliance appears to arise from the combination of stop sign control and signal control on the Kensington Park Road and Rincon Road approaches to the intersection. California Vehicle Code section 21355(a) and CAMUTCD section 4D.01 state that stop signs shall not be used in conjunction with traffic signal control and operation.

While the traffic signal system appears to be out of compliance with these codes and standards, it does not appear to operate in an unsafe manner. Field observations revealed that drivers are not confused by the signal system and stop signs. Further, the traffic collision history indicates that drivers are able to safely travel through the area. However, to promote uniformity with traffic control device application throughout the State and the rest of the nation and to minimize potential driver confusion, compliance with these codes and standards is suggested.

This issue cannot be resolved by simply removing the stop signs and pavement legends on Kensington Park Road and Rincon Road because CAMUTCD section 4K.02 requires that a stop sign be used on all approaches to which a flashing red indication is shown. The flashing red beacon would essentially be serving as an intersection control beacon without the required stop sign, which would result in a different non-compliance issue.

**Figure 3-2: Kensington Park Road at Arlington Avenue**



### **3.3 Potential Engineering Safety Improvements**

A range of potential improvements were identified to assist the Community of Kensington and Contra Costa County with the enhancement of safety and the resolution of the non-compliance issues. Further, even though non-compliance and sight distance issues were identified, the intersection does not appear to present unsafe conditions. Therefore, the local agencies may consider evaluating these improvement options in conjunction with overall community needs and value, and ultimately determine the appropriate course of action at this location.

- **Option 1 – Install a full traffic signal.** This intersection could be converted to a full traffic signal by installing red-yellow-green indications for all vehicular approaches and walk-don't walk indications for all pedestrian crossings. This would require the installation of additional traffic signal poles and associated infrastructure. The stop signs on Kensington Park Road and Rincon Road would be eliminated. The sight distance constraints for drivers turning left from Rincon Road would become less of an issue. This option could be costly, and it may create traffic congestion on Arlington Avenue. A traffic signal warrant study will be needed.
- **Option 2 – Remove signal control from Kensington Park Road and Rincon Road.** The stop signs would remain. This option would not address the sight distance issue, and it would result in two stop controlled approaches with a signalized pedestrian crossing. This option could create conflicts between pedestrians crossing during the protected pedestrian signal phase and traffic stopped at Kensington Park Road and Rincon Road, trying to use gaps created by red signal on Arlington Avenue to make their left turns.
- **Option 3 – Remove the signal control and replace with all-way stop control.** This option would eliminate the non-compliance issue and alleviate the sight distance issue. However, it could create additional congestion on Arlington Avenue.
- **Option 4 – Remove the signal in its entirety.** The stop signs on the two side streets would remain. The non-compliance issue would be eliminated, but the sight distance issue would remain. This option would eliminate signal control protection for pedestrians crossing Arlington Avenue at this intersection, which could degrade overall pedestrian

safety at this location. However, adequate sight distance and gaps would exist for pedestrians to safely cross the street, but pedestrians would need to exercise a high degree of attentiveness and judgment. This may not be a suitable option given the high number of school children who use this crossing.

- **Option 5 – Eliminate on-street parking along the west curb line north of Rincon Avenue.** This option could eliminate or alleviate the sight distance issue depending upon how much parking to be eliminated. It would not address the non-compliance issue. This option could be implemented in combination with any of the other four options. This on-street parking is heavily utilized and its elimination would impact area residents, and the adjacent church and preschool.
- **Option 6 – Implement enhanced traffic law enforcement.** Enhanced law enforcement would probably increase compliance with traffic signal control during pedestrian crossings. This option will be discussed in more detail in Chapter 4.

#### **4. ENFORCEMENT MEASURES**

##### **4.1 Traffic Enforcement Capabilities**

The Kensington Police Protection and Community Services District is governed by a board of five directors. Operations are under the command of Chief of Police, Gregory Harman, who is also the General Manager of the District.

There are two sergeants assigned to patrol, one detective in investigations, five officers and six reserve officers. Non-sworn personnel include the District Secretary and two part-time employees, the Administrative Aide and Police Services Aide. One sergeant and three officers work 10-hour shifts Sunday through Wednesday, and one sergeant and two officers work 12-hour shifts, Thursday through Saturday. The Police Department performs a variety of services including patrol, traffic enforcement, CPR and First Aid, investigations, and warrant and subpoena services. Many other law enforcement duties are also provided to the citizens of Kensington 24 hours a day, seven days per week.

##### **4.2 California Law Enforcement Challenge (CLEC)**

A California Law Enforcement Challenge (CLEC) is a competition between similar sizes and types of law enforcement agencies. It recognizes and rewards the best overall traffic safety programs in California. The areas of concentration include efforts to enforce laws and educate the public in promoting safety. Agencies submit an application which documents their efforts and effectiveness in the safety areas. Kensington Police Department is encouraged to participate in this program and to submit an application by March 26, 2010. CLEC information and applications are available at [www.chp.ca.gov/features/clec.html](http://www.chp.ca.gov/features/clec.html).

##### **4.3 Traffic Citations**

The level of enforcement action for traffic violations, issuing a citation or giving verbal warning, is left to the officer's discretion based upon extenuating circumstances and/or whether or not the violator is a local resident. This is a reality in small communities where citizen's concerns and complaints bear a significant influence on community leadership. A citation is the most effective tool to influence and change a driver's behavior leading to a raised level of compliance with



**Table 7: Enforcement Index**

Year	Total Hazardous Citations	Fatal and Injury Collisions	Enforcement Index
2004	297	7	42
2005	228	8	29
2006	277	1	277
2007	305	3	102
2008	459	5	92

**4.5 Speed Enforcement**

Due to the narrow roads with parked cars and the terrain, speed is not the top PCF in collisions however it is a major source of traffic complaints. Contra Costa County Public Works has two hand-held radar units available for complaining citizens to use (after a training session) to conduct speed surveys in their neighborhood. Kensington Police has two radar equipped patrol vehicles and three hand-held radars available for speed enforcement. Kensington has an older model radar speed trailer which has not been used recently due to a lack of personnel available to deploy it. Contra Costa County public works also has a radar speed trailer available for deployment in locations where there are a high number of speeding complaints.

**4.6 DUI Enforcement**

All Kensington officers have completed the Peace Officer and Training (POST) course for administering the Standardized Field Sobriety Test (SFST). Kensington participates in the AVOID the 25 Contra Costa County DUI Enforcement project by providing officers to work with El Cerrito and San Pablo Police Departments at DUI Checkpoints.

Table 8 shows the total number of DUI arrests in Kensington and the percentage of those arrests resulting from DUI collisions.

traffic laws. This result is achieved by the violator remembering the incident, the resulting fine and the effect on the driver's record and auto insurance rates. An added benefit is when the violator relates the incident to friends and neighbors who hopefully remember the circumstances when driving through that particular location to focus on driving safely. Verbal warnings are ineffective in enhancing driver safety, as the violator has a tendency to forget the incident, or if the driver relates the circumstances to associates, the 'spin' most likely ends with the offender "talking the officer out of a ticket". Citations are recorded and can be tracked, wherein verbal warnings are not a viable data resource.

At the Kensington Police Department, traffic citations are recorded annually as Moving and Parking Citations, but not usually tracked by type of violation. Table 6 shows the citations issued from specific violations from 2007 to 2009.

**Table 6: Citations for Specific Violations**

Year	Speed	Red Light	Stop Sign	Failure to Yield to Pedestrian	Failure to Obey Crossing Guard Pedestrian
2007	11	2	91	3	1
2008	54	8	82	5	1
2009	23	10	33	2	0

#### **4.4 Enforcement Index**

The Enforcement Index (number of citations issued / # of fatal & injury collisions), was developed by Northwestern University and is utilized by OTS, as a measure of effectiveness in traffic safety programs. OTS recommends a minimum level of 25 to reach the citation threshold of effectiveness in reducing traffic collisions, and may be used as a guide to measure the success of traffic safety programs. The Enforcement Index for the unincorporated area of Kensington is shown in Table 7:

**Table 8: Kensington DUI Arrests (2007 – 2009)**

Year	Total Arrests	DUI Collisions	Percentage of DUI Arrests from Collisions
2007	5	0	-
2008	2	0	-
2009	4	0	-
Total	11	0	-

#### **4.7 Vehicle Impound Program**

Kensington Police Department has a policy to impound vehicles; however a problem with vehicle storage actually makes the program impractical.

#### **4.8 Seat Belt Enforcement and Use Rate**

There were no seat belt or child safety seat citations tracked by the Kensington Police Department, however they may have been included in the 1,050 Mechanical/Registration citations issued in 2007, 2008 and 2009. Kensington has not participated in the "Click It or Ticket" campaign and does not have a record of the community's seat belt use rate.

Kensington Police might consider completing a seat belt use rate survey annually to compare the County's use rate with the current State-wide use rate (95.7% in 2008). An easy format and directions for the survey form can be downloaded from:

<http://ots.ca.gov/Grants/files/pdf/seatbelt/belt.pdf>.

#### **4.9 Safety Enforcement Grants**

Kensington has not received any OTS grants due to the community not being an incorporated city.

#### **4.10 Traffic Signal Enforcement**

The 20 Red Light violations and 2 "Failure to Obey Crossing Guard" violations occurred at Arlington Avenue and Kensington Park Road as that is only signalized intersection in the community and the only location that have crossing guards assigned. Additionally, some of the 10 "Failure to Yield to Pedestrians" violations most likely occurred at that location. These 32 violations had the potential to result in a serious injury or fatal collision. The Kensington Police Department knows that the probability of fatal or serious injury to a pedestrian, especially a child at the pedestrian crossing would have serious consequences in their community.

#### **4.11 Traffic Safety Public Information**

The Kensington Police Department has two public information resources: 1) a local newspaper "The Outlook", which is mailed to every resident ten times per year; and 2) the Police Department's website.

#### **4.12 Coordination among Enforcement Agencies**

In addition to participating in the "AVOID" the 25 DUI program, Chief Harman is a member of the Contra Costa County Chief's Association and the West County Chief's Association. Traffic issues can be put on the agenda for either one of these groups.

#### **4.13 "Zero Tolerance Policy"**

Based on the statistical data shown in Table 3, "Comparison of Similar Communities Ranked by Total Collisions", the Community of Kensington is relatively free of serious traffic problems. Measuring traffic problems is accomplished by compiling collision data; however it is impossible to measure collisions that have been prevented by police presence and traffic enforcement. Unfortunately most traffic safety and preventative programs begin after a tragedy occurs and a public outcry motivates community leaders to take action.

The problem of motorists failing to stop for the red light at the signalized crosswalk on Arlington Avenue could result in a tragic occurrence.

For many years motorists have believed that municipalities with a zero tolerance for traffic violations use the program as a source of generating revenue for the city. The policy also results in drivers being very careful to obey the traffic laws when traveling through a targeted area and a reduction in the number and severity of traffic collisions.

“Zero Tolerance Policy” is a more positive spin on preventing serious traffic collisions. The goal would be to inform and gain the agreement of law enforcement officers, governmental and judicial representatives, community representatives, and have media support for the program.

It is important to keep the public informed through media of all aspects of the “Zero Tolerance Policy” program, including the purpose and goals, and to warn the public where the focused traffic enforcement would take place, and that a “zero tolerance policy” would be in effect. It is also very important that the community understands, accepts and supports the importance of a “Zero Tolerance Policy” for the intersection and crosswalk at Arlington Avenue and Kensington Park Road.

#### **4.14 Potential Enforcement Safety Improvements**

Potential enforcement safety improvements are summarized below:

- Kensington Police Department may consider completing a seat belt use rate survey annually to compare the community's use rate with the current State-wide use rate.
- Traffic issues can be put on the agenda for either one of these groups: Contra Costa County Chief's Association and the West County Chief's Association.
- A “Zero Tolerance Policy” for red signal and pedestrian crosswalk violations could be implemented for intersection of Arlington Avenue and Kensington Park Road after approval by the Community Services District Board.
- A public information campaign could also alert the citizens of the community to the potential serious injury collisions that could occur at the intersection of Arlington Avenue and Kensington Park Road/Rincon Road due to failure to stop at the red signal.

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## ABOUT THE TECHNOLOGY TRANSFER PROGRAM

The Technology Transfer Program, a division of the Institute of Transportation Studies at the University of California, Berkeley, is the California transportation community's source for professional training, expert assistance, and free resources for public agencies.

The Technology Transfer Program provides training, workshops, conferences, technical assistance and information resources in the transportation-related areas of planning and policy, traffic engineering, project development, infrastructure design and maintenance, safety, environmental issues, railroad and aviation.

Our training programs and services are affordable—often free—and are offered statewide. Most of our classes are subsidized for California-based public employees, but our service area is national and international.

As California's LTAP Center, we serve the more than 25,000 public and private transportation agency personnel working for our state's 476 cities, 58 counties, over 50 regional transportation planning agencies (MPOs, RTPAs, CTCs and CMAs) and the California Department of Transportation.



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# TRAFFIC STOPS INITIATED VS CITATIONS ISSUED ANALYSIS 2010-2015

	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER
2010												
TRAFFIC STOPS	96	93	81	72	59	162	90	178	175	89	132	97
CITATIONS ISSUED	34	23	40	22	37	52	36	89	46	27	72	28
2011												
TRAFFIC STOPS	220	170	172	227	225	144	111	138	108	194	213	108
CITATIONS ISSUED	131	119	49	187	114	108	42	69	63	102	128	32
2012												
TRAFFIC STOPS	93	182	165	100	163	162	140	89	114	127	102	81
CITATIONS ISSUED	65	104	58	46	90	93	88	47	53	67	42	31
2013												
TRAFFIC STOPS	134	92	76	110	91	74	115	141	95	120	48	120
CITATIONS ISSUED	66	44	28	66	58	47	78	105	78	86	39	86
2014												
TRAFFIC STOPS	68	48	104	87	102	75	74	100	146	75	109	76
CITATIONS ISSUED	33	17	67	57	64	37	48	58	89	40	47	36
2015												
TRAFFIC STOPS	66	23	39	67	57	55	44	24				
CITATIONS ISSUED	34	9	15	36	24	26	16	7				