



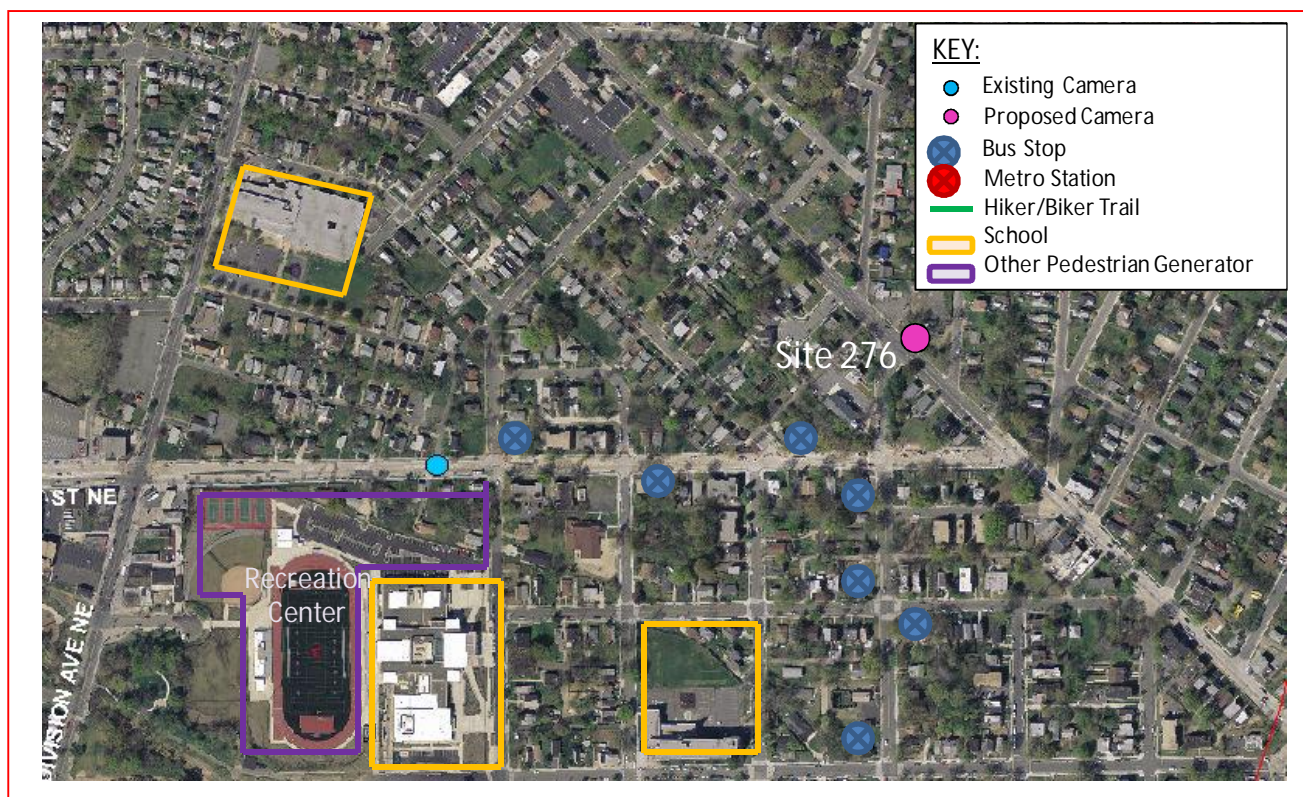
District Department of Transportation

## Speed Limit and Safety Nexus Studies for Automated Enforcement Locations in the District of Columbia

### 800 Block Eastern Avenue NE W/B

### Study Area and Location

District	PSA	Ward	ANC	Phase	Description
6	608	7	7C	Proposed	800 Block Eastern Avenue Northeast, Westbound



This *proposed* speed camera will be located in Ward 7 at the 800 block of Eastern Avenue Northeast in the westbound direction. Eastern Avenue Northeast runs between Fort Lincoln Drive Northeast to the east and Gallatin Street Northeast to the west and also from Southern Avenue Northeast to the east and Kenilworth Avenue Northeast to the west. The posted speed limit is 25 MPH.

W7 - 552





District Department of Transportation

800 Block Eastern Avenue NE W/B

## Field Assessment Summary

Eastern Avenue Northeast is assumed to run in the east-west direction, and is classified as a minor arterial. Eastern Avenue Northeast has two travel lanes in each direction. This site has the following characteristics:

- This is a residential area with houses and driveways.
- There are three schools in the area: H.D. Woodson Senior High School, Drew Elementary School and Burrville Elementary School.
- The Woodson Senior Recreation Center is also in the area and generates pedestrian activity.
- The Fairmount Heights Neighborhood Playground is in the area.
- There are sidewalks on both sides of the street.
- There is on-street parking on both sides of the street.
- The pavement is in good condition and there is curb and gutter with drainage inlets. There is a downgrade slope eastbound.



Looking Eastbound

W7 - 553



District Department of Transportation

800 Block Eastern Avenue NE W/B



Looking Westbound

## Speed Data Analysis

	EB	WB
Posted Speed Limit (MPH)	25	25
Mean Speed (MPH)	30	29
85th Percentile Speed (MPH)	36	35
10 MPH Pace Speed	27-36	26-35
Sample Size	6,170	6,037
ADT	12,207	

In the westbound direction, the mean speed is higher than the posted speed limit by 4 MPH and the 85<sup>th</sup> percentile speed is higher than the posted speed by 10 MPH at this location.

## Crash Data Analysis

From the Accident Summary Report provided for the dates between January 1, 2010 and December 31, 2012, there were a total of 8 crashes at this location. A breakdown of number of crashes by collision type can be found in the chart on the next page. The most common types of collision at this location were Right Turn (3 crashes), Side Swipe and Fixed Object (2 crashes each). The other collision types had 1 crash or less each. Furthermore, this site experienced 3 injury-related crashes.

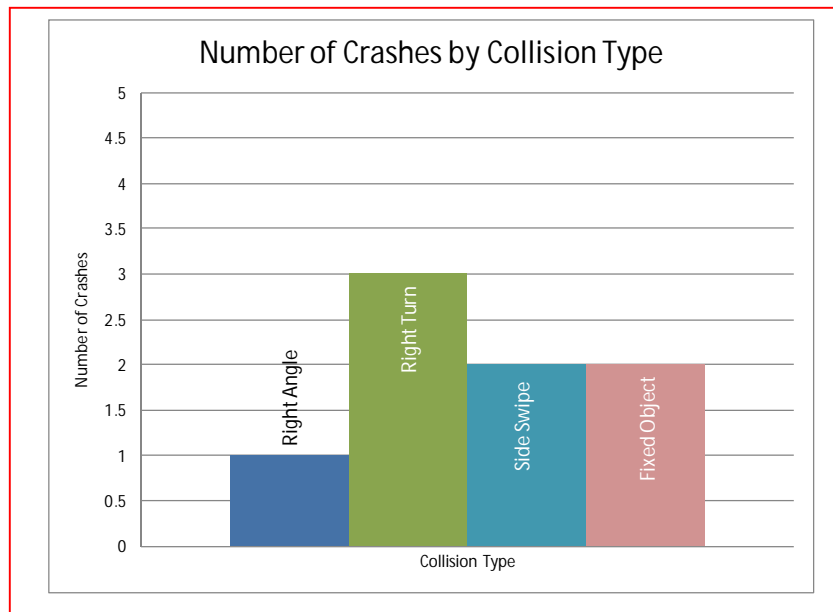
W7 - 554



District Department of Transportation

800 Block Eastern Avenue NE W/B

Severity			Weather			Surface condition			Light Condition		
Total	8										
Fatal	0	0.0%	Clear	8	100.0%	Dry	8	100.0%	Day	5	62.5%
Injury	3	37.5%	Rain	0	0.0%	Wet	0	0.0%	Night	1	12.5%
Bus	1	12.5%	Snow	0	0.0%	Snow/Ice	0	0.0%			
Truck	1	12.5%									



## Safety Nexus

This site presents the following safety considerations which may establish a nexus between traffic safety and the speed camera:

1. Speed Data – The 85<sup>th</sup> percentile speed is much higher than the posted speed limit at this location.
2. Crash Data – This site experienced 3 injury-related crashes.
3. Field Assessment – The following site characteristics suggest a need for a safer travel environment:
  - a. This is a residential area with houses and driveways.
  - b. There are three schools in the area: H.D. Woodson Senior High School, Drew Elementary School and Burrville Elementary School.
  - c. The Woodson Senior Recreation Center is in the area and generates pedestrian activity.

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District Department of Transportation

800 Block Eastern Avenue NE W/B

- d. Fairmount Heights Neighborhood Playground is in the area which generates pedestrian and bicycle activity.
- e. There are several bus stops in the area which generate pedestrian activity.
- f. There is on-street parking on both sides of the street.

Due to the speed data analysis, the number of injury-related crashes, the specific site characteristics of a residential area, the proximity of school zones and recreation center to the site, and the other pedestrian generators, there is a nexus between traffic safety and the speed camera at this location.

W7 - 556

# SAMMAT ENGINEERING SERVICES, LLC

1515 RISING RIDGE ROAD  
MOUNT AIRY, MD 21771

[www.sammateng.com](http://www.sammateng.com)

## 800 block of Eastern Ave NE Speed

EB

Start Time	15	20	25	30	35	40	45	50	55	60	65	70	75	999	Total
11/19/13	0	1	4	24	46	24	4	2	0	0	0	1	0	0	106
01:00	2	0	2	13	25	6	11	0	0	0	0	0	0	0	59
02:00	0	2	1	22	22	16	5	1	0	0	0	0	0	0	69
03:00	0	0	1	10	18	12	1	0	1	0	0	0	0	0	43
04:00	6	0	6	13	19	12	6	0	1	0	0	0	0	0	63
05:00	3	2	8	17	32	33	12	2	0	0	0	0	0	0	109
06:00	8	2	10	26	63	36	13	3	0	0	1	0	0	0	162
07:00	20	3	8	52	72	48	20	3	2	0	0	0	0	0	228
08:00	27	3	25	95	97	42	11	2	1	0	0	0	0	0	303
09:00	8	1	9	82	119	50	12	4	1	0	0	0	0	0	286
10:00	6	4	12	66	106	42	20	0	1	0	0	0	0	0	257
11:00	6	1	13	73	100	67	8	1	0	0	0	0	0	0	269
12 PM	3	1	15	87	122	75	8	0	1	0	0	0	0	0	312
13:00	12	5	19	84	155	55	14	2	1	0	0	0	0	0	347
14:00	8	2	21	135	142	40	11	3	0	0	0	0	0	0	362
15:00	16	4	43	201	147	34	5	1	1	1	0	0	0	0	453
16:00	23	4	106	207	137	26	1	0	1	0	0	0	0	0	505
17:00	25	10	45	220	167	50	9	0	0	0	0	0	0	0	526
18:00	20	6	61	190	143	40	5	0	0	0	0	0	0	0	465
19:00	12	3	29	146	105	48	6	0	0	0	0	0	0	0	349
20:00	7	5	14	70	129	36	4	2	0	0	0	0	0	0	267
21:00	4	3	12	89	109	23	12	0	0	0	0	0	0	0	252
22:00	8	2	13	50	90	31	10	0	0	0	0	0	0	0	204
23:00	2	1	8	56	57	32	12	5	0	0	0	0	0	1	174
<b>Total</b>	<b>226</b>	<b>65</b>	<b>485</b>	<b>2028</b>	<b>2222</b>	<b>878</b>	<b>220</b>	<b>31</b>	<b>11</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>6170</b>
<b>Grand Total</b>	<b>226</b>	<b>65</b>	<b>485</b>	<b>2028</b>	<b>2222</b>	<b>878</b>	<b>220</b>	<b>31</b>	<b>11</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>6170</b>

15th Percentile : 24 MPH  
 50th Percentile : 30 MPH  
 85th Percentile : 36 MPH  
 95th Percentile : 40 MPH

Stats  
 Mean Speed(Average) : 30 MPH  
 10 MPH Pace Speed : 27-36 MPH  
 Number in Pace : 3774  
 Percent in Pace : 61.2%  
 Number of Vehicles > 25 MPH : 5034  
 Percent of Vehicles > 25 MPH : 81.6%

# SAMMAT ENGINEERING SERVICES, LLC

1515 RISING RIDGE ROAD  
MOUNT AIRY, MD 21771

[www.sammateng.com](http://www.sammateng.com)

## 800 block of Eastern Ave NE Speed

WB

Start Time	15	20	25	30	35	40	45	50	55	60	65	70	75	999	Total
11/19/13	0	0	10	48	19	4	3	0	0	0	0	0	0	0	84
01:00	1	1	10	21	20	3	0	1	0	0	0	0	0	0	57
02:00	1	1	7	19	21	6	5	2	0	0	0	0	0	0	62
03:00	0	0	6	29	24	7	2	1	0	0	0	0	0	0	69
04:00	3	1	15	40	36	11	1	0	0	0	0	0	0	0	107
05:00	4	0	17	101	83	45	5	1	0	1	0	0	0	0	257
06:00	9	2	20	137	143	56	18	5	0	0	0	0	0	0	390
07:00	25	5	53	189	185	57	25	3	1	0	0	0	0	0	543
08:00	25	2	45	146	139	45	15	3	1	0	1	0	0	0	422
09:00	9	1	17	81	110	50	7	2	1	0	0	0	0	0	278
10:00	6	2	21	102	94	36	6	2	0	0	0	0	0	0	269
11:00	11	1	17	93	100	39	5	1	0	0	0	0	0	0	267
12 PM	11	2	24	132	89	31	11	2	0	0	0	0	0	0	302
13:00	10	0	22	103	101	54	12	4	0	0	0	0	0	0	306
14:00	14	2	29	111	107	52	6	2	0	0	0	0	0	0	323
15:00	20	0	32	129	94	21	1	1	0	0	0	0	0	0	298
16:00	24	10	61	150	82	13	2	2	0	0	0	0	0	0	344
17:00	38	3	46	130	93	27	5	1	0	0	0	0	0	0	343
18:00	23	10	60	122	87	21	3	0	0	0	0	0	0	0	326
19:00	9	1	50	104	65	15	5	0	0	0	0	0	0	0	249
20:00	7	2	28	113	83	27	3	0	0	0	0	0	0	0	263
21:00	6	3	22	91	69	13	1	1	0	0	0	0	0	0	206
22:00	9	1	9	58	58	22	8	1	1	0	0	0	0	0	167
23:00	3	0	17	43	32	7	2	0	1	0	0	0	0	0	105
<b>Total</b>	<b>268</b>	<b>50</b>	<b>638</b>	<b>2292</b>	<b>1934</b>	<b>662</b>	<b>151</b>	<b>35</b>	<b>5</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>6037</b>
<b>Grand Total</b>	<b>268</b>	<b>50</b>	<b>638</b>	<b>2292</b>	<b>1934</b>	<b>662</b>	<b>151</b>	<b>35</b>	<b>5</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>6037</b>

15th Percentile : 23 MPH  
 50th Percentile : 29 MPH  
 85th Percentile : 35 MPH  
 95th Percentile : 39 MPH

Stats  
 Mean Speed(Average) : 29 MPH  
 10 MPH Pace Speed : 26-35 MPH  
 Number in Pace : 3727  
 Percent in Pace : 61.7%  
 Number of Vehicles > 25 MPH : 4696  
 Percent of Vehicles > 25 MPH : 77.8%

# SAMMAT ENGINEERING SERVICES, LLC

1515 RISING RIDGE ROAD  
MOUNT AIRY, MD 21771

[www.sammateng.com](http://www.sammateng.com)

## 800 block of Eastern Ave NE Volume

Start Time	19-Nov-13		EB		WB		Combined		20-Nov-Wed	EB		WB		Combined	
	Tue		A.M.	P.M.	A.M.	P.M.	A.M.	P.M.		A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
12:00			30	81	28	72	58	153		*	*	*	*	*	*
12:15			28	84	20	75	48	159		*	*	*	*	*	*
12:30			27	85	21	74	48	159		*	*	*	*	*	*
12:45			21	62	15	81	36	143		*	*	*	*	*	*
01:00			9	87	16	65	25	152		*	*	*	*	*	*
01:15			15	79	14	75	29	154		*	*	*	*	*	*
01:30			19	106	14	79	33	185		*	*	*	*	*	*
01:45			16	75	13	87	29	162		*	*	*	*	*	*
02:00			22	71	12	79	34	150		*	*	*	*	*	*
02:15			16	108	18	85	34	193		*	*	*	*	*	*
02:30			17	86	18	86	35	172		*	*	*	*	*	*
02:45			14	97	14	73	28	170		*	*	*	*	*	*
03:00			17	102	18	66	35	168		*	*	*	*	*	*
03:15			12	114	15	72	27	186		*	*	*	*	*	*
03:30			6	117	17	83	23	200		*	*	*	*	*	*
03:45			8	120	19	77	27	197		*	*	*	*	*	*
04:00			15	129	19	96	34	225		*	*	*	*	*	*
04:15			11	121	26	80	37	201		*	*	*	*	*	*
04:30			25	123	23	85	48	208		*	*	*	*	*	*
04:45			12	<b>132</b>	39	<b>83</b>	51	<b>215</b>		*	*	*	*	*	*
05:00			23	<b>149</b>	49	<b>101</b>	72	<b>250</b>		*	*	*	*	*	*
05:15			23	<b>118</b>	62	<b>77</b>	85	<b>195</b>		*	*	*	*	*	*
05:30			36	<b>152</b>	81	<b>90</b>	117	<b>242</b>		*	*	*	*	*	*
05:45			27	107	65	75	92	182		*	*	*	*	*	*
06:00			31	113	87	85	118	198		*	*	*	*	*	*
06:15			40	110	80	76	120	186		*	*	*	*	*	*
06:30			47	125	107	91	154	216		*	*	*	*	*	*
06:45			44	117	116	74	160	191		*	*	*	*	*	*
07:00			49	89	<b>134</b>	66	183	155		*	*	*	*	*	*
07:15			57	95	<b>129</b>	65	<b>186</b>	160		*	*	*	*	*	*
07:30			60	84	<b>132</b>	57	<b>192</b>	141		*	*	*	*	*	*
07:45			62	81	<b>148</b>	61	<b>210</b>	142		*	*	*	*	*	*
08:00			67	69	126	74	<b>193</b>	143		*	*	*	*	*	*
08:15			67	67	113	67	180	134		*	*	*	*	*	*
08:30			<b>95</b>	62	84	59	179	121		*	*	*	*	*	*
08:45			<b>74</b>	69	99	63	173	132		*	*	*	*	*	*
09:00			<b>73</b>	68	74	46	147	114		*	*	*	*	*	*
09:15			<b>70</b>	74	84	55	154	129		*	*	*	*	*	*
09:30			77	58	66	56	143	114		*	*	*	*	*	*
09:45			66	52	54	49	120	101		*	*	*	*	*	*
10:00			68	51	60	42	128	93		*	*	*	*	*	*
10:15			70	54	82	42	152	96		*	*	*	*	*	*
10:30			58	52	77	42	135	94		*	*	*	*	*	*
10:45			61	47	50	41	111	88		*	*	*	*	*	*
11:00			56	44	65	29	121	73		*	*	*	*	*	*
11:15			64	43	58	25	122	68		*	*	*	*	*	*
11:30			76	43	73	31	149	74		*	*	*	*	*	*
11:45			73	44	71	20	144	64		*	*	*	*	*	*
Total			1954	4216	2805	3232	4759	7448		0	0	0	0	0	0
Day Total			6170		6037		12207			0	0	0	0	0	0
% Total			16.0%	34.5%	23.0%	26.5%				0.0%	0.0%	0.0%	0.0%		
Peak Vol.			08:30 312	04:45 551	07:00 543	04:45 351	07:15 781	04:45 902							
P.H.F.			0.821	0.906	0.917	0.869	0.930	0.902							

ADT                      ADT 12,207                      AADT 12,207



DC Department of Transportation - Traffic Accident Reporting and Analysis System

## Accident Summary Report (R-8)

**Corridor:** EASTERN AVE,NW,NE From FIFTY SEVENTH PL,NE TO FIFTY EIGHTH AVE,NE

**Time Period Covered:** From 01/01/2010 To 12/31/2012

**Prepared By:** Rahul Jain

**Prepared Date:** 9/15/2013

		<b>Collision Type</b>	<b>#ACC</b>	<b>%</b>	<b>Collision Type</b>	<b>#ACC</b>	<b>%</b>
Total Number of Accident:	8	Right Angle:	1	12.5%	Fixed Object:	2	25.0%
Total Number of Fatalities:	0	Left Turn:	0	0.0%	Ran Off Road:	0	0.0%
Total Number of Injuries:	4	Right Turn:	3	37.5%	Ped. Involved:	0	0.0%
Total Number of Disabling Injuries:	0	Rear End:	0	0.0%	Backing:	0	0.0%
Total Number of NonDisabling Injuries:	2	Side Swiped:	2	25.0%	Non Collision:	0	0.0%
Total Number of Pedestrians Involved:	0	Head On:	0	0.0%	Under/Over Ride:	0	0.0%
Total Number of Bicycles Involved:	0	Parked:	0	0.0%	Unspecified:	0	0.0%
Total Number of Motorcycles Involved:	0						

<b>Time of Day</b>	<b>#ACC</b>	<b>%</b>	<b>Day o fweek</b>	<b>#ACC</b>	<b>%</b>
07:30 ~ 09:30:	1	12.5%	Sunday:	2	25.0%
09:30 ~ 11:30:	0	0.0%	Monday:	0	0.0%
11:30 ~ 13:30:	2	25.0%	Tuesday:	1	12.5%
13:30 ~ 16:00:	1	12.5%	Wednesday:	0	0.0%
16:00 ~18:30:	1	12.5%	Thursday:	1	12.5%
18:30 ~ 07:30:	3	37.5%	Friday:	2	25.0%
Unspecified:	0	0.0%	Saturday:	2	25.0%

<b>Weather Condition</b>	<b>#ACC</b>	<b>%</b>	<b>Surface Condition</b>	<b>#ACC</b>	<b>%</b>
Clear:	8	100.0%	Dry:	8	100.0%
Rain:	0	0.0%	Wet:	0	0.0%
Snow:	0	0.0%	Snow/Ice:	0	0.0%
Sleet/Hail:	0	0.0%	Slush:	0	0.0%
Fog/Mist:	0	0.0%	Water/Sand:	0	0.0%
Crosswind/Blowing Sand:	0	0.0%	Repairing:	0	0.0%
Unspecified:	0	0.0%	Unspecified:	0	0.0%

<b>Type of Vehicle</b>	<b>#VEH</b>	<b>%</b>	<b>Accident Severity Type</b>	<b>#ACC</b>	<b>%</b>
Passenger Car:	8	57.1%	Fatal Collision:	0	0.0%
Bus:	1	7.1%	Injury Collision:	3	37.5%
Truck:	1	7.1%	PDO Collision:	5	62.5%
Taxi:	0	0.0%			
Minivan:	0	0.0%	<b>Light Condition</b>	<b>#ACC</b>	<b>%</b>
Police/Emergency Vehicle:	1	7.1%	Daylight:	5	62.5%
Motorcycle/Moped:	0	0.0%	Dawn/Dusk:	2	25.0%
Bicycle:	0	0.0%	Dark(Lighted):	1	12.5%
Fixed Object:	0	0.0%	Dark(Not Lighted):	0	0.0%
Unspecified:	3	21.4%	Dark(Unknown Lighting):	0	0.0%
			Unspecified:	0	0.0%

<b>Contributing Factor</b>	<b>#VEH</b>	<b>%</b>	<b>Pedestrian Actions</b>	<b>#ACC</b>	<b>%</b>
Driver: Speed:	0	0.0%	In Crosswalk with Signal:	0	0.0%
Driver: Alcohol/Drug:	0	0.0%	In Crosswalk against Signal:	0	0.0%
Driver: Electronic Device:	0	0.0%	In Crosswalk no Signal:	0	0.0%
Driver: Others:	4	28.6%	In Unmarked Crosswalk:	0	0.0%
Vehicle:	0	0.0%	Not in Crosswalk:	0	0.0%
Roadway:	1	7.1%	From Between Parked Cars:	0	0.0%
Unspecified:	9	64.3%	Unspecified:	0	0.0%

7 Records are not approved as of 9/15/2013 2:33:15 PM