



Community Support  
Program

# *The Community Support Program*

*Supporting Cities and Police Departments  
to make Cities safer and more enjoyable*

Dr. Ross McNutt



# Community Support Program Overview

- The Problem We Are Working To Address
- What is the Community Support Program
- WAMI Capability Overview
- Baltimore CSP Overview and Sample Cases
- Legal and Privacy Policy Considerations
- Potential Support and Steps Required to Proceed



# The Problem

## We Are Working To Address

Crime in our Major Cities

Lack of Trust Between Community and Police

Potential Police Misconduct



News / Maryland / I

# Deadliest year in Baltimore history ends with 344 homicides

CBS NEWS - December 29, 2015, 1:53 PM

## Bloody end of 2015 sees record murder rate in Baltimore



PHOTO GALLERY

### From this article

**Baltimore detectives** the suspected killer of Cannaday  
DEC. 30, 2015

**Baltimore homicides**  
JUL. 1, 2014

### Related

**Chasing a killer: Insi** Baltimore homicide investigation



Baltimore Mayor Stephanie Rawlings-Blake swears in Kevin Davis as interim commissioner in wake of Freddie Gray's death while in custody of the Baltimore Police Department. CBSNEWS.COM

91 Comments / f Share / Tweet / Stumble / Email

**BALTIMORE** -- Baltimore's murder rate is the highest per capita in the city's history -- and the past few days have been bloody, reports CBS Baltimore.



By **Kevin Rector** - Contact Reporter  
The Baltimore Sun



### Will Baltimore Die?

The beleaguered city's mayor will need grit and brains to save it.

Myron Majumdar  
May 2, 2017 - Cities, Public safety

With nearly a killing a day so far this year in her shrinking city of just over 600,000, it's no wonder that Baltimore mayor Catherine Pugh has cried out, "Murder is out of control" -- even before the summer homicide season has begun. She has begged the FBI to help her contain the mayhem, now running at

News / Maryland / Balt

# Per capita, Baltimore reaches its highest ever homicide rate

By **Kevin Rector and Justin Fenton** - Contact Reporters  
The Baltimore Sun

Baltimore City  
2015

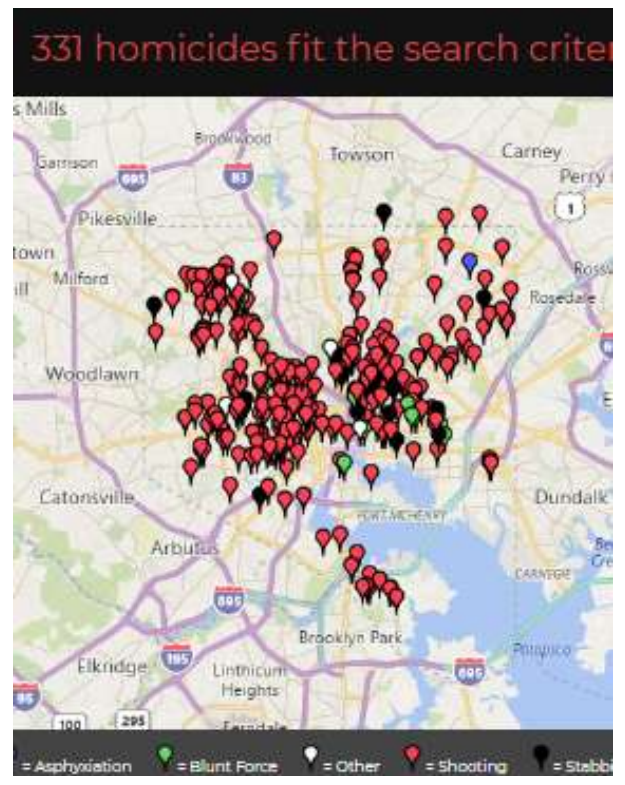
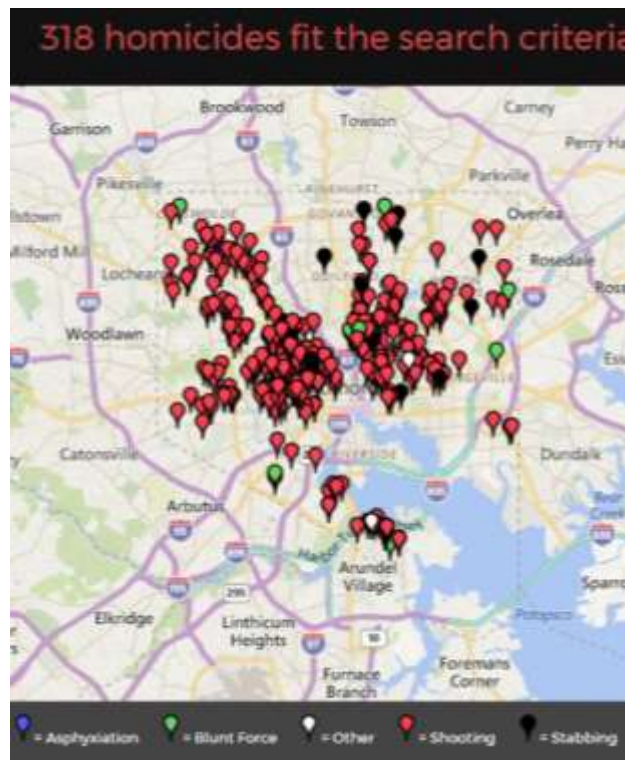
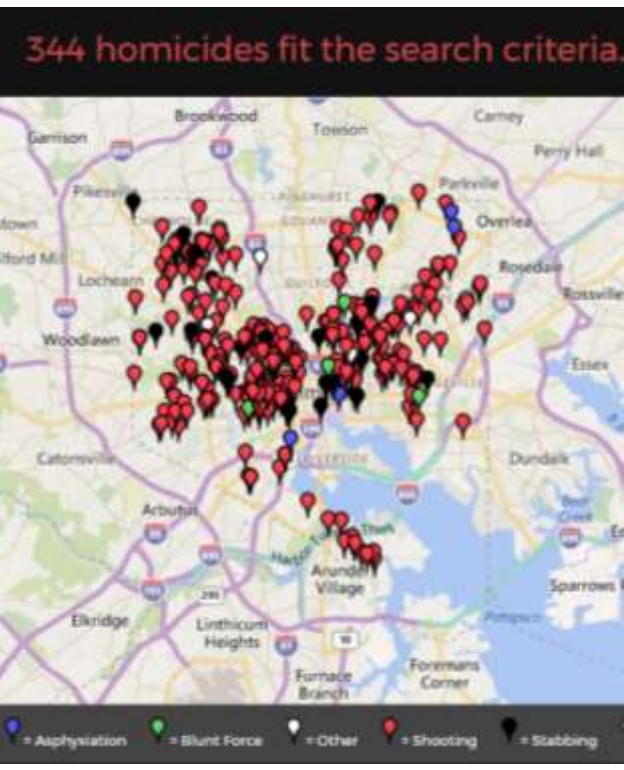
344 Homicides

Baltimore Ci  
2016

318 Homicid

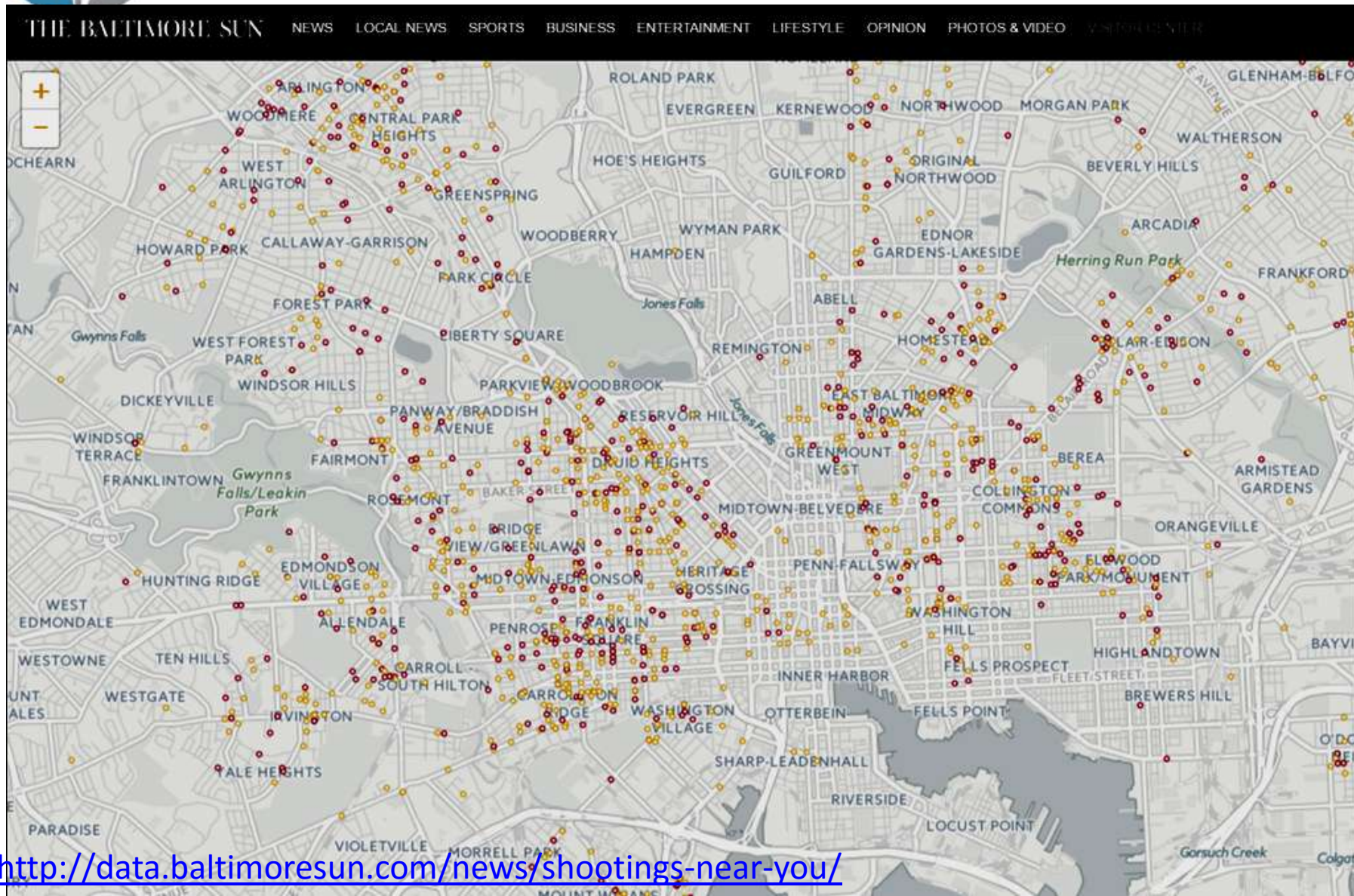
Baltimore City  
2017 to Date

~~129-244~~ 343 Homicides





# Baltimore Shootings





# The Numbers Behind Baltimore's Record Year in Homicides 2015

**55** -- The per-capita murder rate, a city record, for every 100,000 residents  
2<sup>nd</sup> highest in nation, 3 times Chicago's murder rate

**344** -- The number of Baltimore homicides in 2015, a 63 percent increase over 2014

**318** – The number of Baltimore homicides in 2016, no let up.

**77** – The number of Baltimore homicides in 2017 to data (March)

**72 percent** -- The increase in nonfatal shootings in 2015

**93 percent** -- The share of homicide victims in Baltimore who were black

**30.5 percent** -- The percentage of homicides solved by police 2015

**87 percent** -- The share of 2015 homicides committed with firearms

**45 homicides in July 2015** -- Baltimore's deadliest months in decades



# Baltimore Homicide Clearance Rate

- While homicides are up 60%, from 211 in 2014 to 344 in 2015, 318 in 2016
- At the end of 2015, non-fatal shootings were up by 72% and homicides were at the city's highest per capita in its history.
- Case Clearance rates have fallen from 70% to 30%







# Cost of Crime - Baltimore

<http://www.rand.org/jie/centers/quality-policing/cost-of-crime.html>

The cost of crime is significant. The national Institute of Justice has sponsored many studies on the cost of crime to a community. Using the results of one of these studies conducted by the Rand Center on Quality Policing the cost of crime in Baltimore is calculated to be **\$3.8B per year**. This is calculated by multiplying the number of crimes in a given category by the cost of crime from the study.

<b>Cost of Crime Baltimore</b>				
<b>Cost of Baltimore Violent Crime</b>				
	Type	Number	Cost per crime	Total Cost
	Murder	344	\$8,649,215	\$2,975,329,960
	Rape	347	\$217,866	\$75,599,502
	Robbery	3709	\$67,277	\$249,530,393
	Aggravated Assault	4232	\$87,238	\$369,191,216
	<b>Total Violent Crime</b>			<b>\$3,669,651,071</b>
<b>Cost of Baltimore Property Crime</b>				
	Burglary	6973	\$13,096	\$91,318,408
	Larceny	18,431	\$2,139	\$39,423,909
	Auto Theft	4529	\$9,079	\$41,118,791
	<b>Total Property Crime</b>			<b>\$171,861,108</b>

**Total Cost of Part 1 Crimes**

**\$3,841,512,179**

Baltimore Population 622,793 Cost per Person

**\$6,168 per year per person**

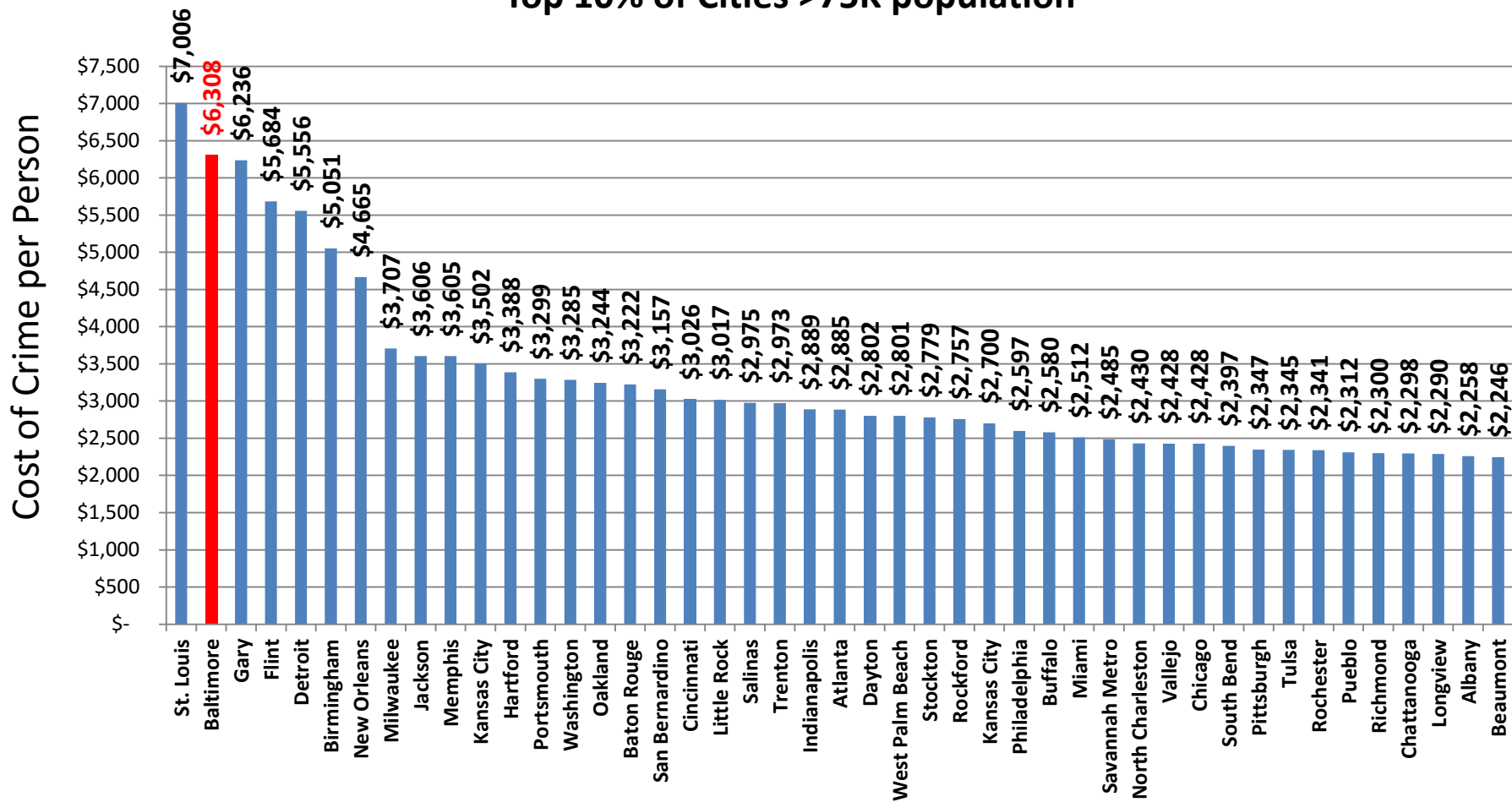
**Even a 10% reduction in crime would result in \$384M economic impact on the city.**



# Cost of Crime Per Person

## Baltimore \$6,308 per person

Cost of Crime Per Person  
Top 10% of Cities >75K population





# Mayor Catherine Pugh speaks out on spike in crime

- Baltimore mayor Catherine Pugh has cried out, “Murder is out of control”—even before the summer homicide season has begun. CJ 5/8/17
- Strategy we have in place now is not working. Looking for original solutions.
- “Anytime feel comfortable in the daylight to walk up and shoot somebody in their head that’s like slaying people. That says to me you don’t value life in our city. I value every single life of every individual in Baltimore,”
- Now Pugh is calling for action, saying violent acts like this will not stand.
- I ran on a platform of bringing the city together and moving the city forward.





# Provides Unbiased Witness of Potential Police Misconduct

*9 Baltimore Police Officers indicted robbing people*

*DOJ Report shows mistreatment of Citizens*

*Baltimore Police Caught Planting Evidence on Body Cameras*

*Freddie Grey – What actually happened? Rough Ride?*

- CSP provides unbiased information as to what happened
  - Provided information in 2 officer involved shootings
- Can be used to verify officers statements
  - Has been used by Public Defender in Baltimore to challenge officers statement
- Provide all information to defense attorneys
- CSP provides additional **privileged analysis and information to defense attorneys**



# Community Support Program

- Full subscription-based turn-key service for community support and major crime investigations using **wide area motion imagery**
- *Provides information to law enforcement and communities to help solve what may have often been **unsolvable crimes**.*
- CSP Provides all equipment and manpower required
- Output is
  - Major crimes investigation briefings
  - Support of ongoing investigations
  - Consistent with agreed to Privacy Policy
  - Prosecution testimony
  - Support for public disclosure events
  - Support for major events
- Available to communities through GSA Schedule 84



# The Community Support Program

## **Goals and Objectives**

**Solving and Deterring Crime to make communities safer and more enjoyable, and more prosperous**



# CSP Objectives:

## Impact Investigations and Crime

- Provides Airborne Persistent Witness of Major Crimes
  - Identify potential suspects, witnesses, and accomplices at crime scenes
  - Provided an overview of events at crime scene
  - Provided addresses of suspects and others
  - Track suspects past ground based cameras for identification
- Use Provided Information to Solve Otherwise Unsolvable Crimes
  - 20-30% of murders cases currently solved, 10% of shootings
  - Provide justice to victims and families of major crimes
  - Reduce desire for revenge killings by providing justice for victims
- Remove of the Repeat Offenders Earlier in Criminal Career
  - Reduces future crime – Provides early course correction to potential offenders
- Dramatically Increase Crime Deterrence in Supported Cities
  - **A crime deterred is always better than a crime solved**



# Deterrence Effect

- **Most Important Aspects of Deterrence**

- 1<sup>st</sup> – Perceived likelihood of getting caught
  - Current case clearance rate has dropped to 30% for Homicides and lower for shootings
- 2<sup>nd</sup> – Perceived likelihood of getting convicted
  - Conviction rate much lower than case clearance rate
- 3<sup>rd</sup> - Amount of Punishment
  - Federal Crimes/County are seen as more significant punishment

- **Best Ways to Increase Deterrence**

- Increase Case Clearance Rate – Provide critical leads to investigators
- Increase Conviction Rate – Support public trials and convictions of those caught
- Insure people know the systems exists its capabilities and that is operating in the area

- **Ways to Amplify Deterrent Effect**

- Increase the **perceived** impact on case clearance and conviction rates
- Increased public knowledge of capability
  - Brief at risk youth and people of the systems and its capability
- Publicize high profile cases results
- Support in-depth news media stories

**A crime deterred is always better than a crime solved**





# Increased Law Enforcement Accountability

## The Community Support Program

- Acts as an **impartial observer** and recorder of activity associated with law enforcement personnel
- Provides **neutral video based evidence of the facts** at a crime scene and actions of law enforcement before and after an event
- Because its use is known, CSP provides a **deterrent effect to improper behavior** by law enforcement personnel
- Defense team support analysis can and has been used by defense legal teams to **analyze the accuracy of law enforcement statements and testimony**
- Support of defense efforts not limited to reported major crimes but require a release agreement and must abide by CSP privacy policies
- Support to defense efforts use a separate team of analysts are **defense privileged information** and are not shared with law enforcement or the prosecution.

**CSP supports community and defense team efforts and can  
Provide Video-based evidence and privileged confidential analysis**



# Community Support Program Goals

- Help supported cities reduce the crime rate by **20% to 30% in the first full year of operation.**
  - By solving typically unsolvable crimes
  - By catching the small percentage of people who are driving most crime
  - By increased deterrence through higher case closure and conviction rates
  - By increased deterrence through public awareness of program
  - By pushing crime out of the supported city
- Demonstrate the impact and effectiveness of our systems in support of a large cities.
- Help our customers be seen as a **city successfully turning around and reducing recent troubling crime trends**
- Provide **employment opportunities to local youth** for job training and experience to allow them to enter a very profitable careers in the area.



# Benefits of 20%-30% Crime Reduction

- **70 - 105 People Saved (Not Murdered)**
- **920 to 1480 fewer shooting and aggravated assaults**
- **\$760 Million - \$1.14 Billion** saved economic impact
- Positive city publicity from significant drop in crime
- Increased attractiveness of city and community to business
  - More Jobs - more opportunities
- Increased home prices (Decreased crime discount to property values)
  - Increased city tax revenue due to increased house values
- Local jobs program with strong career path
  - Allows Baltimoreans a path to 20,000 high paying local NSA/DoD intel analyst jobs

**A safer, more enjoyable, and prosperous  
community to live, work, play and raise families**



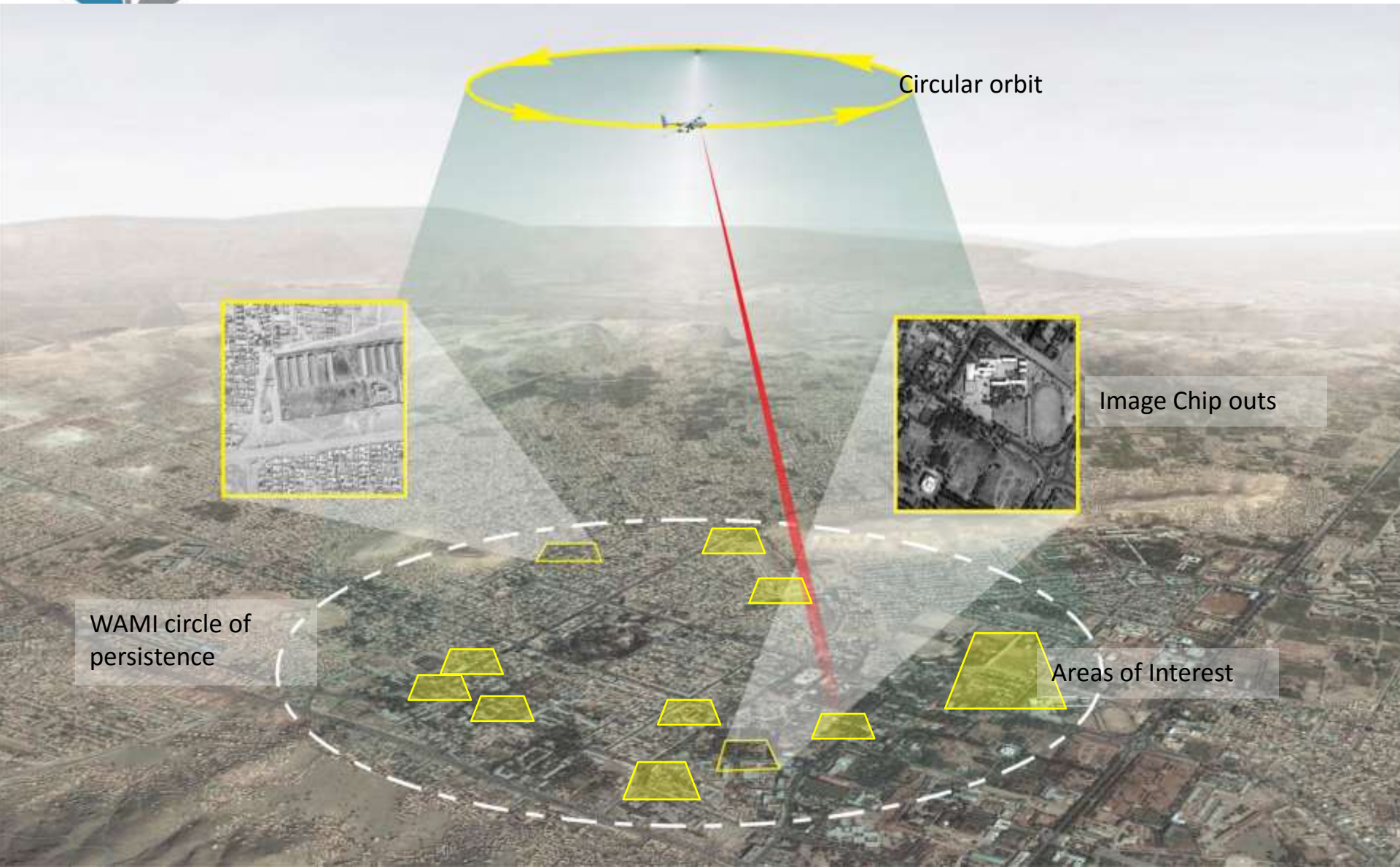
# The Technology Behind the Community Support Program

## Wide Area Motion Imagery



# What is Wide Area Motion Imagery?

## Continuous Imagery of city-size areas



Circular orbit

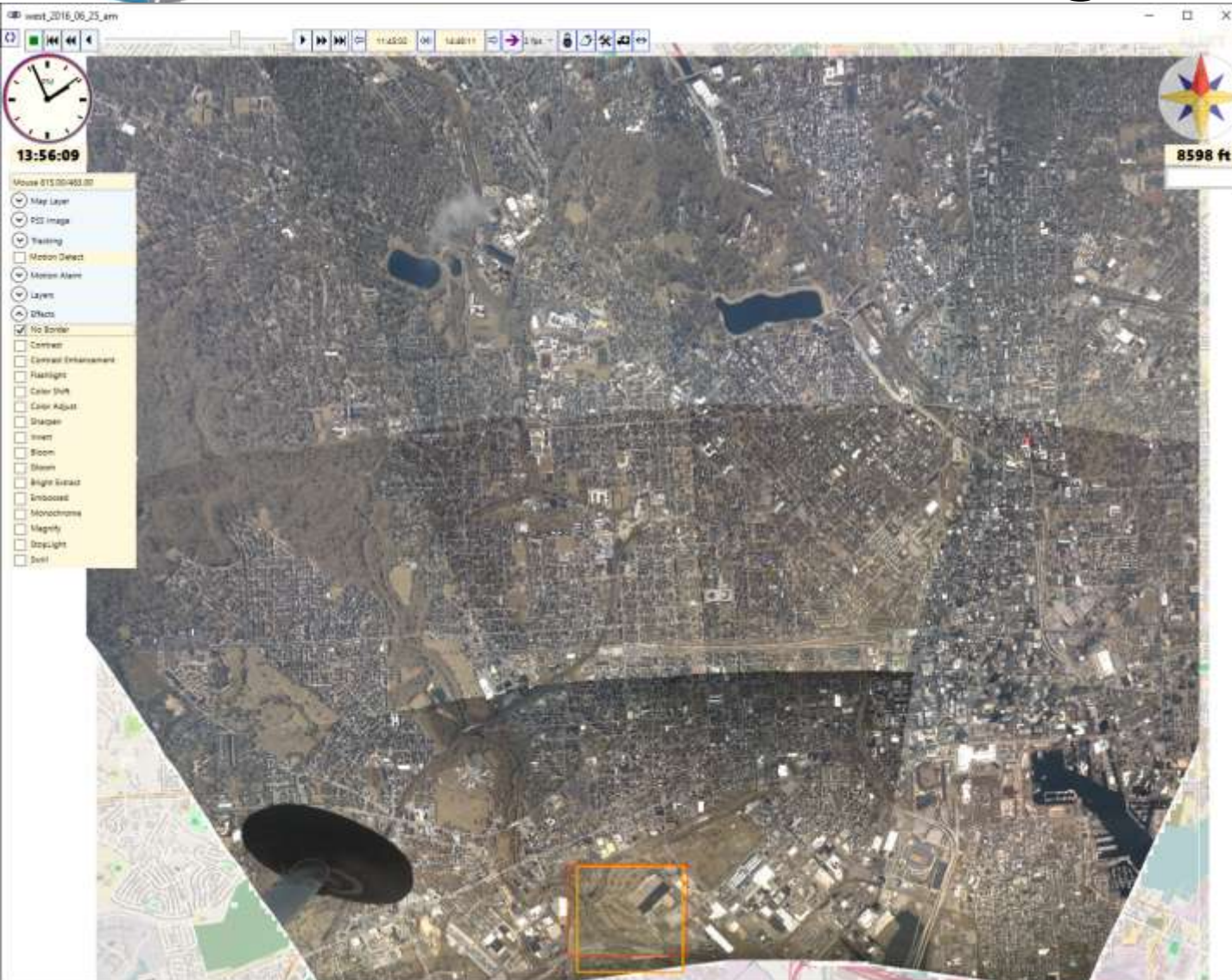
Image Chip outs

WAMI circle of persistence

Areas of Interest

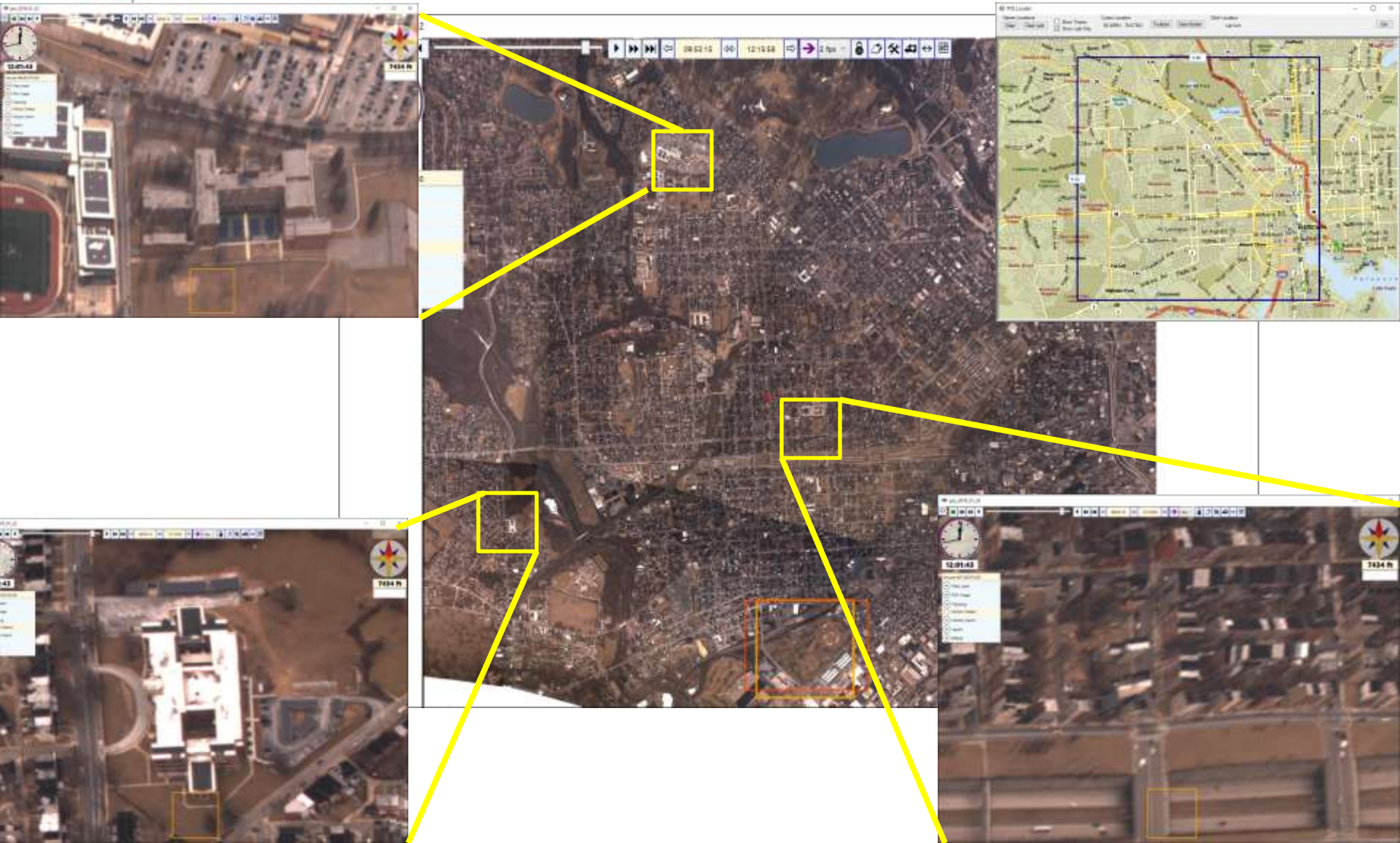


# West Baltimore Area of Coverage





# Wide Area Motion Imagery





# Samples of Pixels

Comparison between PSS Wide area motion imagery  
and Typical Security cameras

## Typical Security Camera

Standard TV	640 x 480	0.31 MP
HD TV 720P	1280 x 720	0.92 MP
HD 1080	1920 x 1080	2.07 MP
Digital Cinema 2K	2048 x 1080	2.21 MP
Imax Digital Cinema 4k	4096 x 2160	8.84 MP

## Wide Area Surveillance Systems

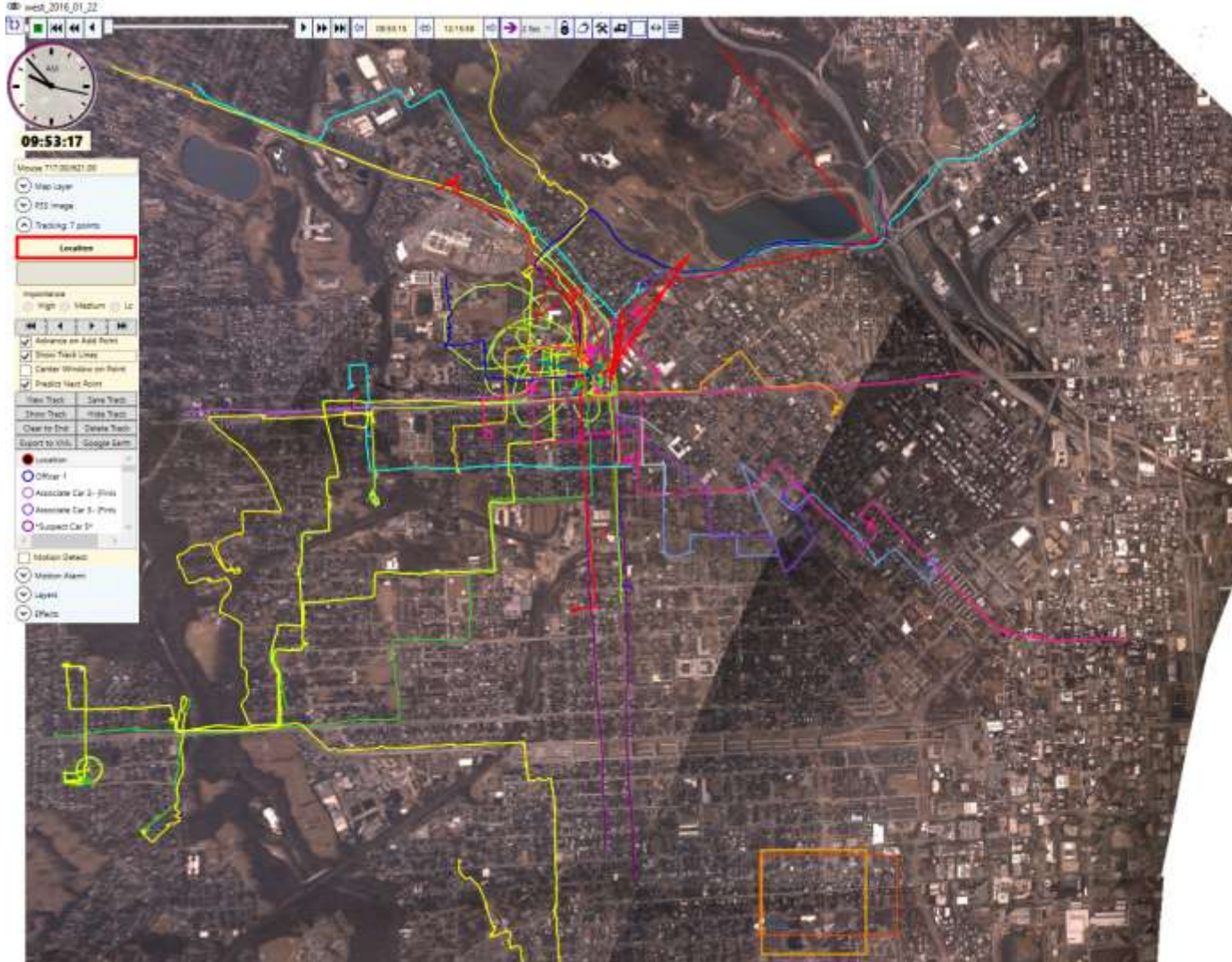
PSS Hawkeye B&W	99 MP
<u><i>PSS Hawkeye II Color</i></u>	<u><i>192 MP</i></u>

Real-time processing and downlink makes imagery available to analysts on the ground in 3-5 seconds





# Observed Event Example: Multiple Vehicles Tracked from a Single Shooting



Multiple vehicles tracked from and around crime scene

Victim, suspects and potential witnesses tracked

Multiple beginning and end destination identified

Multiple vehicles tracked past CitiWatch cameras



# Baltimore System Integration

Wide Area Motion Imagery amplifies the effectiveness of the following systems

- Police Dispatch and 911 - CAD
- CitiWatch Ground Based Cameras

Working to integrate

- MTA Bus Cameras
- Automatic Gun Shot Detection
- Automatic License Plate Readers

Incident Locator

Incident ID	Location	Time	Status	Priority	Category	Officer	Vehicle	Notes
100001	1000 N. ...	5/2/2006 10:02:19 AM	Open	High	Police	Officer ...	...	...
100002	...	...	...	...	...	...	...	...
100003	...	...	...	...	...	...	...	...
100004	...	...	...	...	...	...	...	...
100005	...	...	...	...	...	...	...	...
100006	...	...	...	...	...	...	...	...
100007	...	...	...	...	...	...	...	...
100008	...	...	...	...	...	...	...	...
100009	...	...	...	...	...	...	...	...
100010	...	...	...	...	...	...	...	...





# CitiWatch Camera Integration

pos\_2016\_01\_22

10:14:37

Mouse 748.00x520.00

Map Layer  
RSS Image  
Tracking: 628 points

\*Suspect Car 1\*

Importance  
High Medium Low

Advance on Add Point  
Show Track Lines  
Center Window on Point  
Predict Next Point

New Track Save Track  
Zoom Track Hide Track  
Clear to End Delete Track  
Export to KML Google Earth

\*Suspect Car 1\*  
\*Suspect Car 2\*  
\*Suspect Car 3\*  
\*Suspect Car 4\*  
\*Suspect Car 5\*

Motion Detect  
Motion Alarm  
Layers

Cameras  
Shapes  
Load SHP Files

Geocpy

Offics

Track Report

File: xxx\_ev01\_1020.htm  
Event: Shooting (McKean/Walbrook)  
Track: \*Suspect Car 1\*  
Notes: White vehicle that is always travelling with Suspect 2.

Time	Level	Trackpoint Comment
0933:15	Low	[First] First image.
0933:47	Low	Location 1: Suspect Cars 1 and 2 Arrive at 1745 Mulberry St.
1001:26	Low	Suspect Cars 1 and 2 Depart 1745 Mulberry St.
1002:02	Low	609 Edmonson Ave and Alendale St.
1003:36	Low	Suspect Cars 1 and 2 Arrive at Woodridge Rd and Mt Holy St Location.
1005:09	Low	Location 2: 621 Mt Holy Street
1008:10	Low	Suspect Cars 1 and 2 Depart Woodridge and Mt Holy St.
1016:23	Low	Location 3: Suspect Cars 1 and 2 Arrive at Walbrook Street and park.
1016:40	Low	3 People get out of Suspect Cars 1 and 2 and walk into 1816 Walbrook Ave.
1016:55	Low	Suspects appear to enter second house from corner at 10:16:55. In View of Ground Camera 722.
1026:11	Low	Red car pulls up fts of people around.
1027:19	Low	Red car pulls back up next to white cars.
1038:49	Low	Red car pulls up next to white cars.
1042:27	Low	Black Car leaves parking spot on McKean.
1045:19	Low	Large group of people walk from McKean onto Walbrook, Camera 722.
1050:04	Low	Suspect Cars 1 and 2 Depart Walbrook parking spot.
1050:14	Low	T22: N Monroe St and Walbrook Ave
1050:28	Low	T12: N Payton St and Ridgehill Ave
1051:15	Low	Location 4: Suspect Cars 1 and 2 Arrive at McKean Parking and park together.
1055:24	Low	Other Silver and White Car have meeting that block south on McKean.
1108:30	Low	Other Silver car drops off person at north end of block.
1108:39	Low	Suspect Cars 1 and 2 stay parked on McKean until shooting when they depart.
1157:40	Low	Person Gets into Car
1200:52	Low	Car at Shooting scene at 1200:52.
1200:53	Low	Suspect Car 1 Departs scene after shooting at 1200:53.
1201:46	Low	Suspect Car 1 pulls over for a few seconds before going around back to reconnect with Suspect Car 2.
1202:12	Low	721: W North Ave and N Monroe St
1202:36	Low	T17: N Payton St and Walbrook Ave
1203:44	Low	Suspect Car 1 pulls beside Suspect Car 2.
1204:13	Low	Suspect Car 1 Departs shooting location with Suspect Car 2.
1204:33	Low	Suspect stops on side of road for a minute; Officer 2 passes him while parked.
1205:32	Low	Suspect departs at same time as suspect 2 from another location indicating they are in close communication.
1205:52	Low	T21: W North Ave and N Monroe St
1206:03	Low	T15: W North Ave and N Payton St
1206:11	Low	T12: W North Ave and N Payton St
1206:20	Low	T09: W North Ave and N Siskinwood St
1206:26	Low	T37: W North Ave and Bentlows St
1206:41	Low	T06: W North Ave and Moreland Ave
1207:38	Low	W3: W North Ave and N Dukenand St
1208:03	Low	910: Baker St and N Dukenand St
1208:40	Low	916: Booningsdale Rd and Ellicott Driveway
1210:59	Low	918: Poplar Grove and Riggs Ave



# CitiWatch Ground Camera Integration

## White Infiniti In Camera Views

Camera 715: W North Ave – N Payson St  
Suspect 1: White Infiniti 10:14:51



Camera 715 W North Ave – N Payson St  
Suspect 1: White Infiniti 12:02:23



### CSP Vehicle tracks with CitiWatch In Camera Views

#### CitiWatch Cameras

Time	Level	Comment
10:02:32	Low	929: Edmonson Ave and Allendale St.
10:05:09	Low	821 Mt Holly Street
10:14:52	Low	715: W North Ave and N Payson St
10:50:14	Low	722: N Monroe St and Wallbrook Ave
10:50:28	Low	718: N Payson St and Ridgehill Ave
12:02:12	Low	721: W North Ave and N Monroe St
12:02:23	Low	715: W North Ave and N Payson St
12:05:52	Low	721: W North Ave and N Monroe St
12:06:11	Low	712: W North Ave and N Pulaski St
12:06:20	Low	709: W North Ave and N Smallwood St
12:06:26	Low	737: W North Ave and Bentalou St
12:06:41	Low	706: W North Ave and Moreland Ave
12:07:38	Low	905: W North Ave and N Dukeland St
12:08:28	Low	910: Baker St and N Dukeland St
12:09:40	Low	916: Bloomingdale Rd and Ellicott Drwy
12:10:39	Low	918: Poplar Grove and Riggs Ave
12:11:07	Low	920: Poplar Grove St and W Lafayette Ave
12:11:34	Low	921: N Franklinton Rd and N Longwood St.



# Example Investigation Briefing

Type of Product We Provide  
Baltimore Case Example

# Example Investigation

Murder #2 on  
26 Aug 09 at 13:42

Report Number 1126146

Case Number 43132N



# PSS Incident Locator

Ingests available police reports and dispatch information

Shows times and locations of flights

Shows summary of reported crimes within the coverage area

Searchable by location, time, crime, flight, and coverage area

Significantly speeds process to identify crimes in coverage area

## Incident Locator

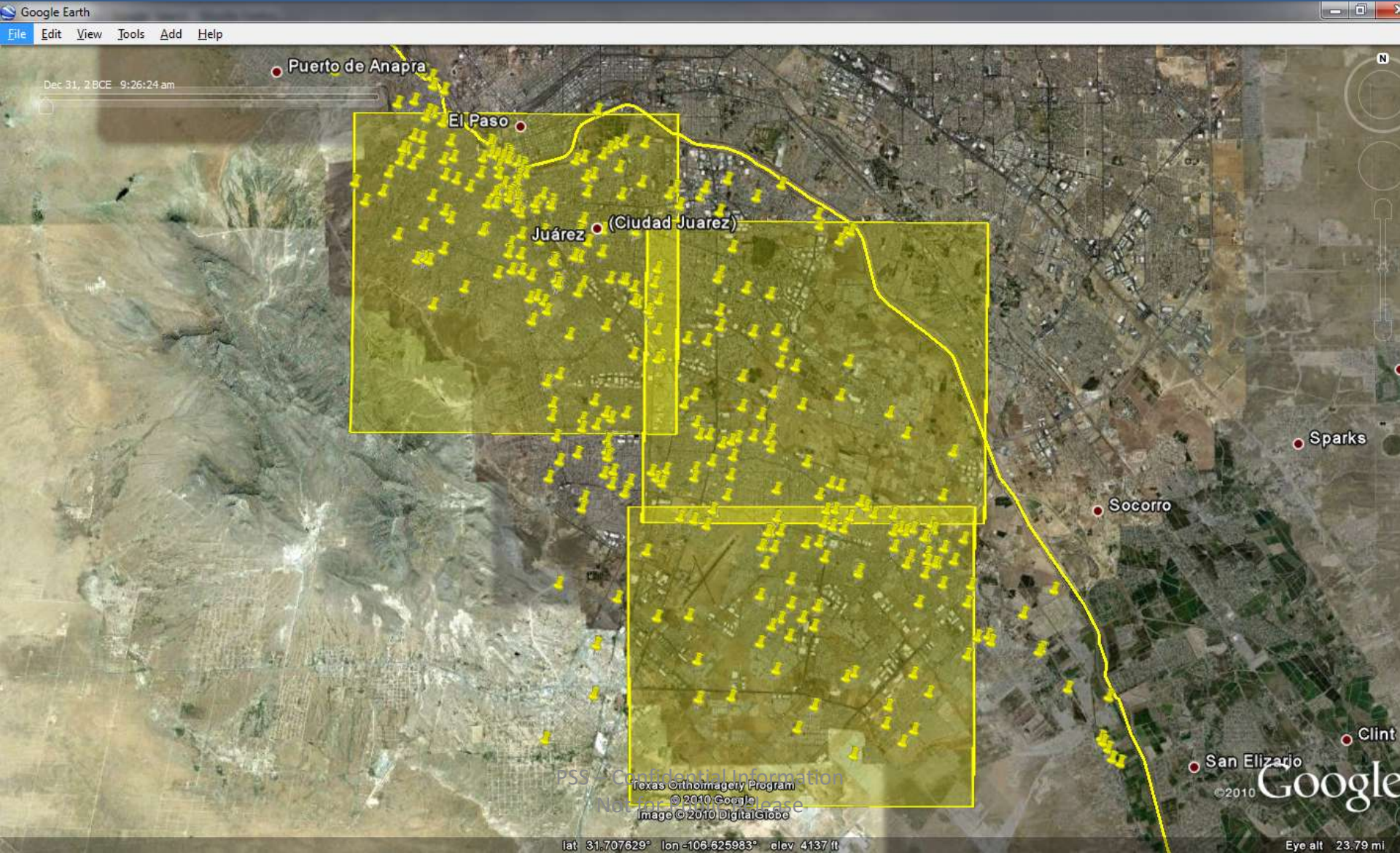
App	Area	Type	Date	Time	Location	Officer	Unit	Status	Priority
ALPHA_11	ALPHA_11	ALPHA_11	2010-11-11	10:10:10	10101010	10101010	10101010	10101010	10101010
ALPHA_12	ALPHA_12	ALPHA_12	2010-11-11	10:10:10	10101010	10101010	10101010	10101010	10101010
ALPHA_13	ALPHA_13	ALPHA_13	2010-11-11	10:10:10	10101010	10101010	10101010	10101010	10101010
ALPHA_14	ALPHA_14	ALPHA_14	2010-11-11	10:10:10	10101010	10101010	10101010	10101010	10101010
ALPHA_15	ALPHA_15	ALPHA_15	2010-11-11	10:10:10	10101010	10101010	10101010	10101010	10101010
ALPHA_16	ALPHA_16	ALPHA_16	2010-11-11	10:10:10	10101010	10101010	10101010	10101010	10101010
ALPHA_17	ALPHA_17	ALPHA_17	2010-11-11	10:10:10	10101010	10101010	10101010	10101010	10101010
ALPHA_18	ALPHA_18	ALPHA_18	2010-11-11	10:10:10	10101010	10101010	10101010	10101010	10101010
ALPHA_19	ALPHA_19	ALPHA_19	2010-11-11	10:10:10	10101010	10101010	10101010	10101010	10101010
ALPHA_20	ALPHA_20	ALPHA_20	2010-11-11	10:10:10	10101010	10101010	10101010	10101010	10101010



# Persistent Surveillance Systems

## Area Coverage (With 3 month murder overlay)

Coverage Area 4 x 4 miles - 600,000 people within covered area







# Murders Observed and Investigated in a 2 month Period

**26 Aug 13:10 - Execution of Police Woman**

**26 Aug 13:45 - Cartel on Cartel Murder**

**31 Aug 1515 - Armed Robbery**

**1 Sept 15:20 - Body Dumping by Liberty Bridge**

**9 Sept 14:09 - Attempted Execution**

**9 Sept 14:55 - Execution of City Official**

**20 Sept 13:05 - Murder**

**24 Sept 16:15 - Execution on Street**

**25 Sept 14:22 - Execution on Street**

**29 Sept 14:47 - Murder**

**1 Oct 13:47 - Execution on Street**

**2 Oct 17:15 – Murder**

**10 Oct 1407 - Murder**

**15 Oct 14:22 - Murder**

**16 Oct 14:48 - Murder**

**21 Oct 11:56 - Double Murder**

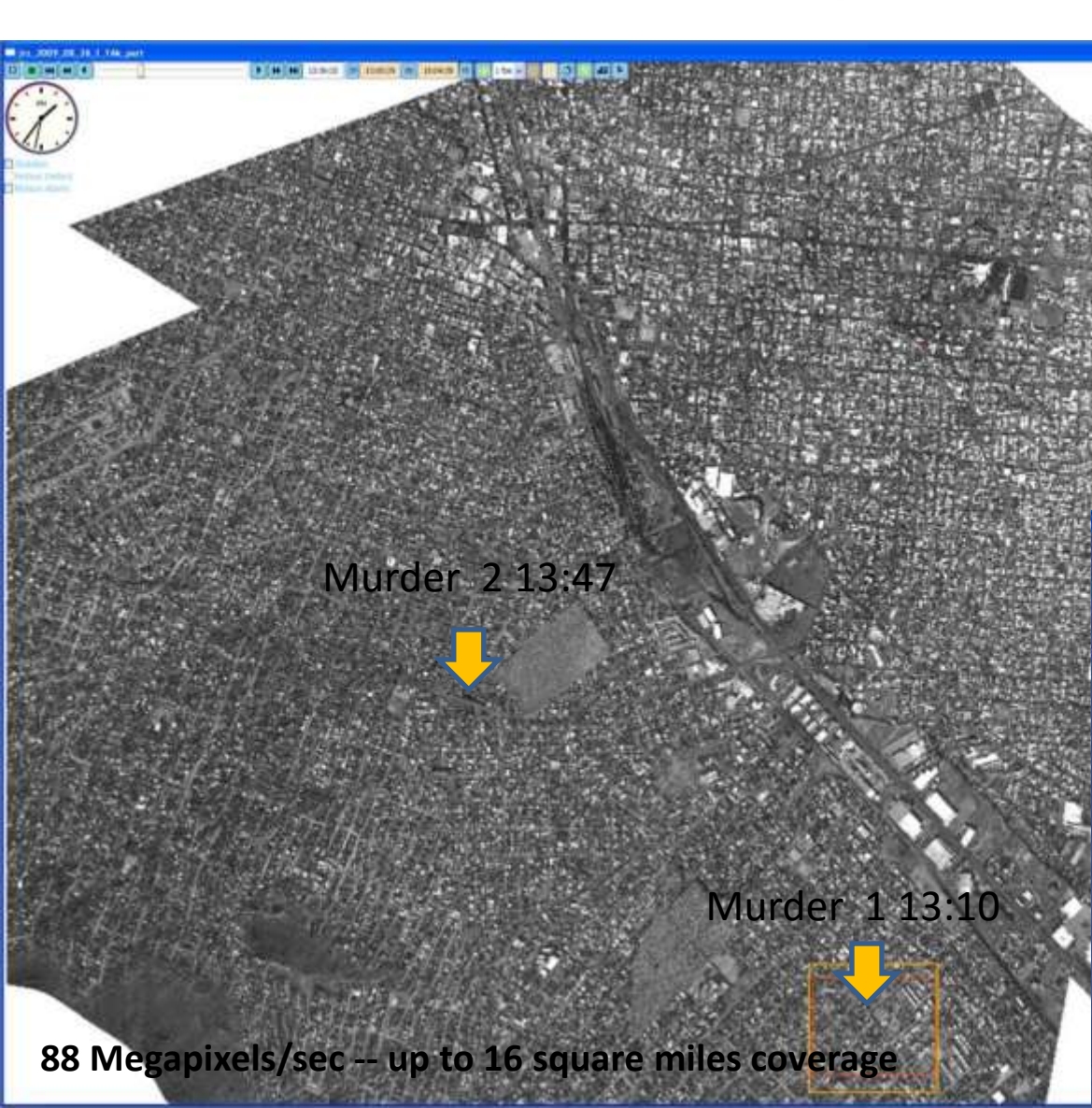
**22 Oct 15:22 - Murder in Mall Parking Lot**

PSS – Confidential Information  
Not for Public Release

Many more events in data collected but we have not analyzed

We witnessed many more crimes than could be analyzed with available staff

# Wide Area Surveillance Murder Examples



# Images of the Murder



# Images of the Murder



# Images of the Murder





# 3 Cars Directly Involved in Murder

Murder Car 3

Murder Car 2

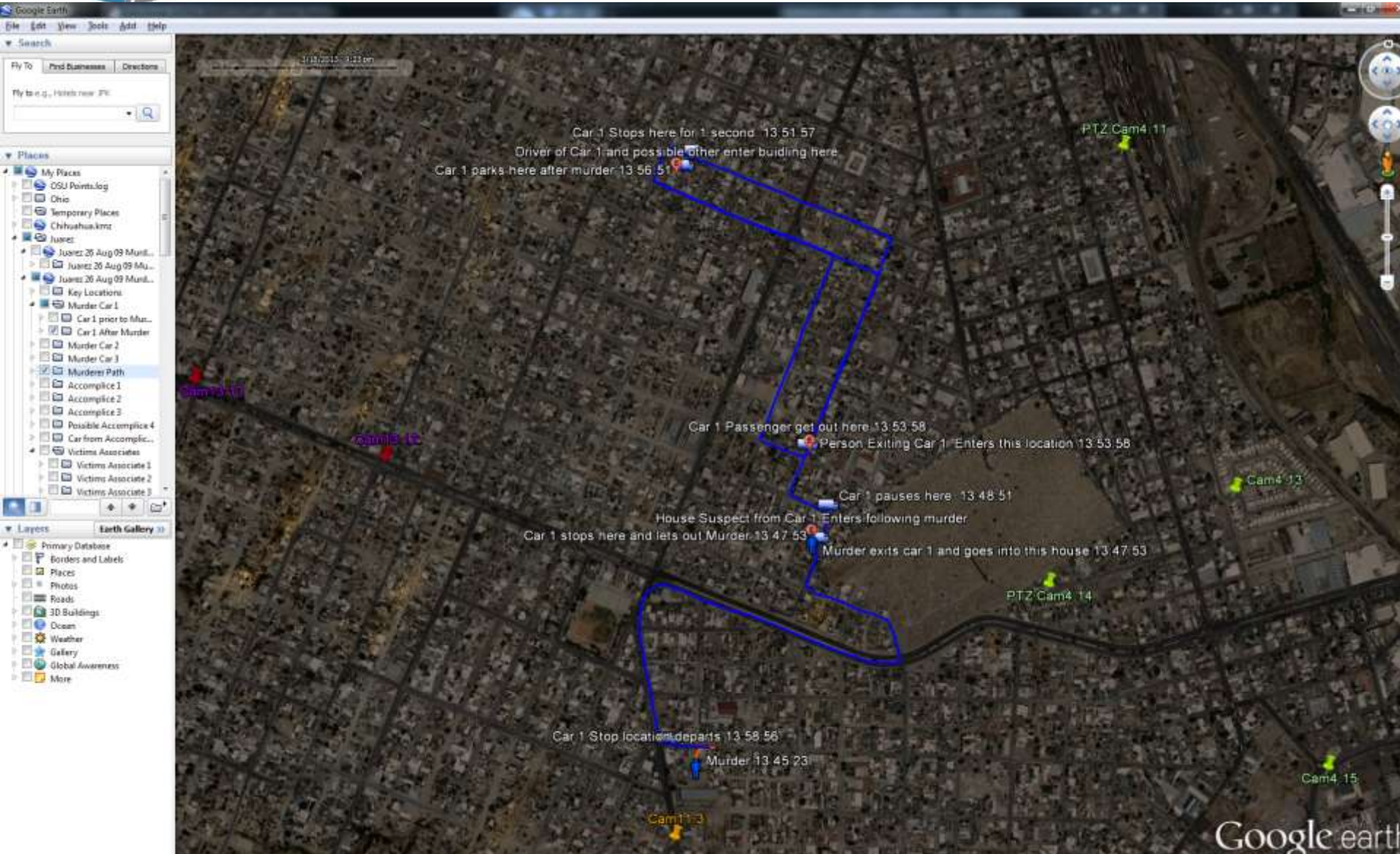
Murder Car 1  
Murder Get into  
this car after murder

Murder Location  
and Murderer



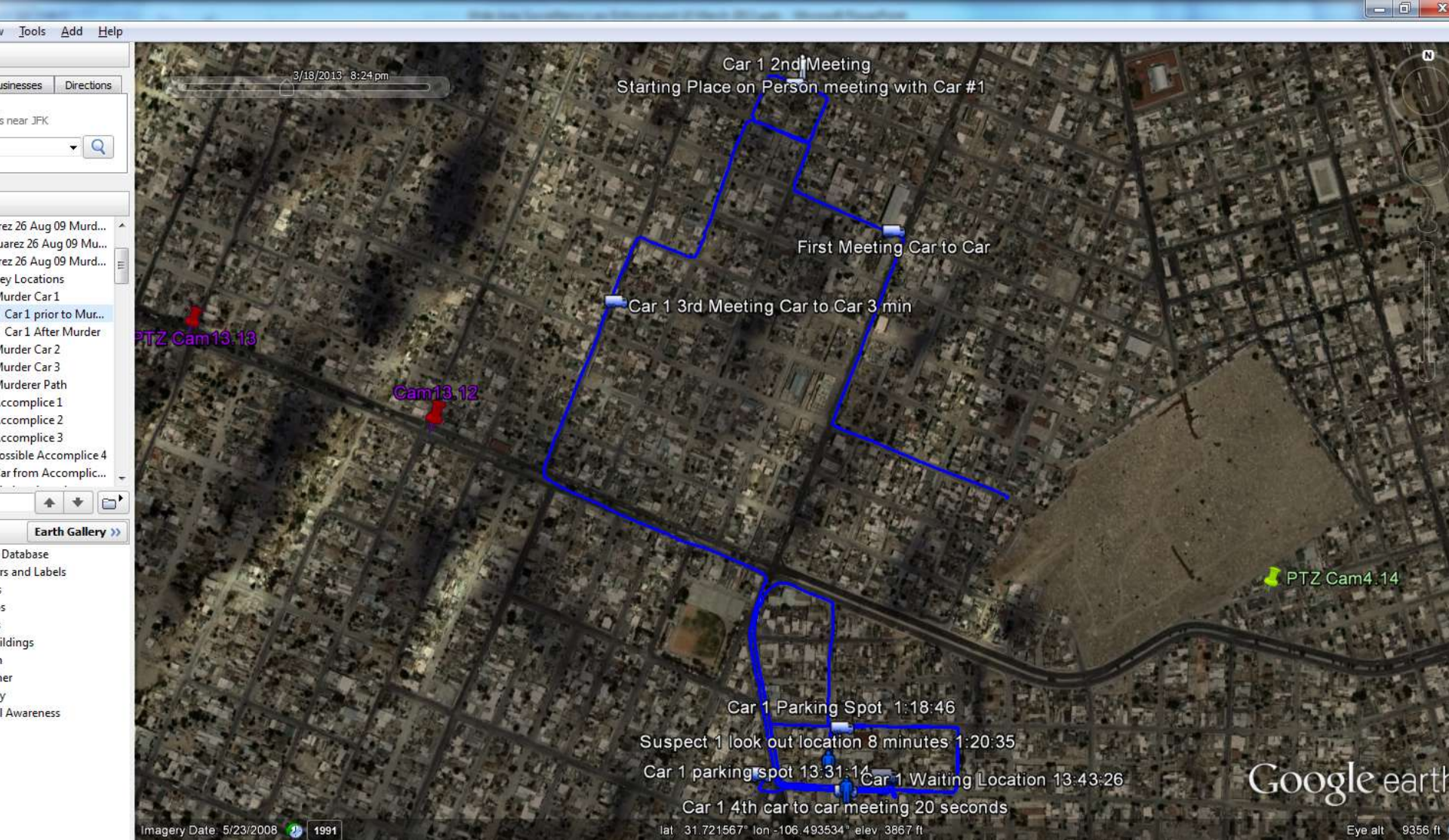


# Suspect Car 1 Path after Murder





# Suspect Car 1 Path Prior to Murder







# Suspect Murder Car #1 Timeline

- 13:01:14 Murder Car #1 Start
- 13:02:51 Car to Car Meeting With Car 3
- 13:04:20 Car to Multi People Meeting
- 13:07:32 Car to Car Meeting with Car 3
- 13:12:40 Car to Car Meeting by Where murder will happen
- 13:18:48 Person exits Car to observe area where the murder will take place
- 13:42:11 Car to Car meeting just down the block where the murder will happen
- 13:44:25 Murder Occurs
- 13:45:46 Suspect enters Car on passenger side and Suspect Car drives away
- 13:47:58 1<sup>st</sup> Person exits Car enters house
- 13:48:33 Car to Person Meeting
- 13:53:41 2<sup>nd</sup> Person exits Car and enters house
- 13:56:05 Suspect Car Parks - Driver exits Car
- 14:35:20 Suspect Car stops (37 25.818'N 122 05.36'W) 35 minutes long
- 14:39:46 Suspect Car parks and Driver exits

.....

# Post Murder Locations



Suspects from Car 1  
Enter this House after  
Murder

Suspects from Car 2  
Enter this House after  
Murder

Suspect Car #2  
Returns here after  
Murder

Suspect Car #1  
Returns here  
after Murder  
– Drops off  
person



# Back Tracked to Pre-Murder Meeting at 13:38:11



## **Murder Car 3**

Previously picked up weapons from Accomplice #1 20 minutes prior

## **Murder Car 2**

Murder Cars 2 and 3 leave this location at 13:38:23 to go to murder site

## **Accomplice #2**

Accomplice #2 Meets with murderers takes different route then observes from a distance

Accomplice #2 is tracked for 40 minutes prior and 2 hours after the murder



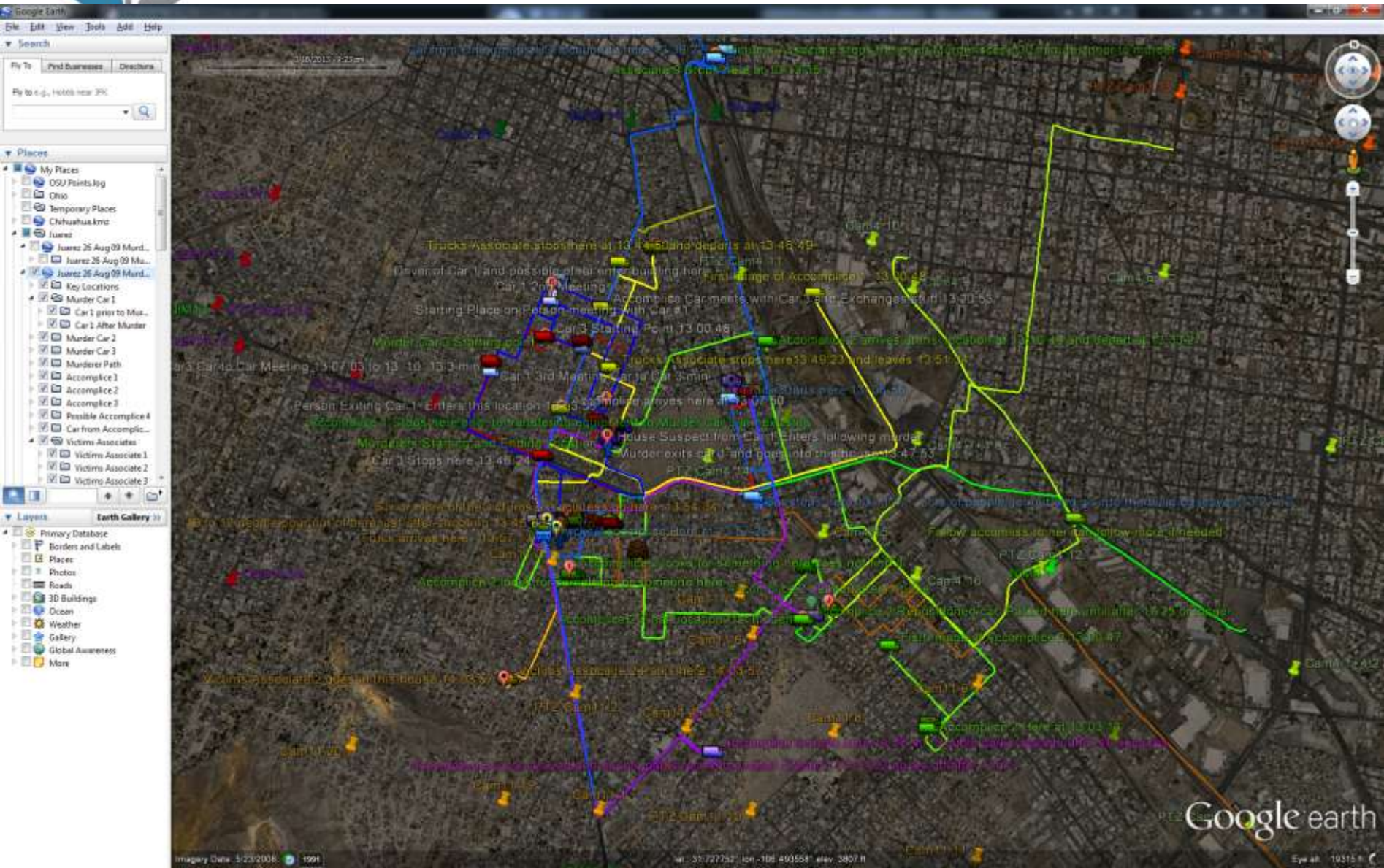
# Street View

SUSPECT #1 STARTING AND ENDING LOCATION "B"



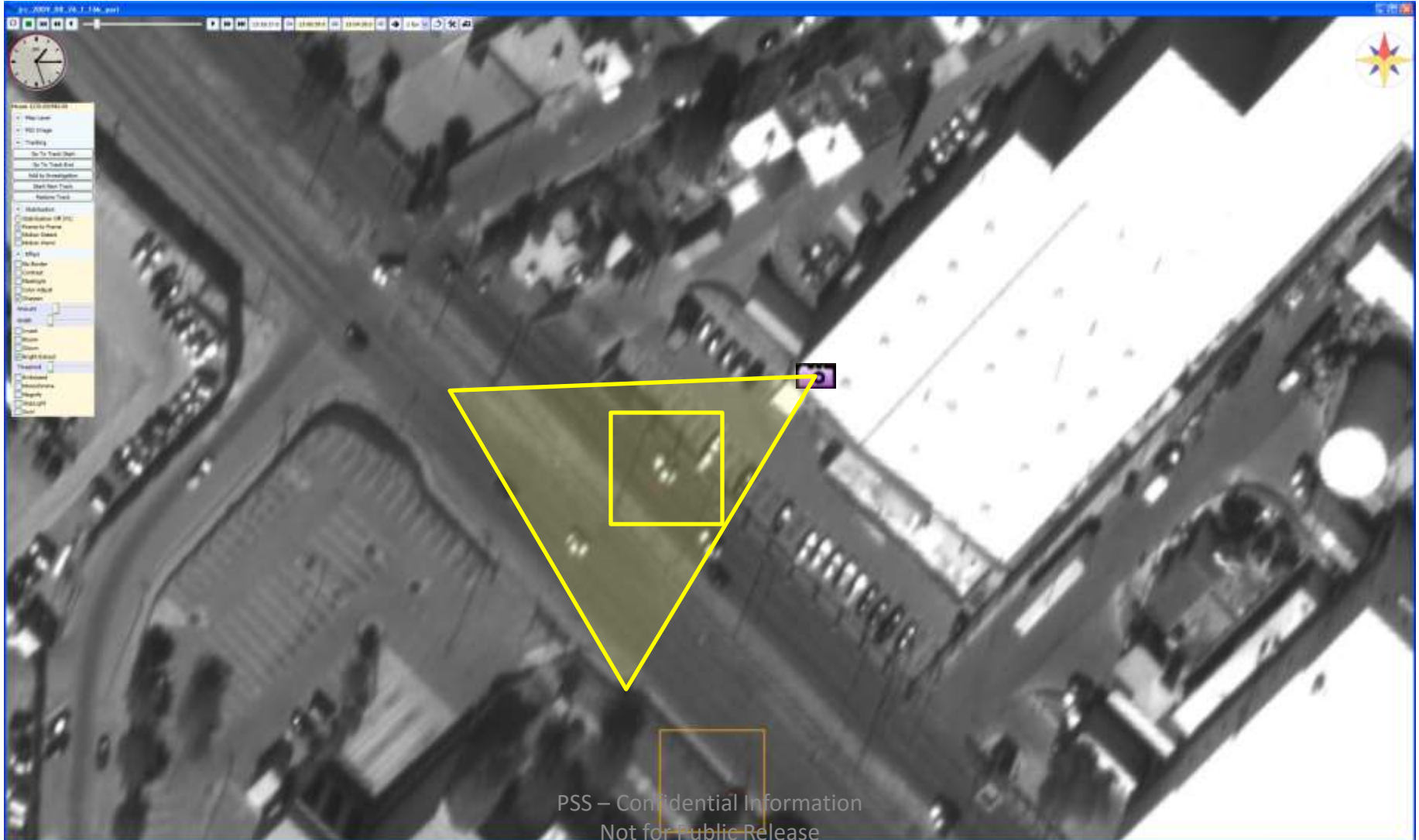


# Murderer, Accomplices, and Associates Tracked Activities 45 minutes prior and 3 hours after murder





# Suspect Car 1 in Camera 4.12 at 13:15:27



PSS - Confidential Information  
Not for Public Release

# Annotated Reports Integrate Ground and Arial Imagery

## Car 1 and Car 2 Post-Murder Activities



13:48:31: Driver from Murder Car 2 Meets Murder car 1 then enters this building.

13:47:53: Murder Car 2 returns here after murder and parks. Driver appears to exit vehicle.



Corner D.M. Ruiz & Heroes del Carrizal



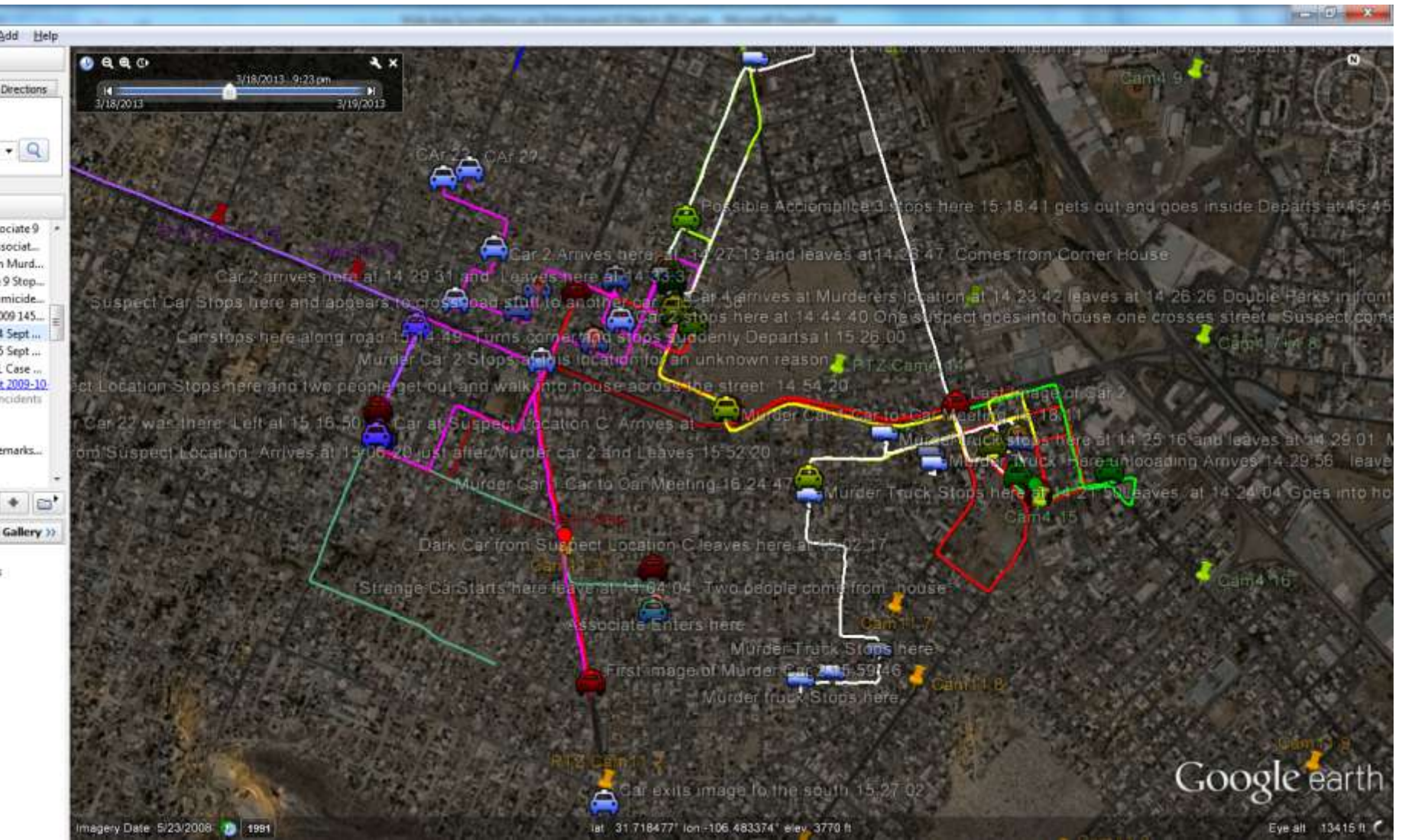
13:47:51: Murder Car 1 returns to location of pre-event meeting , parks briefly. Person exits passenger side (it is possible that this is the murderer) and enters this Blue building (also pictured earlier).



Corner of Pascual Jaramillo & Heroes del Carrizal



# 24 Sept Murder Same Group







# Baltimore Community Support Program

## Evaluation Phases

- Phase I - Technical Evaluation
  - Jan Feb 2016– Worked well, Worked Integration Issues
- Phase II – Initial Operational Evaluation
  - June- Aug 2016 – Worked well, 108 sample investigation briefs completed – Showed value – Integrated with BPD systems
  - Leadership approval to proceed
- Phase III – Operational Employment
  - Briefing to Investigators, States Attorneys, Other Agencies
  - Public Announcement and Community Involvement
  - Use of Data in Investigations and Cases



# Baltimore Phase I/II Results

- ~314 hours of recorded imagery data
  - 3,576 Priority 1 Calls within imagery
  - 13,302 Priority 2 Calls within imagery
  - 3,001 Priority 3 Calls within imagery
  - 21,174 Total Call For Service within imagery
- 108 Completed Investigation Briefs
- Including:
  - Murders, Shootings, Officer Involved Shootings, Stabbings, Rape, Robbery, Burglary, Car Jackings, Hit and Runs, Accidents, and Illegal Dumping



# Calls For Service within Coverage Areas and Times

Phase	Priority	Number within coverage area
Phase I	100 hours Jan – Feb	6,378
	1	1,085
	2	3,409
	3	1,504
	4	380
Phase II	200 hours Jun - Aug	14,796
	1	2,491
	2	9,893
	3	1,497
	4	915
Total		21,174



# BCSP Investigation Briefings Completed

Homicides	5
Shootings	15
Stabbings	3
Rape	1
Aggravated Assaults	2
Robbery/Burglary	3
Surveillance	7
Dirt Bike Complaints	4
Car Jacking	3
Hit and Run	16
Accidents	42
Auto Theft	1
Illegal Dumping	2
Scenarios (Live Tests of System)	3
GPS Tracking Integration	1
Requested Analysis for Public Defender	<u>1</u>
	109



# Completed Homicide Investigations

- 30 Jan 1400 Morris St
- 20 Feb 2300 Lafayette
- 3 Jul 2226 Poplar Grove
- 11 Jul 500 Dolphin St
- 19 Jul 2200 Rosedale St



# Completed Shooting Investigations

- 22 Jan Walbrook and McKean
- 27 Jan 3407 Piedmont Ave - Officer Involved Shooting Investigation
- 4 Feb 2401 Hollins
- 16 Feb Madison Ave & MLK Blvd
- 23 Feb 3400 Clifton Ave
- 27 Feb 3400 Canton Ave
- 25 Jun 1400 N Mount St
- 29 Jun 3300 Edmondson Ave
- 11 Jul 1800 North Ave
- 14 Jul Winchester St - Officer Involved Shooting Pre-incident Surveillance
- 17 Jul 1817 Clifton Ave
- 19 Jul 3130 North Ave
- 24 Jul Pulaski Ave
- 13 Aug 3100 North Ave
- 17 Aug 2305 N Longwood



# Priority 1 Crimes Information Provided

Date	CFS#	Event Description	The number of events observed and investigated	The number of crime scene characterized ( Time, number of people, number of vehicles, activity on the ground observed)	The number of tracks created for the event	Number of Primary Vehicles or People	The total number of Cameras we tracked Vehicles or People past	The number of cameras that captured images of either Vehicles or People	The number specific stop locations of Primary Vehicles or People	number of potential suspects and witnesses at the crime scene identified.	The number of Final Locations associated with Primary Vehicles or People
20-Jan	160201311	Kirk Ave and Friendship Auto Theft	1	1	14	3	0	0	2	0	2
20-Jan	160201657	N Rose St Burglary	1	1	7	1	10	2	2	3	2
22-Jan	160221384	Walbrook and McKean Shooting	1	1	60	4	78	15	12	6	5
22-Jan	160221220	3212 Westmount Cutting	1	1	3	1	14	3	3	-	1
30-Jan	160301330	1400 Morris St Homicide	1	1	42	7	9	7	6	1	2
4-Feb	160351349	2401 Hollins Shooting	1	1	52	2	8	0	1	3	0
14-Feb	160451244	2019 Walbrook Cutting	1	1	6	1	6	4	1	1	2
16-Feb	160472064	Madison Ave & MLK Blvd Shooting	1	1	3	1	1	0	1	1	1
20-Feb	160511411	2300 Lafayette Homicide	1	1	20	2	9	5	25	-	2
22-Feb	160531304	3400 Clifton Ave Shooting	1	1	41	2	0	0	3	-	2
27-Feb	160581506	3400 Canton Ave Shooting	1	1	13	1	1	0	1	2	0
28-Feb	Event #1429	1655 Smallwood Cutting	1	1	2	1	11	0	1	1	1
25-Jun	161771470	1400 N Mount St Shooting	1	1	24	3	40	14	8	4	2
29-Jun	161811490	3300 Edmondson Ave Shooting	1	1	38	2	27	2	4	8	2
3-Jul	161751760	2226 Poplar Grove Homicide	1	1	21	14	40	15	13	0	5
11-Jul	161932069	500 Dolphin St Homicide	1	1	28	4	11	10	4	10	1
17-Jul	161991558	1817 Clifton Ave Shooting	1	1	24	9	8	5	1	4	1
18-Jul	162001565	2742 Edmondson Ave Rape	1	1	22	3	21	15	4	1	3
19-Jul	162012332	2200 Rosedale St Homicide	1	1	27	3	7	4	4	8	3
19-Jul	162012654	3130 North Ave Shooting	1	1	17	2	11	3	3	3	2
24-Jul	162061610	Pulaski Ave Shooting	1	1	19	2	16	13	13	9	2
13-Aug	162262755	3100 North Ave Shooting	1	1	38	1	9	6	1	3	1
17-Aug	162301746	2305 N Longwood Shooting	1	1	16	4	14	7	3	4	2
		<b>TOTALS</b>	<b>23</b>	<b>23</b>	<b>537</b>	<b>73</b>	<b>351</b>	<b>130</b>	<b>116</b>	<b>72</b>	<b>44</b>

Priority 1 Crimes: 73 Primary Vehicles Identified, 116 locations where suspects stopped, 44 suspect final locations, 351 CitiWatch camera shots of primary vehicles

# Analysts at Work







# Levels of Analysis

- **Real -Time Operational Support**
  - Event response and information forwarding
  - Multiple simultaneous location surveillance
  - Cued or tasked support - Dispatch or 911, locations of interest, BOLO
- **Level 1 Analysis - Overnight**
  - Who is directly involved
  - Where did they come from
  - Where did they go
- **Level 2 Analysis – 1-3 days**
  - Who did they meet with
  - Where did they come from
  - Where did they go
- **Level 3 Network Analysis - 1 week**
  - Over the last week or two who did all of the above meet with
  - Where did they come from and where did they go





# CSP Workforce

## Expected Source and Demographics

Position	Number	Local Hires	8A Subcontract	Local HS Interns	Deployed	Potential Minority Hires
Analysts	15-20	11	4-8	2	3	9-15
Pilots	7	7				1-2
Managers	2	1			1	0-1
IT	2	1			1	0-1
Police Liaison	1	1				0-1
Total	32	21	4		7	10-20

More will shift to local hires as we move to longer term operations.

Roughly 2/3rds of our local hired analysts are minorities from the community

After 2 years analysts have experience typically required for DoD Analyst positions



# Use of CSP Information

- Legally reviewed many times by many states and defense attorneys
- Found fully constitutional and allowable as evidence
  - 4 Supreme Court decisions directly support
  - Baltimore States Attorneys and Public Defenders have been briefed and agree
  - Even the ACLU acknowledges it is legal
- Usable in support of major crime investigations by both defense/prosecution
- Usable as evidence by both defense and prosecution
- Usable by community to investigate incidents with police
- Provides an unbiased record of what happened at a scene of an incident for use by all sides
- **All analysis done for investigation is provided in full to defense attorneys**
- Additional **confidential/privileged** analysis can be conducted for defense attorneys and is not shared with police or prosecutors



# CSP Privacy Program

- Privacy Program is Central to all Community Support Program operations
- Resolution limited to 1 pixel per person
  - no identifiable information from images – Just dots for people
  - See as many major crimes as possible
- Only look at reported **Major Crime Scenes** and people coming and going from them.
  - Someone has called and asked for assistance
  - Support analysis of community approved crimes
- Information is maintained where all analysts have ever looked, what investigation it was for and that is reviewed by management, department leadership, and outside parties.
- All tracks (vehicle/people) are required to be directly associated to a specific investigation
- Fully welcome outside oversight and review and will fully support their efforts
- Data securely maintained and accessed.
  - Consistent with all BPD video camera surveillance policies



# Public Acceptance

<http://www.bizjournals.com/baltimore/pulse/poll/are-you-comfortable-with-city-polices-surveillance-program/20446022>

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MENU BALTIMORE BUSINESS JOURNAL

BUSINESS PULSE POLL

## Are you comfortable with city police's surveillance program?

RELATED Baltimore Police Says Aerial Surveillance Plane Was Not A Secret

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Comments

### Baltimore Business Journal Poll

82 % Approve

9 % "Would have approved had it been discussed"

91 % Approve of CSP approach

5 % Program makes them feel "uneasy"

4 % Wanted more information



82%	Yes, as long as it's keeping people safe
9%	I would have been OK with it if they had discussed it publicly
5%	No, the program makes me feel uneasy
4%	I still want to know more before I make up my mind
1%	Other

Total number of responses: 128

*This poll is not a scientific sampling. It offers a quick view of what readers are thinking.*

# Public Acceptance

www.baltimoresun.com/news/opinion/bal-bpds-secret-surveillance-poll-20160825-htmlstory.html

SECTIONS SEARCH

THE BALTIMORE SUN

THURSDAY SEP. 1, 2016

BREAKING SPORTS MARYLAND BUSINESS OPINION OBITS ENEWSPAPER ADVERTISING

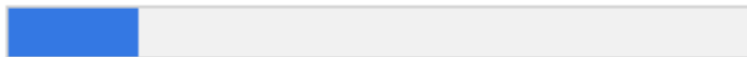
## Should the Baltimore Police Department have disclosed plans to conduct aerial surveillance over the city before doing it, even if it put the program at risk?

THE BALTIMORE SUN  
News / Opinion

AUGUST 25, 2016, 3:10 PM

Thank you for voting!

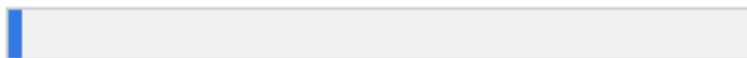
Yes 17.52% (55 votes)



No 80.57% (253 votes)



Not sure 1.91% (6 votes)



Total Votes: 314

80.5% Approved of the program

17.5% Said it should have been announced "even if it put the program at risk"

2% Said "not sure"

<http://www.baltimoresun.com/news/opinion/bal-bpds-secret-surveillance-poll-20160825-htmlstory.html>



# Efforts in Baltimore

- **Phase I**      Jan Feb 2016 – Initial demonstration and test
  - Does it technically work – **Answer Yes**
  
- **Phase II**      June July August 2016
  - Does it provide useful information supporting crime investigations - **Answer Yes**
  - Police Foundation report said it showed great promise in helping solve crime
  - Supported many cases and contributed significant information
  
- **Phase III**      1 Year Proposed Effort **Not yet started – Need community support**
  - Does CSP help reduce crime in the community?
    - Goal is 20-30% reduction in major crime in first full year of operation
  - How effective is CSP in reducing crime in the community
    - How effective is the deterrence with full public awareness program
    - How effective is it in solving otherwise unsolvable crimes
    - What is the impact of increased trust between police and the community on the community



# Required Funding

- Our services cost \$1.6M per year or 135,000 per month as a complete service
  - Less than the cost of operating a single police helicopter
- There are groups willing to fund the entire effort
  - No money required from the city
  - External evaluation program to determine effectiveness in meeting goals
- Just need local support and approval by political leadership
- Able to start as early as January





# CSP Public Awareness

- Asked to come and brief community and community leaders
- Public Awareness and Engagement
  - Community Meetings
  - Community Leaders
  - City Leadership
- Outreach and Awareness Program for Youth and Prior Offenders
  - Awareness Briefings in Schools, Community Centers, Churches, others
    - Increased deterrence through wide spread knowledge of the program
    - Deterrence does not work if no one knows about the program
  - Awareness of Job opportunities
- CSP will support all requested efforts

**If you want this program we require your support expressed to your city council member and the Mayors office**



# Summary

- We support the community
- We help solve unsolvable crimes
- We help build trust and accountability between the community and law enforcement
- Our goal is to reduce major crimes within the community by 20-30% within the first year
  - Mostly through deterrence of crime
- We want to help make communities a better place to live, work and raise families
- We are open to talk with anyone or group at any time