

IN HOT PURSUIT OF TRAFFIC DATA: HOW TO USE DATA COLLECTION AS EVIDENCE

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ALL TRAFFIC
SOLUTIONS



A sign of the future.™

ABOUT

ALL TRAFFIC SOLUTIONS

Industry-leading solutions for traffic management, speed enforcement, roadside messaging and parking availability

TRUSTED BY 5,000+ CUSTOMERS
IN ALL 50 STATES AND 20 COUNTRIES

- ✓ Law Enforcement
- ✓ Safety Planning
- ✓ Urban Planning
- ✓ Emergency Management
- ✓ Large Public Venues
- ✓ Facility Safety
- ✓ Public Works
- ✓ Corporate Campuses
- ✓ Traffic Engineering
- ✓ Transportation Departments



CONNECTED SOLUTIONS FOR BETTER TRAFFIC SAFETY OUTCOMES

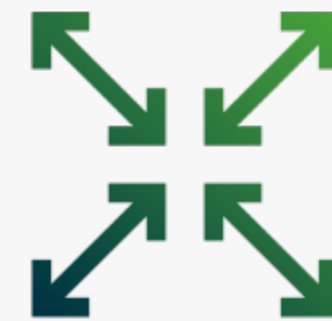
WEB-ENABLED TRAFFIC DEVICES AND CLOUD-BASED DATA ANALYTICS YOU MANAGE IN TRAFFICCLOUD

SOLUTIONS

- ✓ Traffic Calming
- ✓ Speed Enforcement
- ✓ Messaging and Notifications
- ✓ School Zones & Work Zones
- ✓ Conditional Messaging
- ✓ Traffic Management



**REDUCE
COSTS**



**MAXIMIZE
RESOURCES**



**ENABLE PROACTIVE
DECISION MAKING**

SITUATION



Cities and Towns
More Populated



Department size and
resources remain constant



Increased calls for service,
pressure to lower
response times



**HIGHER EXPECTATIONS, MORE TASKS,
INCREASED ENFORCEMENT HEADACHES**

SITUATION

MORE OFFICERS MANAGING TRAFFIC CONCERNS IS NOT THE ANSWER

- Budget Cuts
- Hiring Freezes
- Resources Needed Elsewhere
- “Band-Aid” Approach

**BE MORE RESOURCEFUL
TO ACHIEVE GOALS AND MANAGE SAFETY**



CONSIDER THESE QUESTIONS:

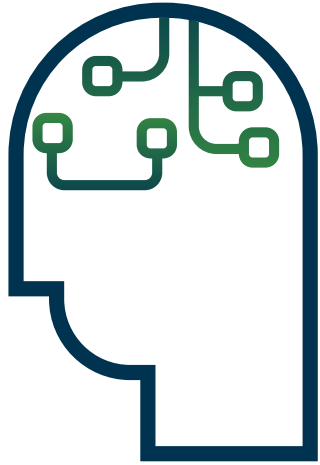
- How do you respond to traffic enforcement demands?
- How do you collect traffic data? Is it easy to gather?
- Do you use traffic data to maximize resources?
- How much time is spend on traffic data file management?
- Is personnel being pulled from primary duties to manage and respond to traffic-based requests?



TIME FOR A NEW APPROACH



Technology



Automation



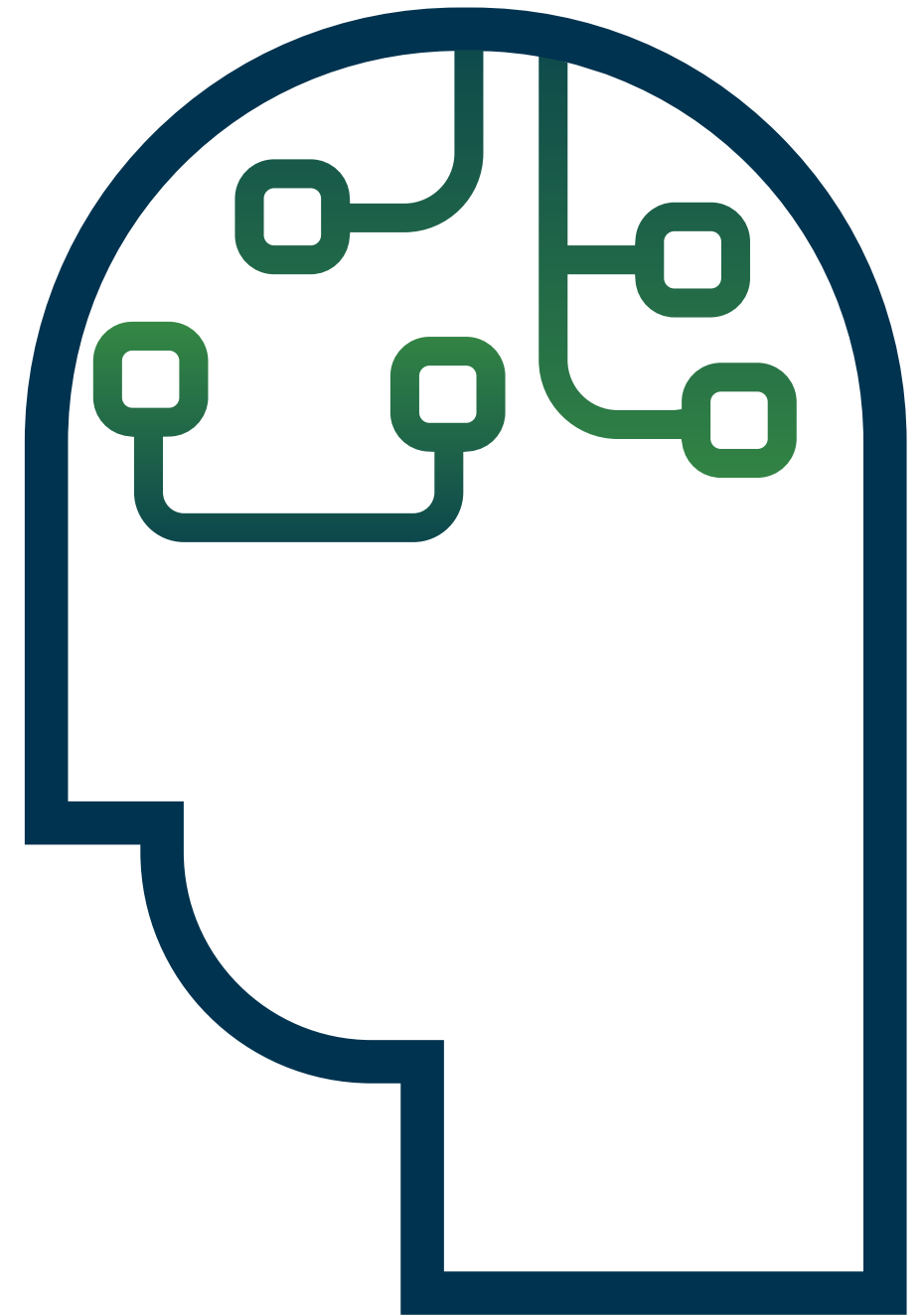
Data and Analytics
you can use now



MEASURABLE RESULTS, SAFER ROADS, HAPPY CITIZENS

WHAT WE DO FOR LAW ENFORCEMENT

- **CLEAR COMPLAINTS** faster
- Help agencies **OPTIMIZE ENFORCEMENT RESOURCES** and **REDUCE COSTS**
- Provide relevant, **REAL-TIME DATA** to make **PROACTIVE ENFORCEMENT DECISIONS**
- Furnish **REPORTS** to Department management and community to **DEMONSTRATE RESULTS** of traffic calming efforts
- Help keep drivers and pedestrians safe by making it easier to **CALM TRAFFIC AND ENFORCE SPEED LIMITS**



HOW DATA HELPS

DEMONSTRATE NEED

- Site-specific speed summaries
- 85th percentile volumes by day/time
- Speed enforcement priorities

PROVE SUCCESS

- Traffic device effectiveness
- Reduction in number of complaints
- Run 'before and after' reports for comparison



CLEAR COMPLAINTS PERCEPTION PROBLEM OR GENUINE ISSUE?

- **ADDRESS COMPLAINTS** easily and efficiently
- Gather data automatically from radar speed signs and sensors
- Traffic data can be reviewed as it's being collected
- Quickly determine the legitimacy of traffic concerns
- Be **RESPONSIVE** and **PROACTIVE**



IMPROVE COMMUNITY RELATIONS

EASY TO HAVE A ROBUST RESPONSE PROGRAM

- Respond quickly with data
- Post traffic reports and responses on your website
- They see signs in the community, know you're responsive
- Create response program for tracking and transparency



START YOUR BEST PRACTICES PROGRAM

- Simple documentation
- Create log for complaints, assign numbers and dates

COMPLAINTS

Complaint Number	Date Received	Complainant	Date Resolved	Letter Sent
17-10	2/20/2017	Paul Griffith	2/27/2017	2/28/2017
17-11	3/6/2017	Alma Simpson	3/8/2017	3/8/2017
17-12	3/25/2017	Bernard Mackey	4/7/2017	4/20/2017
17-13				
17-14				

JUSTIFY A BUDGET REQUEST

DATA ANALYTICS HELPS AT BUDGETING TIME!

- Demonstrate need
- Show how the Department will save money by implementing data-driven technology
- Show community support, being proactive/responsive
- Identify best locations for officer deployment, decrease resources where speeding is no longer an issue
- Predesigned reports reduce hours spent on data management and paperwork




OBTAIN GRANTS AND FUNDING

TO PROVE ELIGIBILITY YOU MUST: (LANGUAGE FROM ACTUAL GRANT)

- Articulate the goal of your initiative
- Define your strategy to achieve success
- Identify the method that will accurately measure the funded initiative
- Generate the required reports proving the success of your funded initiative



REPORTS



A sign of the future.

Enforcement Priorities Report

Generated by Heidi Traverso from Heidi Traverso Demo
on Jun 20, 2017 at 12:43:25 PM


Speed Bins: Size 0, Range 1 to 100
Rank Results By 85% Speed
Sites: 084 ST E @ 6400 BLOCK, EB,084
ST E @ 6400 BLOCK, WB

Time of Day: 0:00 to 23:59
Dates: 5/21/2017 to 6/19/2017
Violation Threshold: Speed Limit + 10

#	Site	Day of Week	Time	Speed Limit	Average Speed	Average Violator Speed	85% Speed	Average # Vehicles	Average # Violators
1	084 ST E @ 6400 BLOCK,	Monday	5:00 - 6:00	35	41.0	50.0	47.0	20.0	4.0
2	084 ST E @ 6400 BLOCK,	Saturday	18:00 - 19:00	35	38.0	48.3	45.0	89.0	12.0
3	084 ST E @ 6400 BLOCK,	Friday	6:00 - 7:00	35	38.0	48.6	44.0	41.0	5.0
4	084 ST E @ 6400 BLOCK,	Saturday	8:00 - 9:00	35	36.0	47.0	44.0	68.0	9.0
5	084 ST E @ 6400 BLOCK,	Saturday	19:00 - 20:00	35	38.0	47.7	44.0	80.0	9.0
6	084 ST E @ 6400 BLOCK,	Saturday	22:00 - 23:00	35	37.0	51.7	44.0	41.0	3.0
7	084 ST E @ 6400 BLOCK,	Monday	8:00 - 9:00	35	37.0	48.6	43.0	78.0	8.0
8	084 ST E @ 6400 BLOCK,	Monday	20:00 - 21:00	35	35.0	48.0	43.0	54.0	6.0
9	084 ST E @ 6400 BLOCK,	Thursday	14:00 - 15:00	35	34.5	47.4	43.0	115.0	7.0
10	084 ST E @ 6400 BLOCK,	Friday	5:00 - 6:00	35	40.0	56.7	43.0	29.0	3.0
11	084 ST E @ 6400 BLOCK,	Saturday	20:00 - 21:00	35	39.0	50.4	43.0	70.0	5.0
12	084 ST E @ 6400 BLOCK,	Sunday	22:00 - 23:00	35	36.0	52.5	42.5	35.0	2.0

**ENFORCEMENT PRIORITIES
FOR ONE LOCATION**





A sign of the future.

Enforcement Priorities Report

Generated by Heidi Traverso from Heidi Traverso Demo
on Jun 20, 2017 at 12:50:29 PM

Speed Bins: Size 0, Range 1 to 100
Rank Results By 85% Speed
Sites: 084 ST E @ 6400 BLOCK, EB,084
ST E @ 6400 BLOCK, WB,096 ST E W/O MCCUTCHEON RD E, EB,096 ST E W/O MCCUTCHEON R

Time of Day: 0:00 to 23:59
Dates: 6/13/2017 to 6/19/2017
Violation Threshold: Speed Limit + 10

#	Site	Day of Week	Time	Speed Limit	Average Speed	Average Violator Speed	85% Speed	Average # Vehicles	Average # Violators
1	SOUTH TAPPS DR E @ 18400	Wednesday	3:00 - 4:00	35	41.5	49.0	47.5	22.0	5.0
2	SOUTH TAPPS DR E @ 18400	Friday	3:00 - 4:00	35	41.0	49.0	47.5	26.0	6.0
3	084 ST E @ 6400 BLOCK, EB	Monday	5:00 - 6:00	35	41.0	50.0	47.0	20.0	4.0
4	SOUTH TAPPS DR E @ 18400	Saturday	6:00 - 7:00	35	39.0	48.0	47.0	22.0	4.0
5	SOUTH TAPPS DR E @ 18400	Monday	3:00 - 4:00	35	40.5	48.1	46.5	34.0	9.0
6	SOUTH TAPPS DR E @ 18400	Tuesday	3:00 - 4:00	35	41.5	50.2	46.0	25.0	5.0
7	SOUTH TAPPS DR E @ 18400	Friday	4:00 - 5:00	35	40.0	48.3	46.0	97.0	18.0
8	SOUTH TAPPS DR E @ 18400	Thursday	3:00 - 4:00	35	40.5	48.0	45.5	21.0	4.0
9	084 ST E @ 6400 BLOCK, EB	Saturday	18:00 - 19:00	35	38.0	48.3	45.0	89.0	12.0
10	SOUTH TAPPS DR E @ 18400	Sunday	7:00 - 8:00	35	39.0	49.0	45.0	26.0	3.0
11	SOUTH TAPPS DR E @ 18400	Friday	23:00 - 24:00	35	39.0	48.0	45.0	56.0	8.0
12	SOUTH TAPPS DR E @ 18400	Tuesday	4:00 - 5:00	35	40.0	47.6	45.0	104.0	14.0

FOR MULTIPLE LOCATIONS

REPORTS

SPEED EFFECTIVENESS



Speed Effectiveness Report

Generated by Marketing Demo from All Traffic Solutions Traffic Study Account on Jun 5, 2017 at 4:34:07 PM

Speed Bins: Size 0, Range 1 to 100

Time View: By Hour (Avg Volumes)

Site: Beside Mt Nittany United Methodist Church, NB

Time of Day: 0:00 to 23:59

Dates: 1/13/2017 to 1/19/2017

Medium Risk Threshold: Speed Limit + 10

High Risk Threshold: Speed Limit + 20

Date/Time Range	Spd Limit	Sign Mode	Compliant Average Final Speed	Compliant Change In Speed	Low Risk Average Final Speed	Low Risk Change In Speed	Medium Risk Average Final Speed	Medium Risk Change In	High Risk Average Final Speed	High Risk Change In Speed	% of Vehicles Slowed by
0:00	25	Speed Display	19.5	-1.2	30.7	-2.0	39.3	-1.9	47.0	-1.0	66.0%
1:00	25	Speed Display	25.0	-3.5	30.6	-2.1	39.8	-3.5	52.0	0.0	65.4%
2:00	25	Speed Display	19.8	-5.6	31.1	-2.6	39.2	-1.1	0.0	0.0	75.8%
3:00	25	Speed Display	20.1	0.9	30.9	-2.2	40.0	-3.0	48.2	-2.4	72.5%
4:00	25	Speed Display	23.6	-2.4	30.0	-2.1	39.8	-1.9	48.7	-0.7	75.6%
5:00	25	Speed Display	23.8	-2.3	30.4	-1.9	39.7	-1.9	47.6	-0.2	64.8%
6:00	25	Speed Display	23.1	-3.4	30.4	-1.8	38.8	-1.5	50.5	-0.4	65.5%
7:00	25	Speed Display	22.5	-1.4	29.9	-1.7	38.2	-1.3	50.3	0.3	65.6%
8:00	25	Speed Display	20.9	-1.8	29.9	-1.7	38.2	-1.3	49.4	-0.2	66.8%
9:00	25	Speed Display	21.7	-1.6	30.3	-1.7	36.9	-0.9	46.5	-1.0	63.3%
10:00	25	Speed Display	22.0	-1.7	30.1	-2.3	38.5	-1.8	47.6	-1.4	68.8%
11:00	25	Speed Display	22.3	1.3	30.0	-1.9	38.8	-1.5	48.5	-0.3	69.3%
12:00	25	Speed Display	21.7	-1.3	30.1	-2.1	38.6	-1.4	47.1	-0.8	66.9%
13:00	25	Speed Display	23.4	-2.0	30.0	-2.3	38.8	-1.4	48.3	-0.9	73.4%
14:00	25	Speed Display	22.9	-2.5	30.1	-2.2	38.8	-1.1	48.7	0.0	69.6%
15:00	25	Speed Display	22.2	-2.4	30.1	-2.2	38.3	-1.1	48.0	-1.8	71.4%
16:00	25	Speed Display	23.2	-2.3	30.0	-2.1	38.5	-1.4	47.7	-0.7	70.6%
17:00	25	Speed Display	22.6	-2.5	29.8	-1.7	38.1	-1.4	47.5	0.3	69.4%
18:00	25	Speed Display	22.7	-2.2	30.1	-1.9	38.0	-1.5	48.4	-0.3	69.5%
19:00	25	Speed Display	22.7	-0.4	30.2	-2.0	39.3	-1.4	49.1	-0.4	67.4%
20:00	25	Speed Display	21.4	-0.5	29.9	-2.4	39.0	-1.5	48.6	-0.6	71.0%
21:00	25	Speed Display	22.8	-2.0	30.2	-2.4	38.8	-2.0	47.6	-1.0	71.2%
22:00	25	Speed Display	23.8	-2.5	29.9	-2.5	39.6	-2.0	50.3	-1.2	73.4%
23:00	25	Speed Display	22.9	-2.8	30.3	-2.6	39.3	-2.1	0.0	0.0	74.2%



Speed Effectiveness Report

Generated by Marketing Demo from All Traffic Solutions Traffic Study Account on Jun 5, 2017 at 4:34:11 PM

Speed Bins: Size 0, Range 1 to 100

Time View: By Hour (Avg Volumes)

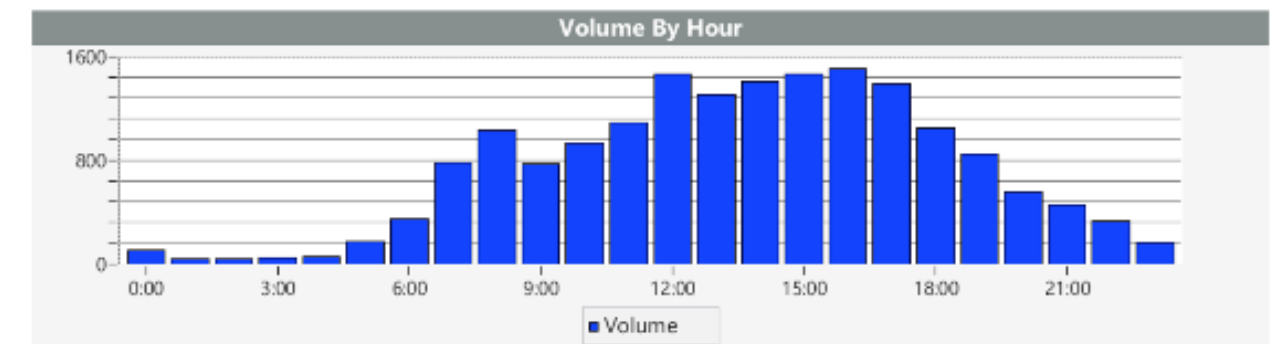
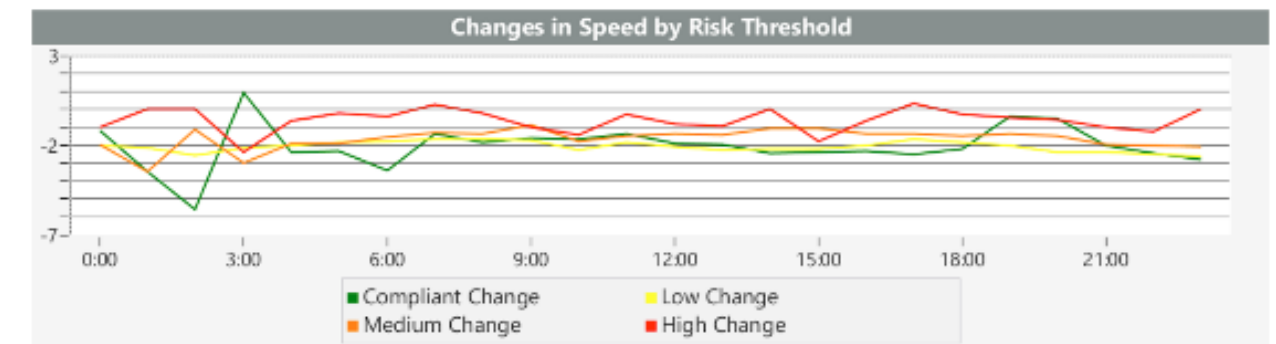
Site: Beside Mt Nittany United Methodist Church, NB

Time of Day: 0:00 to 23:59

Dates: 1/13/2017 to 1/19/2017

Medium Risk Threshold: Speed Limit + 10

High Risk Threshold: Speed Limit + 20



REPORTS

VOLUME BY SPEED

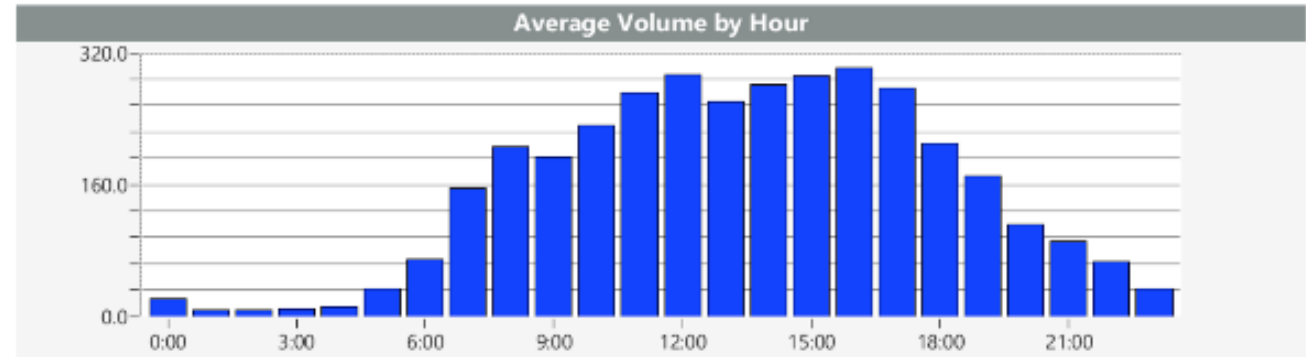
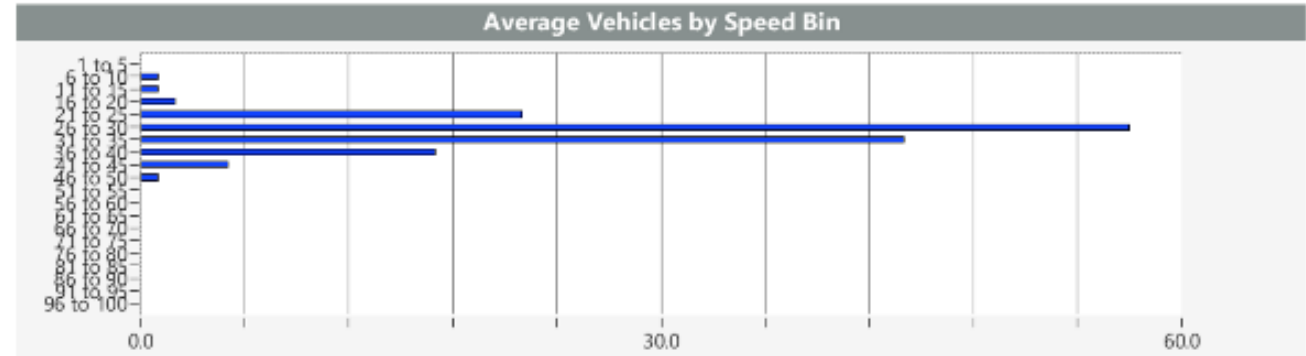


Volume By Speed Report
 Generated by Marketing Demo from All Traffic Solutions Traffic Study Account
 on Jun 5, 2017 at 4:35:12 PM
 Speed Bins: Size 5, Range 1 to 100
 Time View: By Hour (Avg Volumes)
 Site: Beside Mt Nittany United Methodist Church, NB
 Time of Day: 0:00 to 23:59
 Dates: 1/13/2017 to 1/19/2017

Hour	Spd Limit	1 to 5	6 to 10	11 to 15	16 to 20	21 to 25	26 to 30	31 to 35	36 to 40	41 to 45	46 to 50	51 to 55	56 to 60	61 to 65	66 to 70	71 to 75	76 to 80	81 to 85	86 to 90	91 to 95	96 to 100	Avg Spd	Avg Num Vehicles
0:00	25	0	0	0	0	1	7	8	3	1	0	0	0	0	0	0	0	0	0	0	0	31	21
1:00	25	0	0	0	0	0	3	3	1	0	0	0	0	0	0	0	0	0	0	0	0	33.5	8
2:00	25	0	0	0	0	1	2	3	1	0	0	0	0	0	0	0	0	0	0	0	0	31.6	8
3:00	25	0	0	0	1	1	2	2	1	1	1	0	0	0	0	0	0	0	0	0	0	32.8	9
4:00	25	0	0	0	0	1	4	3	2	1	1	0	0	0	0	0	0	0	0	0	0	32.6	11
5:00	25	0	0	0	0	6	9	9	5	3	1	0	0	0	0	0	0	0	0	0	0	32.2	34
6:00	25	0	0	0	1	9	25	23	7	3	1	0	0	0	0	0	0	0	0	0	0	30.6	69
7:00	25	0	1	1	2	18	64	48	17	4	1	1	0	0	0	0	0	0	0	0	0	30.6	155
8:00	25	0	2	5	4	25	80	59	24	5	1	0	0	0	0	0	0	0	0	0	0	29.4	205
9:00	25	1	2	2	4	31	64	59	22	8	1	0	0	0	0	0	0	0	0	0	0	29.3	193
10:00	25	0	1	4	5	37	88	63	26	8	1	0	0	0	0	0	0	0	0	0	0	29.5	232
11:00	25	0	2	4	6	51	102	73	26	6	2	0	0	0	0	0	0	0	0	0	0	29.3	272
12:00	25	0	2	3	6	35	109	82	44	10	2	0	0	0	0	0	0	0	0	0	0	30	298
13:00	25	0	0	1	3	39	95	76	33	12	2	1	0	0	0	0	0	0	0	0	0	30.8	260
14:00	25	0	1	2	3	37	113	79	34	10	1	0	0	0	0	0	0	0	0	0	0	30.4	281
15:00	25	0	1	2	5	40	113	91	31	6	2	0	0	0	0	0	0	0	0	0	0	30.3	292
16:00	25	0	0	1	4	43	123	95	27	6	1	0	0	0	0	0	0	0	0	0	0	30	301
17:00	25	0	3	2	5	54	115	75	19	4	1	0	0	0	0	0	0	0	0	0	0	29	277
18:00	25	0	1	2	1	29	81	61	28	6	1	1	0	0	0	0	0	0	0	0	0	30.1	210
19:00	25	0	0	1	4	26	59	51	17	10	1	1	0	0	0	0	0	0	0	0	0	30.4	170
20:00	25	0	1	1	3	14	45	32	11	4	1	0	0	0	0	0	0	0	0	0	0	30.2	112
21:00	25	0	0	1	1	10	35	31	9	3	2	0	0	0	0	0	0	0	0	0	0	30.7	91
22:00	25	0	0	0	1	9	24	19	7	4	1	0	0	0	0	0	0	0	0	0	0	31.4	66
23:00	25	0	0	0	0	4	12	12	4	2	0	0	0	0	0	0	0	0	0	0	0	30.6	33
Avg # Vehicles		0	1	1	2	22	57	44	17	5	1	0	0	0	0	0	0	0	0	0	0	30.7	150



Volume By Speed Report
 Generated by Marketing Demo from All Traffic Solutions Traffic Study Account
 on Jun 5, 2017 at 4:35:18 PM
 Speed Bins: Size 5, Range 1 to 100
 Time View: By Hour (Avg Volumes)
 Site: Beside Mt Nittany United Methodist Church, NB
 Time of Day: 0:00 to 23:59
 Dates: 1/13/2017 to 1/19/2017



MAXIMIZE RESOURCES

- Traffic reports show you where and when to deploy officers and equipment
- Equipment data alerts you of low batteries, tampering and violations
- Share reports with traffic engineers, public works and other agencies



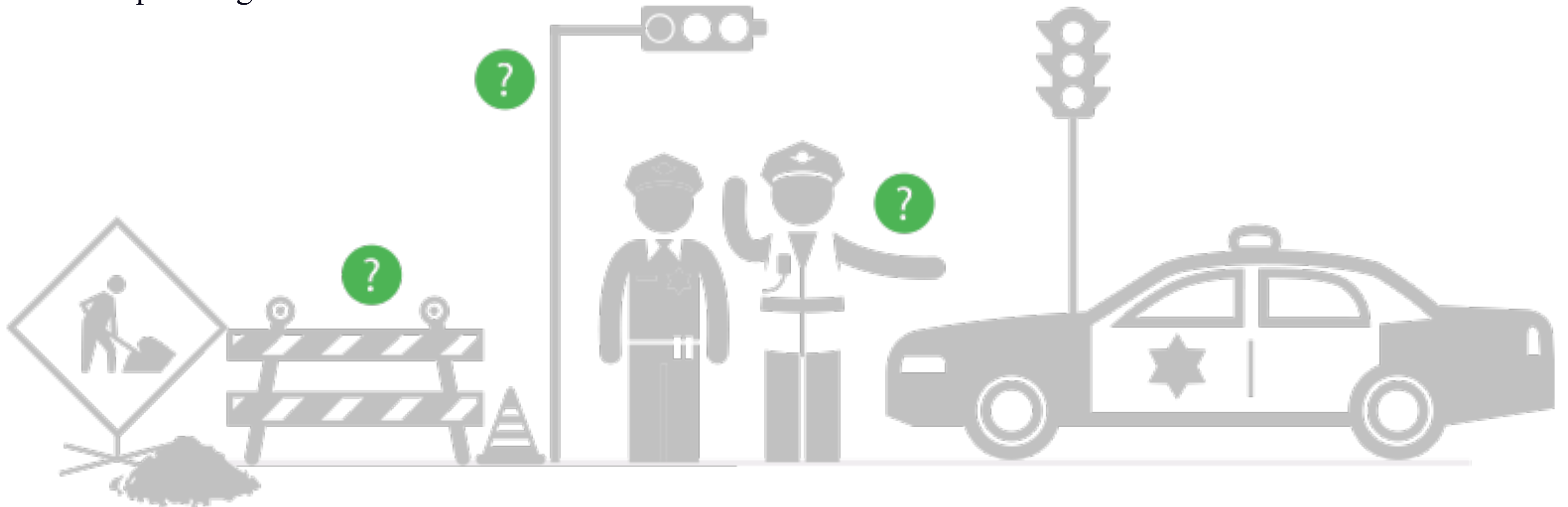
PROOF OF SUCCESS

- Submit reports for state grants
- Present reports at Town Council, Community meetings
- Post on your Department website
- Ongoing reports for your police chief
- Share with local media



LONG TERM PLANNING

- Identify future safety and enforcement needs
- Locations where issues are trending upward
- Share data with municipality for their planning needs



HOLISTIC VIEW OF THE FUTURE

WHEN AGENCIES SHARE DATA EVERYONE BENEFITS:

- Share traffic volume data by the hour with public works dept. so they can schedule road crews
- Traffic engineers need to know trouble spots where road modifications are needed
- Use count and classification data to document displaced traffic



SUMMARY

USING TRAFFIC DATA AS EVIDENCE LEADS TO BETTER

- Resource utilization
- Reduced speeding violations
- Improved community relations
- Safer roads





QUESTIONS?



THANK YOU

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ALLTRAFFICSOLUTIONS.COM