

Partnership between PennDOT's Central RTMC and County 911 Centers/EMA

December 12th, 2019



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IDENTIFYING THE OBSTACLE (WHY?)

- When **notified** of a crash/incident on roadways
- Sets off a **chain of activities**
- **RTMC alerts** motorists / **increases safety** of first responders
- **Goal** : decrease secondary crashes/Delays
- **Prior to pilot**, 35 minutes to **disseminate information** to traveling public
- **Delayed alerts** to motorists **creates the possibility** of increased congestion and safety issues
- **Need**: Reduce time to alert motorists



HOW HAVE WE GOT HERE?

- In **2018-19**, we needed to make the process **more efficient**
- As part of **Regional Operations Plan** (ROP) process, we identified a problem with 911
- Pilot with **Clearfield County** 911 Center
- **Opportunity to share resources** was identified
- **PennDOT shared** its CCTV feeds and **in return**, Clearfield County 911 Center shared their **Computer Aided Dispatch** (CAD) Webview program
- **Microwave antenna** on top of PennDOT building was used to **establish a direct connection** to 911 Center microwave dish
- PennDOT **accesses 911 Web View** through a password-protected website



COMMUNICATIONS DEPLOYED

Microwave Antenna



- **Microwave signal** between 911 Center & PennDOT creates a **constant connection** allowing the **911 center** to **access** video camera feeds
- Allows for **exchange of CAD data** to RTMC (later expanded to Internet-based)
- **Benefit:** 911 did not have to pay for **broadband connection fee** & PennDOT did not have to pay for equipment

NEW PROCESS FLOW CREATED



- Incident occurs
- 911 is the first to be notified




NEW PROCESS FLOW CREATED

911 Center **receives & processes** a call;
they **populate** the **Web View** program, information is
automatically displayed on **RTMC Operator Work Stations** via
password-protected Internet website. The operator begins to
populate RCRS.

County 911 CAD Web View					
Last update: 09/20/2019 08:50:13 Total Calls: 7					
CFS (v)	Fire Call Type (All)	Call Time (All)	Address (All)	Police Call Type (All)	Common Name (All)
226		09/20/2019 08:48:05		Alarm-Burglar	
223		09/20/2019 08:43:31	138 STANDING STONE LN -	Vehicle Crash No Injuries	
220		09/20/2019 08:40:05		Outside Agency Assist	
219		09/20/2019 08:38:15		Vacation Home Check	
218	Fire-Medical Assi	09/20/2019 08:34:36		Health and Safety EMS Assi	
216		09/20/2019 08:31:24		Traffic Stop	
208		09/20/2019 08:15:42		Health and Safety EMS Assi	


NEW PROCESS FLOW CREATED



511
PA 511

Road Condition Reporting System

Logged in as: CWOPA\DOMAICKI



[Home](#) [My Tools](#) [Reports](#) [Admin Login](#)

☰

Event Administration

Event Administration

County:

<Select County for 4-Digit Routes>

State Route:

0080 (I - 080)

Direction:

WEST

Cause:

VEHICLE FIRE

Status:

CLOSED

Verification Method:

PENNDOT PERSONNEL

Info Reported By:

D-2 RTMC

Phone Number:

(814) 768-0725

Event Contact:

D-2 RTMC

Phone Number:

(814) 768-0725

Copy Info Reported By

☐ Enable Segment and Offset for Event Locations

Event Occurs:

10/23/2019

11:22

Use Current Date and Time

Estimated Date to Re-Open:

10/23/2019

12:08

Time Notified:

10/23/2019

11:23

Use Current Date and Time

Time Verified:

10/23/2019

11:23

Copy Date and Time Notified

1st Responders Arrived:

Use Today's Date

PennDOT Arrived:

Use Today's Date

☐ Fatality

☐ School Bus

☐ Commercial Vehicle Rollover

Police Juris:

HAZMAT Criteria

If you select a full road closure in the Status list, you MUST provide a beginning and ending location for the closure!

NEW PROCESS FLOW CREATED



Google Maps

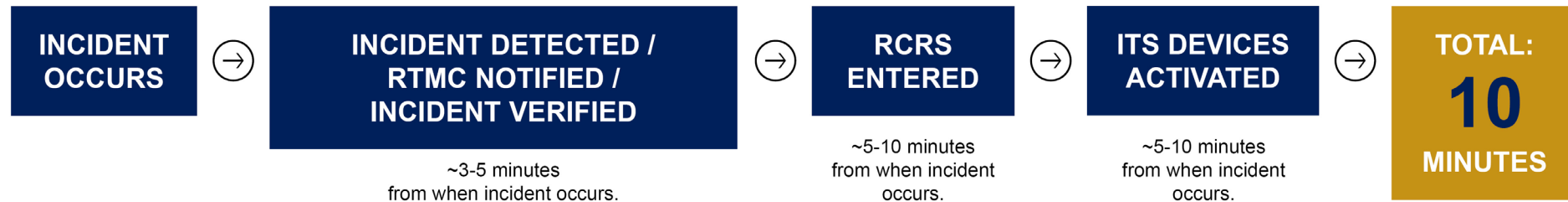


NEW PROCESS FLOW CREATED

BEFORE INTEGRATION



AFTER INTEGRATION



- By **decreasing timeline between when incident occurs** and **activation** of ITS devices (DMS/HAR)/RCRS
- **Ultimately results** in safer transportation system for the traveling public and emergency responders

911 INTEGRATION INFLUENCE REPORT

	BEFORE				AFTER					
County	Crashes	Captured in RCRS	Captured %	RCRS Entry Time	Crashes	Captured in RCRS	Captured %	RCRS Entry Time	Growth %	
Huntingdon	324	11	3.00%	31	181	73	40.00%	12	2109.00%	708% Average Growth of incidents captured (Situational Awareness)
Sullivan	64	2	3.00%	33	9	4	44.00%	7	1956.00%	
Columbia	608	19	3.00%	36	271	89	33.00%	11	1280.00%	
Lycoming	767	42	5.00%	37	148	73	49.00%	8	1196.00%	
Somerset	737	19	3.00%	33	501	119	24.00%	10	1016.00%	
Cambria	785	55	7.00%	32	59	22	37.00%	10	991.00%	
N-Umberland	609	38	6.00%	44	256	63	25.00%	13	815.00%	
Montour	194	11	6.00%	46	88	27	31.00%	11	646.00%	Captured 31% of incidents compared to 8% before.
McKean	247	18	7.00%	35	173	68	39.00%	13	587.00%	
Tioga	376	21	6.00%	40	243	77	32.00%	11	463.00%	
Snyder	367	28	8.00%	33	81	23	28.00%	18	451.00%	
Mifflin	382	15	4.00%	30	690	166	24.00%	13	382.00%	
Potter	124	8	6.00%	30	66	15	23.00%	9	300.00%	
Centre	1050	196	19.00%	22	1501	613	41.00%	12	172.00%	Average of 11.5 Minutes for RCRS entry, reduced from 32 min
Clearfield	338	54	16.00%	25	2184	870	40.00%	13	152.00%	
Cameron	54	3	6.00%	20	28	1	4.00%	12	90.00%	
Clinton	304	62	20.00%	19	368	112	30.00%	12	80.00%	
Union	317	31	10.00%	38	43	5	12.00%	12	70.00%	
Elk	273	36	13.00%	16	225	60	27.00%	12	107.00%	
Bedford	Data N/A				Data N/A					
Fulton	Data N/A				Data N/A					
	7920	669	7.95%	31.5789	6890	2420	30.89%	11.5263	708.67%	

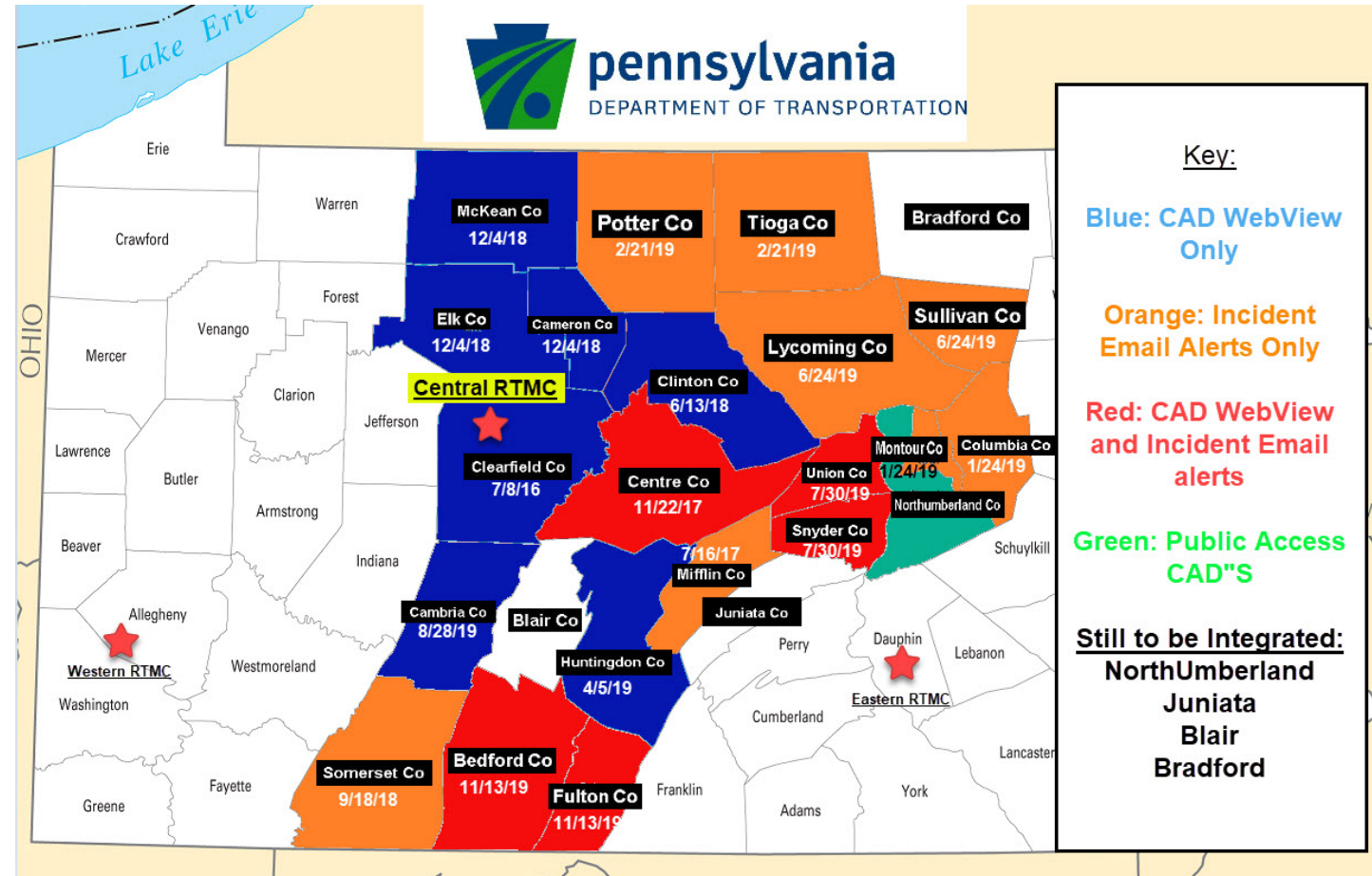
Data = Reportable Crashes All Roads including non state owned roads

Before Data = 1 Year Prior to Integration

Growth = increase in the capture % divided by the original capture %.

PARTICIPATING COUNTY 911 CENTERS

- Integrated 21 of 24 911 Centers
- 3 remaining 911 Centers have expressed interest



QUOTE FROM JEREMY RUFFNER

“It wasn’t until the project was fully implemented that I noticed how well the relationship between 911 and the CRTMC was working. While responding to an incident on interstate 80, we passed the Dynamic Message Sign which was a mile or two before the incident. To my surprise and amazement, the sign was already updated and alerting traffic to the incident ahead. Motorists were moved into the left lane, passing the emergency, and there was no traffic backlog. The system was working how it should!”

– Jeremy Ruffner, Clfd. Co 911 Center & local firefighter



911 Pilot Project Cost

Benefit-cost ratio

- Pilot project has nearly \$0 cost associated.
- 911 Directors **create an RTMC profile** to **access CAD WebView** via **Password protected** web based access.
- RTMC CAD WebView **profile is filtered** to view traffic related incidents.(State Highways)



BENEFITS

- Builds positive relationships between agencies
- Increases safety for the traveling public
- Reduces secondary crashes
- Reduces notification time & incident timeline
- Reduces congestion / implement detour faster
- Keeps first responders safer



CONCLUSION

- **Decreased activation time for ITS device activations from 30+ minutes to 5-10 minutes**
- **Pilot project in CRTMC is in the process of developing into a statewide initiative**
- **Roadways are now safer for traveling public and first responders & of course for our families who travel throughout the Commonwealth**

PSU FOOTBALL GAMEDAY PARKING – The Problem

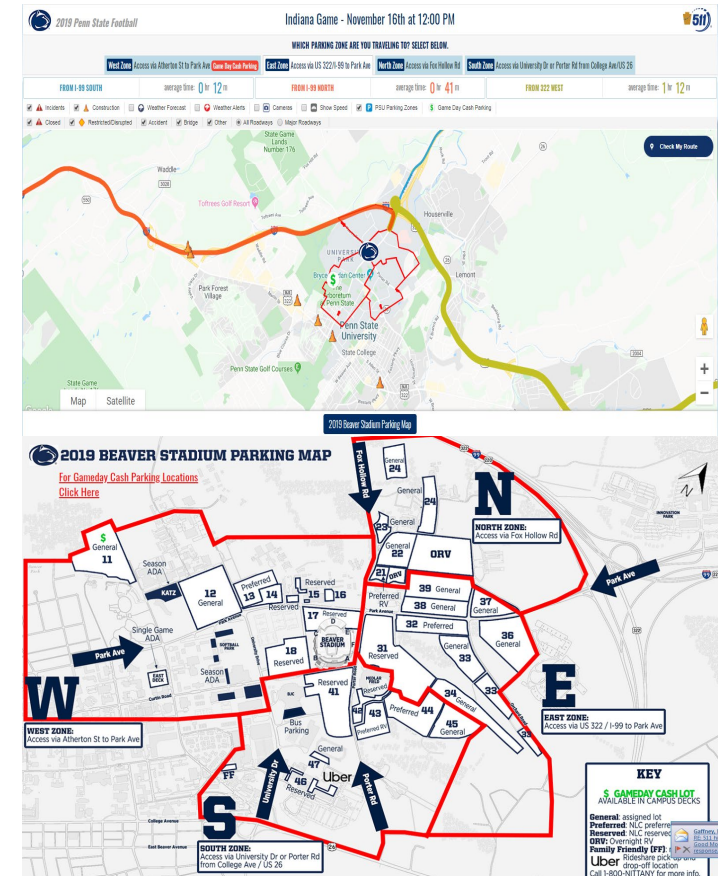
- PSU Football **implemented a new parking system** for the 2019-2020 season
- **Parking lots** were **grouped** into **4 zones** (N,S,E,W), and traffic patterns into the zones were to be **enforced** 4 hours prior to game time
- **Concern** was that **confusion** about the **new system** would lead **increased traffic issues** within State College, and also **potential back ups** onto the **major routes** into the area, such as I-80, I-99, and US 322



PennState

PSU FOOTBALL GAMEDAY PARKING – The Response

- BOMO's **Traffic Systems and Performance Unit** coordinated with the **CRTMC** and **PSU** to **develop** a **special event page** on 511PA for PSU Gamedays
- The **page** showed the **appropriate routes** into the **4 parking zones**, and **displayed** current **travel times** into the zones from the 3 major approaches to the area (US-322, I-99 and I-80)
- **Additional coordination** included an agreement to share **CCTV video feeds** during gameday operations
- **Supported gameday operations** with 30 DMS/CMS, including travel times along with Highway Advisory Radios and CCTV's.



PSU FOOTBALL GAMEDAY PARKING The Results

- Through the first 6 home games, the special event page was viewed on average 1000 times per game weekend
- **CRC News release/Facebook/Twitter/Turn to 511 – Displayed Banner – PSU Link to Website**

Portable CCTV Overview

Portable CCTV Components

- 20' height
- Solar powered
- Digital HD 720p video stream
- HAR Trailers Repurposed
- Network Team Configures/Genetec
- NT adds Sidebar/BARCO Video Wall
- NT Provides Info. Logistics PA511
- AXIS V5914 PTZ
- Modem Sierra wireless RV-50
- SIM Card Unlimited Data Plan



Portable CCTV Applications

- **Key Winter Locations**
- **Special Events**
- **Safety Concern Areas**
- **Construction Projects**
- **Emergency incidents**
- **Traffic Signal Concerns**
- **Inter-Agency request / PSU**

Future Uses



- Identified CCTV Gaps on I-80/99
- Incidents / Winter Operations
- CCTV Coverage/Jefferson-Clearfield-Centre-Mercer-Northumberland-Montour-Columbia (1-10-2-3)
- 10K vs 30K

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