

COVID-19: Considerations for First Responders

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Lesson Outline

- Violent Extremist Exploitation of Covid-19
- Considerations complicating first responders' response
- Research project overview & resources for first responders

Assessing Violent Extremist Threat Relative to Covid-19

- **Opportunity**

- Uncertainty, fear, anxiety, social isolation
- Captive audiences for online propaganda consumption
- First responders are stretched more thinly
- Response to serious incidents problematized
- Fewer SARs initiated by quarantined civilians (assumption)
- Medical facilities, 5G towers, protests as attractive soft targets

- **Motivation**

- Govt legitimacy in question just as govts must exercise power
- Conspiracy theories flourishing (anti-Asian, anti-Semitic, anti-govt)
- High unemployment, disparity b/t haves and have-nots
- *Foreign influence operations are amplifying polarizing narratives*

- **Capability**

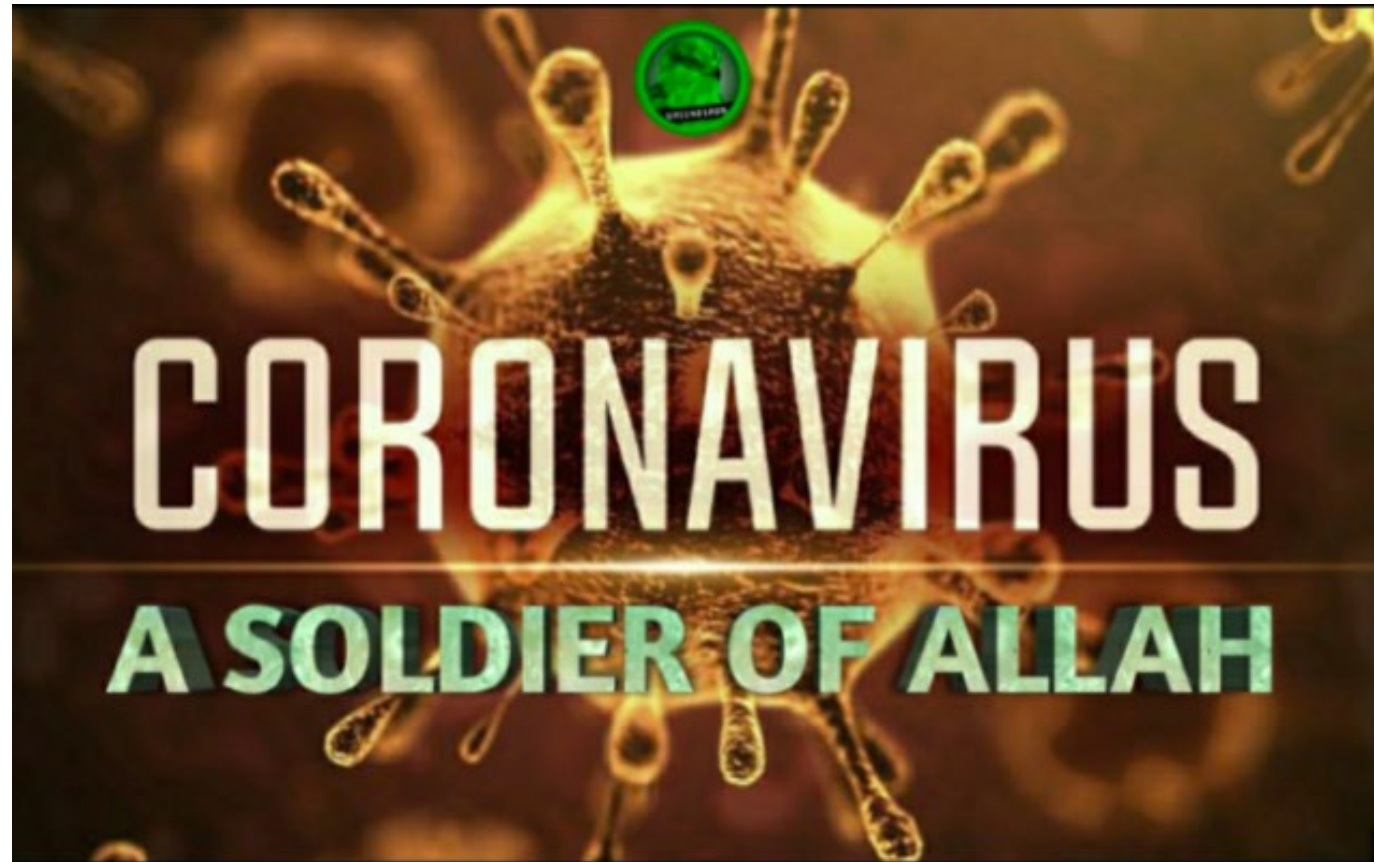
- Calls to use the virus as a biological agent
- Armed protestors can allow for rapid escalation to violent civil unrest

Anti-Govt Extremists & the Lock-Down



The Boogaloo
The Big Luau
The Big Igloo

Proselytize, Recruit, Retain



"It is falsehood to worship America and to fear it instead of Allah the Almighty"
- Al-Naba

The Virus as Vector



Exiled Egyptian Activist Calls for infected individuals to visit the Egyptian Embassy in New York City and shake hands with government officials.

Anti-Asian Propaganda, and...



Remember - everyone who looks Chinese is suspect from now on. If they cough anywhere in public, act visibly distraught. Make them feel like they're a plague victim in the height of the Black Death. If they confront you about it, act like you're scared for your life, and if you're armed, consider protecting your life at their expense. If you kill someone whom you believe to be an immediate danger to you, you have a good chance to be acquitted, especially if you don't talk to the cops and get a lawyer. Escalation is acceleration.

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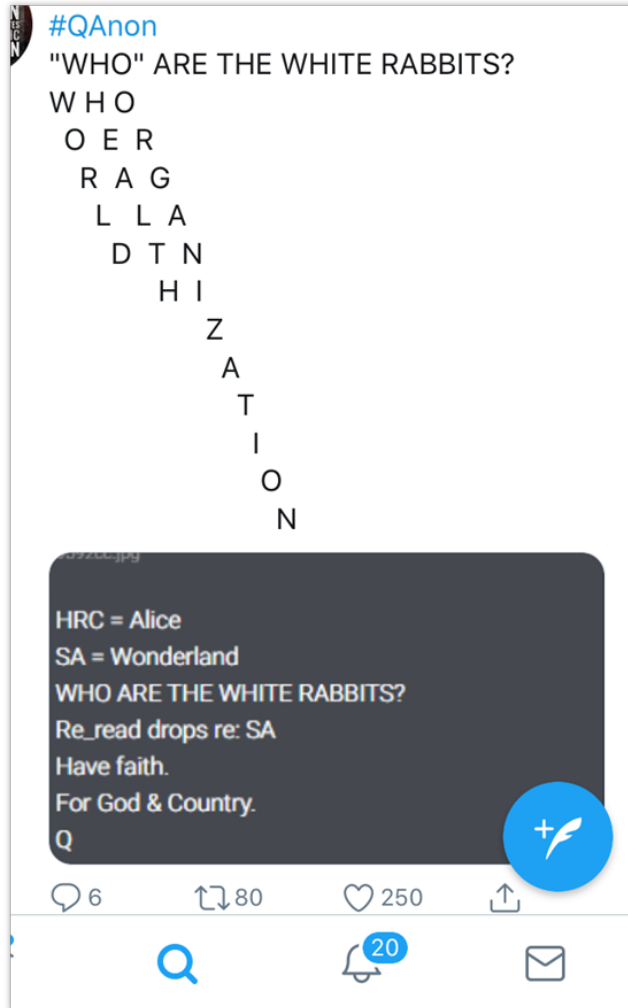
“Escalation is acceleration.”

Anti-Semitic Propaganda



Source: Anti-Defamation League

Conspiracy Theories



US Secretary of State Mike Pompeo Calls The COVID-19 Pandemic A 'Live Exercise' – Trump Responds 'You Should Have Let Us Know' via @



US Secretary of State Mike Pompeo Calls The COVID-19 Pandemic A 'Li...

Terrorist Plots



Hate Crimes



A Tragedy in Three Acts: Covid-19 and Compounding Crises

Act 1: Anti-Lockdown Protests Energize:

- Anti-govt extremists like the Boogaloo Bois
- Xenophobic and Conspiracy Theory Extremists

Act 2: George Floyd Protests Energize & Create Opportunity for:

- Anarchist extremists
- Anti-govt extremists
- Anti-fascist extremists
- Anti-law enforcement extremists
- Racist extremists
- *Foreign Influence Operations which Amplify all of the above*

Act 3: The U.S. General Election and the 2nd Wave of Covid-19

Expect increased unrest as restrictions ease and then stiffen, infection numbers rise again, and the election nears, as responses to Covid-19 and to civil unrest have become politicized.

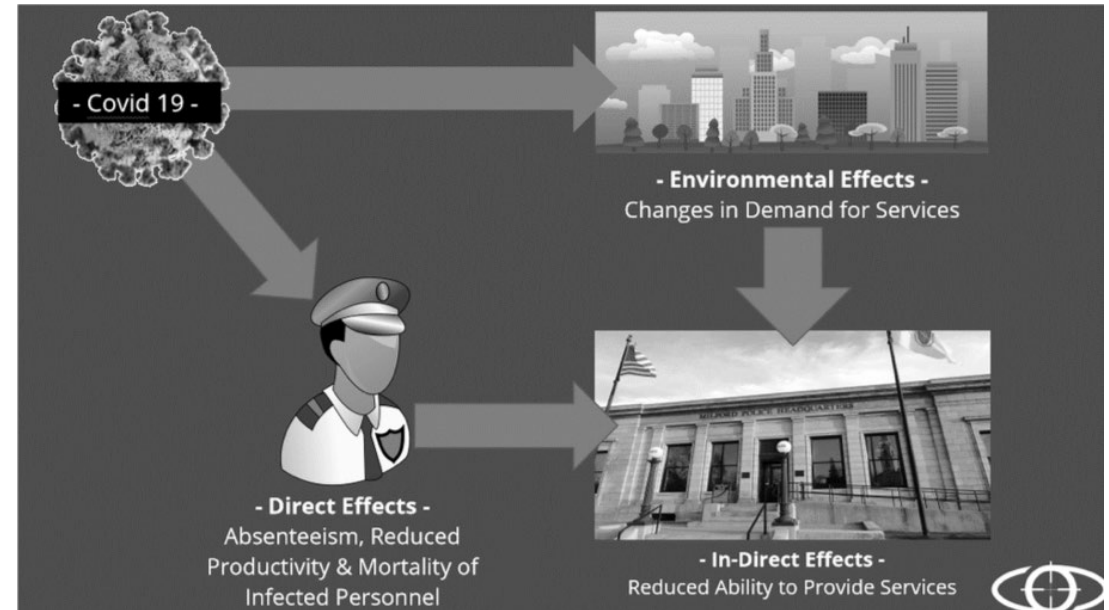
Complicating Factors

Environmental Effects: Changes in level and type of demand for services due to the pandemic

- Coupled w/increased demand due to natural disasters

Direct Effects: Illness driven absenteeism, reduced productivity, and mortality of personnel

Indirect Effects: The effects of COVID-related absenteeism, productivity losses, mortality (direct effects), and changes in demand (environmental effects) have on your operations and ability to provide services. There are short term and long term-indirect effects



Environmental Effect: FDNY EMS Call Volume

- Normal Call Volume is Approximately 4,000 per day.
- March 3-March 24 was 5,700 to 6,200 per day due to COVID
- An approximate 50% increase



Source: Engle, R. (March 30, 2020)

Direct Effect: Quarantines in Washington, DC

- 177 Personnel from Fire & Emergency Medical Services Unit Quarantined March 30, 2020
- Exposure to infected co-workers
- Approximately 10% of total personnel.



Source: Fox 5 DC (March 30, 2020)

Indirect Effect: Police Service Delivery Changes

- 43% of police departments report changing response to specific calls for service.
- 76% report providing guidance on reducing physical arrests for minor offenses.



Monitor & Mitigate the Impact of COVID-19 on Public Safety

- **Build** situational awareness of COVID-19 and its effects on first responders
- **Analyze** and understand literature regarding past pandemics' effects on first responders and other public safety organizations
- **Provide** initial best-practice guidelines for public safety organizations in public health emergencies
- **Monitor** current events, collect data, and rapidly synthesize information for use by first responders
- **Review** practices and planning guidance and analyze data to identify and disseminate evidence informed practices to be shared by DHS across the homeland security enterprise

Literature Review

- Environmental, Direct, and Indirect
- Staffing availability and deployment
- Impact Surveys
- Use of PPE
- Alternative Service Delivery Approaches
- Policy Changes
- Human Resources Management
- Risk and Crisis Communications

Big Data Analytics

Google Street View

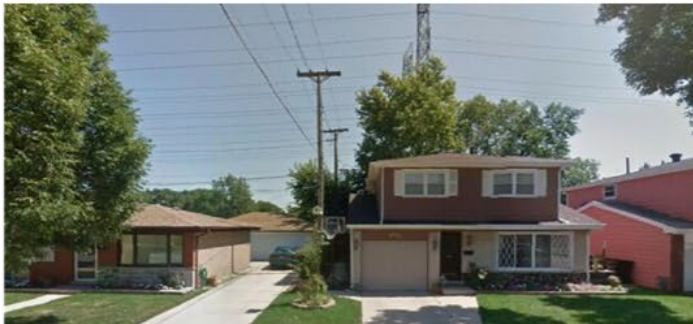
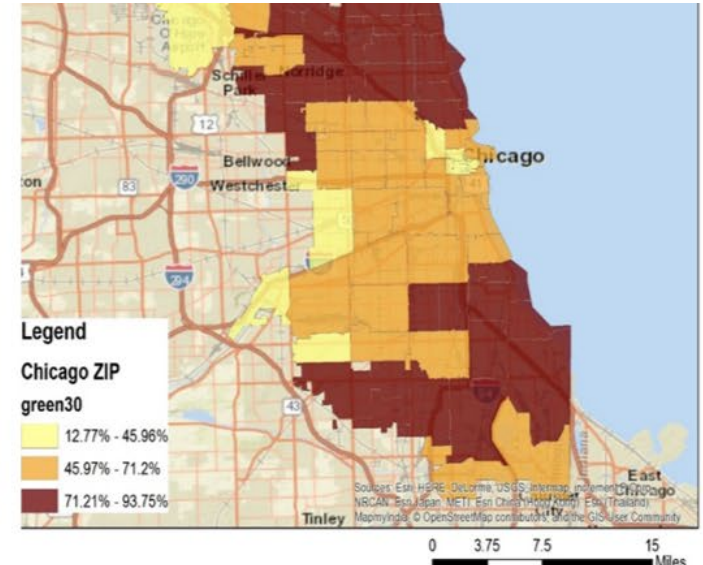
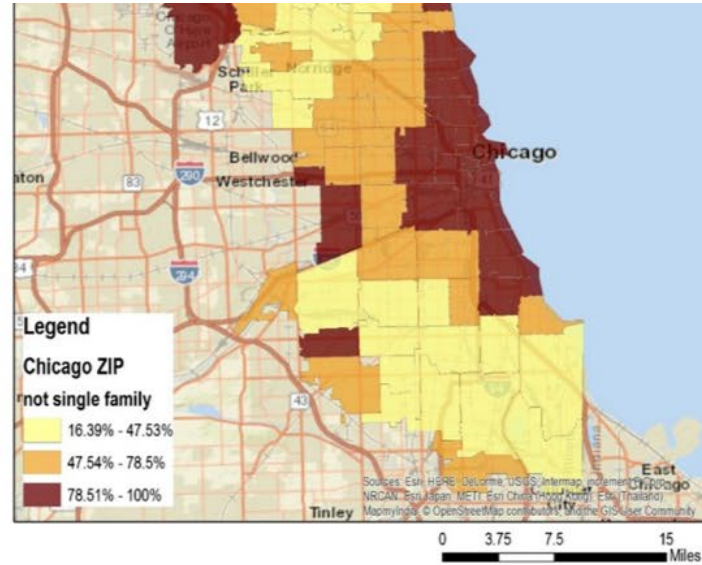
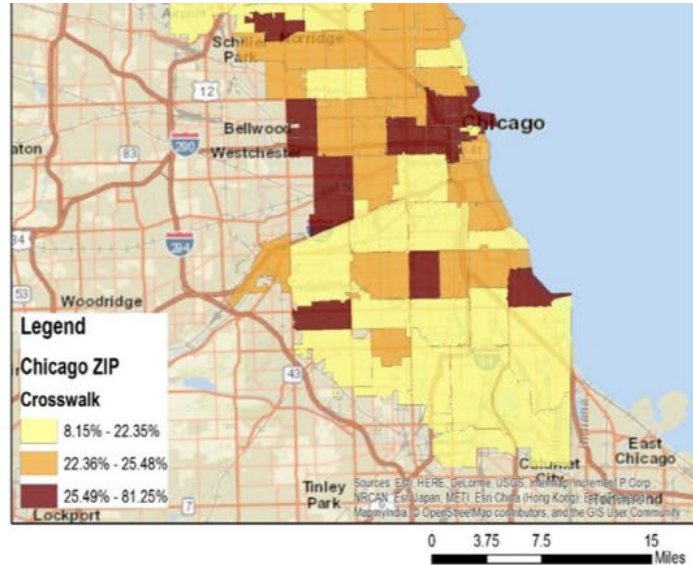
- 360° view of overlapping GPS-linked images

A joint model was trained for all 6 indicators (% accurate)

- Green30 (88.70%)
- Crosswalk (97.20%),
- Not single family house (82.35%)
- Single lane (88.41%)
- Visible wires (83.00%)
- Dilapidated building (89.10%)



Big Data Analytics



Associations between built environment characteristics and zip code level coronavirus cases, 20 States

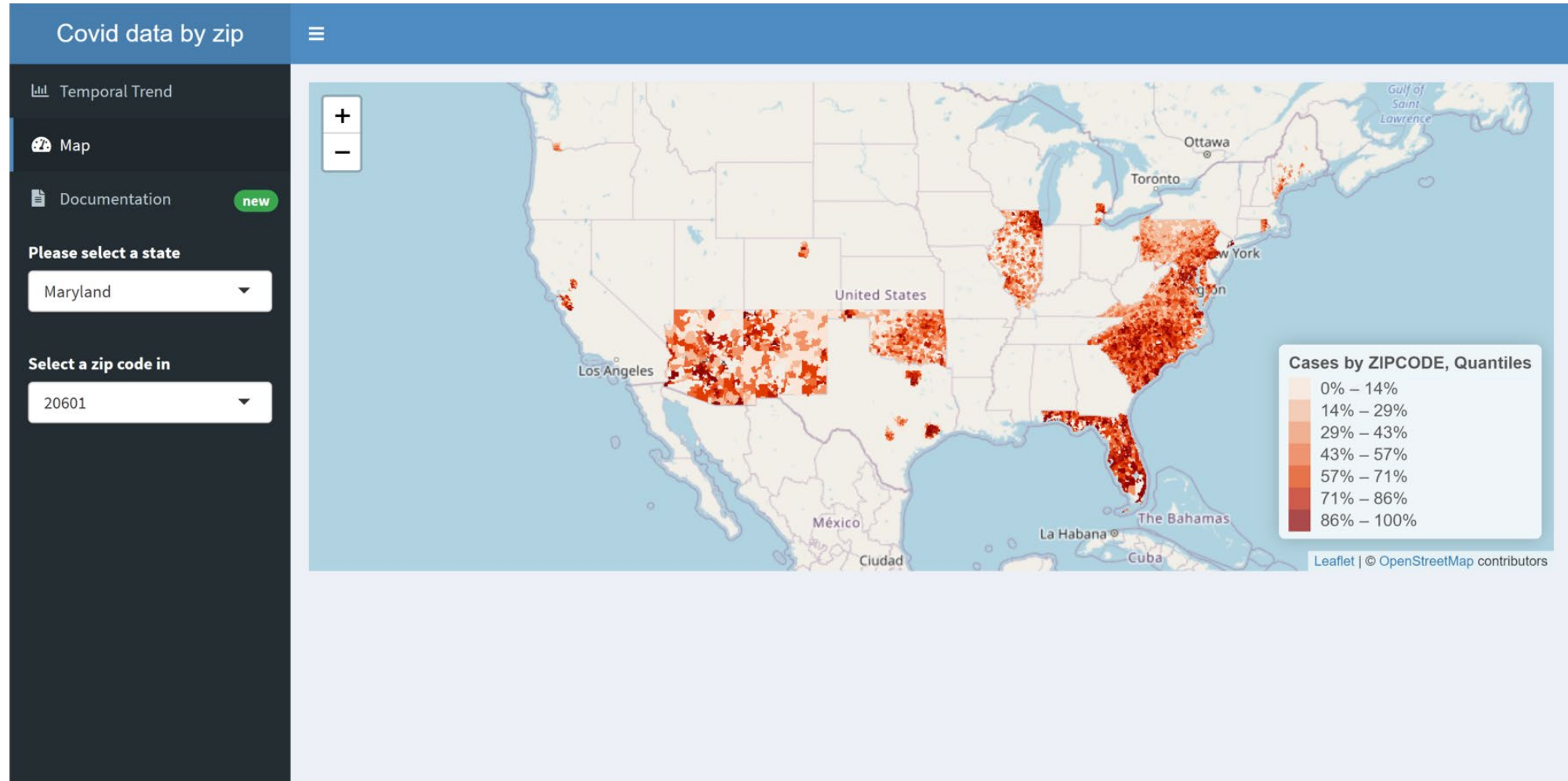
Table 2. Associations between built environment characteristics and zip code level coronavirus cases, 20 States

	Prevalence (95% CI) per 100,000	Prevalence (95% CI) per 100,000	Prevalence (95% CI) per 100,000	Prevalence (95% CI) per 100,000	Prevalence (95% CI) per 100,000	Prevalence (95% CI) per 100,000	Prevalence (95% CI) per 100,000
<i>GSI indicators</i>							
Non-single family home	151 (124, 179)*						
Sidewalks		154 (125, 183)*					
Crosswalks			121 (89, 152)*				
Visible wires				63 (38, 88)*			
Dilapidated building					88 (61, 116)*		
Single lane roads						-44 (-68, -19)*	
Green streets							-105 (-132, -78)*
<i>Covariates</i>							
Household size	108 (81, 135)*	107 (80, 134)*	117 (89, 144)*	88 (61, 114)*	89 (62, 116)*	89 (62, 115)*	88 (61, 114)*
Median household income	68 (40, 97)*	46 (17, 74)*	49 (20, 78)*	66 (37, 95)*	59 (30, 88)*	56 (27, 85)*	68 (39, 98)*
Poverty rate	6 (-22, 34)	3 (-25, 31)	11 (-18, 39)	11 (-17, 40)	11 (-17, 39)	8 (-20, 37)	7 (-22, 35)
% Less than H.S. education	225 (187, 262)*	257 (219, 295)*	230 (192, 268)*	229 (191, 267)*	244 (206, 282)*	218 (180, 256)*	225 (187, 263)*
Civilian employment	-26 (-58, 6)	-40 (-72, -8)*	-41 (-73, -9)*	-45 (-77, -13)*	-43 (-75, -12)*	-45 (-77, -13)*	-37 (-69, -5)*
% Asian	25 (1, 49)*	-8 (-34, 18)	12 (-14, 37)	42 (18, 66)*	28 (4, 53)*	44 (20, 68)*	36 (12, 60)*
% Black	129 (108, 149)*	90 (69, 111)*	112 (92, 133)*	126 (105, 146)*	127 (107, 147)*	127 (106, 147)*	133 (113, 154)*
% Hispanic	52 (25, 79)*	47 (19, 74)*	73 (47, 100)*	87 (61, 113)*	76 (50, 103)*	107 (81, 132)*	75 (48, 101)*
Population density	62 (47, 77)*	65 (50, 80)*	64 (47, 80)*	90 (76, 104)*	87 (73, 101)*	89 (75, 104)*	82 (68, 96)*
Median age	44 (12, 76)*	19 (-13, 51)	35 (3, 67)*	32 (0, 64)	31 (-1, 63)	37 (5, 70)*	37 (4, 69)*
<i>Adjusted R-square</i>	0.1647	0.1636	0.1579	0.1544	0.1560	0.1530	0.1582

^a All variables were standardized with a mean of zero and a standard deviation of 1. Adjusted linear regression controlled for the following zip code level demographics: population density, median age, household income, poverty rate, unemployment, percent with less than a high school education, percent Asian, percent black, percent Hispanic. Zip code coronavirus cases obtained for Arizona, California, Florida, Georgia, Illinois, Maryland, Michigan, Missouri, New York, New Mexico, North Carolina, Ohio, Oklahoma, Pennsylvania, Rhode Island, Texas, Utah, Virginia, Washington, Oregon.

*p<0.05; N=7,625 zip codes

Big Data Analytics



Mixed Methods Study

- Collect quantitative data from first responder organizations to:
 - Measure impact
 - Explore variation across diverse organization types
 - Leverage existing data & project-specific collection
 - Identify effective strategies to mitigate impact and maintain service delivery.
- Collect qualitative data from first responder organizations to:
 - Add context to quant. Data
 - Tease out causal processes
 - Explore variation across diverse organization types
 - Leverage existing data & project-specific collection
 - Identify effective strategies to mitigate impact and maintain service delivery.

Sampling Strategies



Police

- Sheriffs & Local Police Departments
- Small (<10 sworn), Medium (25-150 sworn), and Large Agencies (150+)
- Urban, Suburban, and Rural



Fire

- Volunteer & Career
- Organization Size (Small, Medium, Large)
- Urban and Rural
- EMS / Non EMS Providers



EMS

- Urban and Rural
- Organization Size (Small, Medium, Large)
- Transport versus Emergency Response
- Public versus Private

Community
Level
Risk
Factors

Questions & Comments



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Resources

Engle, R. (March 30, 2020). *FDNY hit hard by COVID-19: EMS Chief Bonsignore says historic call volume likely to increase*. EMS1.com.

Fox 5 DC. (March 30, 2020). *177 DC firefighters, 161 DC cops quarantined after coronavirus confirmation among colleagues*. Fox 5 DC.

Lum, C., Maupin, C., and Stoltz, M. (April, 2020). *The Impact of Covid-19 on Law Enforcement Agencies (Wave 1)*. International Association of Chiefs of Police.