

# Contents

What is Project Green Light?	3
History	
System Structure	
Facial Recognition	
Expansion	
What does the Community Think?	
Why is Project Green Light controversial?	6
Controversial Effectiveness	6
Controversial Policies	7
Controversial Results	8
Controversial Costs	9
Controversial Path	9
Two Paths Forward	10
References	11

# What is Project Green Light?

# **History**

According to Captain Sloan of the Detroit Police Department (DPD), Project Green Light (PGL) was conceived after DPD observed that 25% of violent crime in the city was occurring within 500 feet of gas stations. DPD subsequently performed risk modeling that reportedly concluded that late night businesses such as gas stations and party stores were at the greatest risk for violent crime (1; 2).

PGL was first implemented on January 1<sup>st</sup>, 2016, as a partnership between local business, the City of Detroit, and community groups. On that day, eight gas stations had real-time security cameras connected with DPD headquarters for monitoring (3). In the three and a half years since then, PGL has expanded rapidly. As of June 2019, there are over 550 participating locations in the city, ranging from gas stations, to churches, to reproductive health centers (4).



Map of Detroit showing Project Green Light locations and their increase over 4 years. Credit: Cyrus Peñarroyo

### **System Structure**

Camera positioning is determined by DPD in coordination with the City of Detroit. Outdoor cameras cover all areas generally accessible to the public on and around the participants property. They are positioned to be able to capture

license plates and avoid glare from light sources. For indoor cameras, there must be at least one camera directly facing regularly used entrances. Each participant of PGL must spend money to become involved in the program. They must purchase and install cameras, PGL signage, decals, and green lights to signify to customers that they are part of the project (3).

PGL cameras currently send live feeds to a 24-hour crime monitoring surveillance center called a "real time crime center" (RTCC). The RTCC opened in November 2017 and is operated by both sworn officers and unsworn individuals. The RTCC has an array of surveillance tools at their disposal including facial recognition software, license plate readers, and access to GPS tether data. They receive other feeds in addition to PGL, including feeds from Rock Financial's cameras, hidden neighborhood cameras ("originally put in place to catch dumping"). The RTCC works with government partners including the FBI and the Department of Homeland Security, and private partners including, DTE, Rock Financial, Downtown Detroit Partnership, and the Ilitchs (1; 2).

The real-time crime center monitors incidents at PGL location in real time through the cameras. They "virtually patrol" each PGL location once a day and physically patrol around 184 PGL locations each day. Around 30 calls from PGL locations come through the center each day. Additionally, PGL locations are given priority over non-PGL locations (1; 2).

## **Facial Recognition**

The City of Detroit put forth a Request for Proposals for a contractor to work closely with the city, DPD, and Motorola (Company that help set up the RTCC) to set up a "turn-key" facial recognition system that would work with the already existing infrastructure of the RTCC. They specifically asked that the facial recognition work on at least 100 concurrent real-time video feeds, be integrated into the PGL system, and can be used by officers with a mobile app (5).

The city received 3 proposals, accepting the one from DataWorks Plus. In late 2017, the city signed a 3 year contract with them using over \$1,040,000 in city funds. The city purchased the Face Plus facial recognition solution, toted by DataWorks Plus to use a combination of two algorithms (ROC and NEC) to match faces citing its program being used by JNET (Pennsylvania), Michigan State Police, San Bernardino County, Chicago Police, and Riverside County. Face Plus is capable of automatically searching all faces that enter camera frames against photos in the entity's database, alerting authorities to any algorithmic matches. Additionally, there is a "watchlist" option where persons of interest can be monitored and alerted for (5).

DPD currently uses SNAP photos for their database. SNAP photos include mug shots, sex offender registry photographs, driver's license photos and state ID photos (6). According to DataWorks Plus, in 2017, this repository contained 8 million criminal pictures and 32 million "DMV" pictures (5). As the Free Press reported in March 2019, almost every Michigan resident has a photo of them in this system (7).

## **Expansion**

Claiming PGL promotes both economic development and safety, the City of Detroit plans to continue extending the program to entities other than commercial businesses (restaurants, multi-family dwellings, mixed use developments, etc.) (1; 2; 8). Despite research contradicting camera presence in schools effectiveness and possible psychologically detrimental effects, an expansion into public schools has already begun – 23 cameras in Randolph Career Technical Educational Center are being monitored at the RTCC (9). According to the DPD, the superintendent will be working on getting all schools into PGL (1; 2; 10). This has already led to students protesting PGL (11).

In the Mayor's proposed Capital Agenda 2020-2024, Mike Duggan called for a \$1,100,000 PGL expansion in 2019, along with a \$350,000 UAV (Drone) program expansion. Additionally, he called for \$4,000,000 by 2020 to expand the RTCC and create two "mini" RTCCs. Duggan also proposed adding PGL to all public transit stops, in buses, and to integrate facial recognition in the streets through a pilot of MioVision Traffic Signal Cameras (12).

# What does the Community Think?

For the past four years, the Detroit Community Technology Project (DCTP) has co-led a participatory research project called the Our Data Bodies Project (ODB). Residents across three cities – Detroit, Los Angeles and Charlotte – were asked questions regarding the impact of how their data is used and how they experience surveillance technologies.

Through research conducted with over 130 residents between the three cities, ODB discovered that surveillance and data collection was deeply connected to diversion of public benefits, insecure housing, loss of employment opportunities, and the policing and subsequent criminalization of the community members that come into contact with these surveillance systems.

The research was conducted to answer three main questions:

- 1. How do marginalized adults experience and make sense of the collection, storage, sharing and analysis of their personal information?
- 2. How, if at all, do marginalized adults connect their ability to meet their basic material and social needs to their inclusion in (or exclusion from) data-based systems?
- 3. What strategies do marginalized adults deploy, if any, to protect their digital privacy, self-determination, and data rights?

Across all three cities, community members expressed an interest in being seen, but indicated that they did not want to feel like they were being watched. They wanted both privacy and the ability to be seen and heard as whole human beings. One resident interviewed said, "I mean your face is not even your own anymore. Your face is being captured by cameras."

ODB's interim report was recently read into congressional record by Brandi Collins-Dexter, Senior Campaign Director for Color of Change (13).

Congresswoman Rashida Tlaib (MI-13), representing a large portion of Detroit, spoke on facial recognition technology during a House Oversight Committee hearing recently. Expressing her anxiety around the technology she stated, "This stuff freaks me out." (14)

The Detroit Digital Justice Coalition (DDJC) through its coalition member Detroit Community Technology Project (DCTP), has joined the growing number of fellow Detroiters concerned or opposed to the controversial expansion of Project Green Light and related facial recognition technologies (15).

# Why is Project Green Light controversial?

The idea that public surveillance equates to public safety has led local governments to make problematic decisions that facilitate an outcome that is either ineffective or unsafe (16). Such policies, such as predictive policing, may disproportionately affect marginalized peoples (undocumented, formerly incarcerated, unhoused, poor, etc.) and minority (black, latinx, etc.) populations (17).

#### **Controversial Effectiveness**

Areas in Detroit and other cities that are inundated with poverty due to decades of disinvestment are subject to higher crime rates (18). While mass

surveillance and more militarized policing may be the route that certain municipalities may be going in – despite evidence contradicting its efficacy – it has been argued that reinvestment into the community that does not displace or further marginalize residents (through housing, education, affordable water, etc.) would actually be effective in reducing crime and improving public safety. This is supported by research that has shown that crime rates increase when public welfare is unable to support individuals (19; 20).

Although many public agencies frequently discuss the benefits of programs such as PGL, past studies have shown that the actual results of these programs vary widely. Other closed-circuit surveillance projects, which are not a direct analog for PGL, have seen mixed impact. In neighborhoods in Chicago, Baltimore, and Newark for example, some areas saw substantial reductions in crime while others did not (21).

Another thing to think about regarding PGL is that even if a positive effect could be proven, it would be diminished upon an increase in scale. The Memorandum of Understanding (MOU) PGL partners sign with the City states that DPD is not obliged to monitor the cameras at all times. (8) Rapid expansion of the program may lead to even less camera monitoring as resources become too strained. This is especially the case if the program grows too quickly – and the department has acknowledged this (1; 2). Researchers at the Urban Institute agree that such a scenario could become quickly problematic, stating that it's quite easy to, "get to the point where it's so saturated that it becomes ineffective for everybody." That is, even if PGL could be proven to be an effective deterrent for crime, it will likely lose its effectiveness if it is believed that the cameras are not being monitored (21).

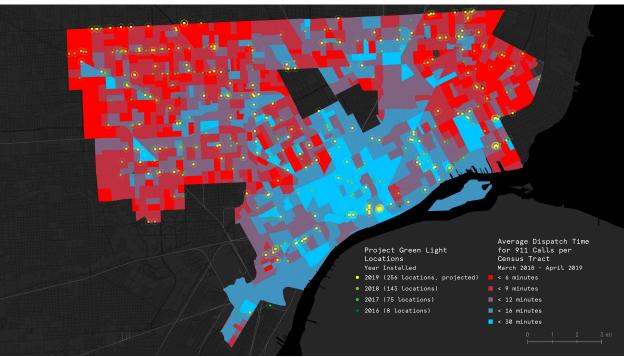
Additionally, costs will increase to sustain a larger program (21). As costs increase, it may be worth questioning if the costs of reactionary policies like massive surveillance are as effective in reducing crime as spending similarly large quantities on preventative policies such as increases in public goods.

#### **Controversial Policies**

DPD recently released two policy drafts regarding the use of facial recognition and traffic light mounted camera footage (22; 6). There were some points it contained (and didn't contain) that are of concern to some residents:

 While policies state that DPD cannot use the cameras for immigration enforcement purposes, the policies do not explicitly exclude DPD from letting the Department of Homeland security (a close partner) from accessing footage or footage related information.

- Non-law enforcement entities, (like Rock Financial) may submit an image for a facial recognition search after filing an incident report.
- Facial recognition may be used (upon approval of DPD officials) to monitor "first amendment-protected events".
- Facial recognition information may be used not just for criminal investigation, but "other types of inquiries" as well.
- If someone is suspected of a crime, their face will be stored in the system until they are identified, no longer a suspect, or the statute of limitation has expired.
- The public may or may not be notified of data breaches
- One individual, the person in charge of the facial recognition program, will also be the only one responsible for overseeing complaints of bias against the program and responding to them.



Map of Detroit showing the relationship between Project Green Light locations and average police response times. Credit: Cyrus Peñarroyo

#### **Controversial Results**

There is substantial political will to expand PGL, especially from the Mayor and the chief of police. There are many statistics used as evidence for PGL's effectiveness.

 Incidents of violent crime reduced by 48% (compared to 2015) at the original 8 PGL sites (3).

- Incidents of violent crime reduced by 23% (compared to 2015) at all PGL sites (3).
- Car-jackings have decreased by 40% in 2 years (23).

These statistics have been deemed too short of a sample size and/or too short of a time frame by researchers (11). It has also been noticed, and confirmed by the Police Chief, that there have been no studies comparing PGL locations to non-PGL locations. In the absence of this, researchers say it is nearly impossible to tie Detroit's crime reduction specifically to Green Light. Additionally, the stats are in line with crime rates that have been decreasing since at least 2007, according to the FBI (24). Motor vehicle theft fell over 30% between both 2007-2009 and 2013-2015. From 2009-2012 violent crime fell by almost 17%.

#### **Controversial Costs**

In January 2018, the mayor announced plans to mandate that all retail business with late night hours partake in PGL, initially costing each business \$1,000 to \$6,000 with an additional yearly charge of over \$1,600 a year in video storage (23; 21). Already, some business owners in the city have confided to reporters that they feel like they are paying for policing (25). Separately, officials such as Commissioner Burch and Deputy Chief Bettison have threatened to decommission PGL locations that do not meet certain beautification standards, in effect removing their priority 911 status stating, "We will pull that light right off of that business and move forward" (1; 2).

#### **Controversial Path**

Many cities have started out with surveillance programs and then moved on to more aggressive programs such as predictive policing, drones, and facial recognition. Detroit is currently on track to follow such a trajectory – it already is utilizing facial recognition for PGL. It plans on using facial recognition on soon to be installed traffic cameras. Such programs have been surrounded by controversy including racial bias, so much so, that some like Los Angeles have even backtracked the polices. There is legitimate fear regarding what that would look like in a majority black city such as Detroit (26; 27; 28; 29).

Some cities, like San Francisco, have preemptively decided that this is a path they do not want to take, banning the use of aggressive surveillance technologies like facial recognition (30). Other cities like Baltimore, have increased its frequency and scale of use, subsequently coming under scrutiny for inappropriate use and racial bias. One example of such use occurred in 2015, when Baltimore police used facial recognition to arrest anyone with outstanding warrants who were protesting the death of Freddie Gray (31). Such

use would be sanctioned as well under Detroit's facial recognition policy (6). There is growing concern that the use of facial recognition software used at protests will lead to watch lists and intimidation, thereby infringing on the human right to protest (32).

## Two Paths Forward

At this juncture in Detroit's history, there are two clear paths forward. The first path sees more surveillance, predictive policing, facial recognition, and other privacy compromising practices with, at the very least, questionable impacts on preventing crime (33). It sees more jails (34). It centers on the belief that people are the problem and that the problem can be solved through fear of punishment, punishment, and removal of said people from society. Such a path could very well lead to greater marginalization of already marginalized communities (21).

The second path is different. It does not assume that people are the main cause of crime. The second path is grounded in the research that shows that the conditions people live in are the greatest influence on criminal activity. It reduces crime by addressing inequalities and societal shortcomings via investment in people and their communities (35). It guards privacy while increasing trust in the government. It both protects and **serves**.

# References

- 1. **City of Detroit.** Detroit Police Commissioners Meeting 04 19 2018. *DetroitMl.gov.* [Online] April 19, 2018. [Cited: June 5, 2019.] http://video.detroitmi.gov/CablecastPublicSite/show/5963?channel=3.
- 2. —. Detroit Board of Police Commissioners Regular Meeting. *DetroitMI.gov*. [Online] April 19, 2018. [Cited: June 5, 2019.] https://detroitmi.gov/Portals/0/docs/policecommissioners/BOPC%20Minutes%20%20%2004-19-18.pdf?ver=2018-05-03-121332-883.
- 3. —. Project Green Light Detroit. [Online] 2019. [Cited: June 4, 2019.] https://detroitmi.gov/departments/police-department/project-green-light-detroit.
- 4. **Detroit Police Department.** Project Green Light Locations. *City of Detroit Open Data Portal.* [Online] June 5, 2019. [Cited: June 5, 2019.] https://data.detroitmi.gov/Public-Safety/Project-Green-Light-Locations/vrh6-6pvj.
- 5. **City of Detroit.** Professional Services Contract Between City of Detroit, Michigan and DataWorks Plus Contract No. 6000801. [Online] 2017. [Cited: June 5, 2019.]
- https://hub.novatuscontracts.com/novatus/services/detroit/downloadDocume nt?documentId=64c55d4f-deb2-4423-94db-62fc2e1e892d.
- 6. —. Facial Recognition Directive 307.5. *DetroitMI.gov.* [Online] January 2019. [Cited: June 2019, 5.] https://detroitmi.gov/document/facial-recognition.
- 7. **Egan, Paul.** Never arrested? Michigan State Police still likely has your photo in its database. *Detroit Free Press.* [Online] March 11, 2019. [Cited: 5 2019, June.] https://www.freep.com/story/news/local/michigan/2019/03/11/michigan-state-police-facial-recognition-database/3102139002/.
- 8. **City of Detroit.** Memorandum of Understanding. [Online] 2019. [Cited: June 4, 2019.] https://detroitmi.gov/departments/police-department/project-greenlight-detroit/agreements.
- 9. Surveillance or Safekeeping? How School Security Officer and Camera Presence Influence Students' Perceptions of Safety, Equity, and Support. Lindstrom Johnson, Sarah, et al. 6, s.l.: journal of Adolescent Health, December 2018, Vol. 63, pp. 732-738.

- 10. **City of Detroit.** DETROIT BOARD OF POLICE COMMISSIONERS REGULAR MEETING 4-5-18. *DetroitMI.gov.* [Online] April 5, 2018. [Cited: June 5, 2019.] https://detroitmi.gov/Portals/0/docs/policecommissioners/BOPC%20Minutes%20 04-05-18.pdf?ver=2018-05-03-120540-760.
- 11. **Ikonomova**, **Violet**. Detroit students fight Project Green Light's expansion to schools. *Metro Times*. April 23, 2018.
- 12. **City of Detroit**. City of Detroit Proposed Capital Agenda 2020-2024. *DetroitMl.gov.* [Online] November 2018. [Cited: June 5, 2019.] https://detroitmi.gov/sites/detroitmi.localhost/files/2018-11/City%20of%20Detroit%20Proposed%20Capital%20Agenda%202020-2024%20Full\_1.pdf.
- 13. **Collins-Dexter, Brandi.** Testimony of Brandi Collins Dexter. *House.gov*. [Online] February 26, 2019. [Cited: June 6, 2019.] https://energycommerce.house.gov/sites/democrats.energycommerce.house.gov/files/documents/Brandi%20Collins%20Dexter%2002.26.2019.pdf.
- 14. **Johnson**, **Jake**. 'This stuff freaks me out': Rep. Rashida Tlaib raises alarm over use of facial recognition as groups demand federal moratorium. *Raw Story*. [Online] June 4, 2019. [Cited: June 6, 2019.] https://www.rawstory.com/2019/06/this-stuff-freaks-me-out-rep-rashida-tlaib-raises-alarm-over-use-of-facial-recognition-as-groups-demand-federal-moratorium/.
- 15. **University of Michigan: Semester in Detroit.** Detroiters Speak 3/5/2019: Containment & Surveillance Shifting Borders & Boundaries. *Youtube*. [Online] April 16, 2019. [Cited: June 6, 2019.] https://www.youtube.com/watch?v=IEXqb3bgoAk.
- 16. **Guariglia**, **Matthew**. Too much surveillance makes us less free. It also makes us less safe. The Washington Post. July 18, 2017.
- 17. **Shapiro, Aaron.** Reform predictive policing. *Nature*. January 25, 2017, Vol. 541, pp. 458-460.
- 18. **Sackett, Chase.** Neighborhoods and Violent Crime. *Evidence Matters.* 2016, Vol. Summer.
- 19. Welfare Payments and Crime. Foley, C. Fritz. 1, February 2011, The Review of Economics and Statistics, Vol. 93, pp. 97-112.
- 20. **Lafree, Gary.** Losing Legitimacy: Street Crime And The Decline Of Social Institutions In America. 1st. New York: Routledge, 1998.

- 21. **Gross, Allie.** Controversial surveillance program coming to Detroit public housing. *Detroit Free Press.* November 6, 2018.
- 22. **City of Detroit.** Use of Traffic Light-Mounted Cameras and Facial Recognition Technology Directive 307.6. *DetroitMl.gov.* [Online] April 23, 2019. [Cited: June 5, 2019.] https://detroitmi.gov/document/use-traficc-light-mounted-cameras-and-facial-recognition-technology.
- 23. **Livengood**, **Chad**. Detroit aims to mandate Project Green Light crimemonitoring surveillance for late-night businesses. *Crain's Detroit Business*. January 3, 2018.
- 24. **FBI.** Crime Data Explorer. [Online] 2019. [Cited: June 4, 2019.] https://crimedata-explorer.fr.cloud.gov/explorer/agency/Ml8234900/crime/2007/2017.
- 25. **Ikonomova**, **Violet**. Project Green Light faces scrutiny as Detroit eyes mandate for thousands of businesses. *Detroit Metro Times*. [Online] January 17, 2018. [Cited: June 6, 2019.] https://www.metrotimes.com/detroit/project-greenlight-faces-scrutiny-as-detroit-eyes-mandate-for-thousands-of-businesses/Content?oid=8539251.
- 26. **Wynter, Kareen.** LAPD Chief Moore Announces Ending Data-Driven Crime Prevention Program. *KTLA 5 News*. April 9, 2019.
- 27. **Neavling, Steve.** Researchers alarmed by Detroit's pervasive, expanding facial-recognition surveillance program. *Detroit Metro Times*. May 17, 2019.
- 28. **Stop LAPD Spying Coalition.** Dismantling Predictive Policing in Los Angeles. Los Angeles: s.n., 2018.
- 29. **Newman**, **Lily Hay**. Facial Recognition Tech is Creepy When it Works And Creepier When it Doesn't. *Wired*. [Online] May 9, 2018. [Cited: June 6, 2019.] https://www.wired.com/story/facial-recognition-tech-creepy-works-or-not/.
- 30. Conger, Kate, Fausset, Richard and Kovaleski, Serge F. San Francisco Bans Facial Recognition Technology. *The New York Times*. May 14, 2019.
- 31. **Baltimore Sun Editorial Board.** Bias in facial recognition technology needs to be fixed. *The Baltimore Sun.* [Online] June 3, 2019. [Cited: June 6, 2019.] https://www.baltimoresun.com/opinion/editorial/bs-ed-bias-bias-facial-recognition-technology-20190524-story.html.
- 32. **Hashem**, **Hoda**. Police Use of Facial Recognition Surveillance Could Violate our Rights. *Rights Info*. [Online] September 24, 2018. [Cited: June 6, 2019.] https://rightsinfo.org/police-use-of-facial-recognition-a-threat-to-human-rights-and-probably-unlawful/.

- 33. **Evelth, Rose.** In the Face of Danger, We're Turning to Surveillance. *Wired*. [Online] March 21, 2019. [Cited: June 6, 2019.] https://www.wired.com/story/surveillance-safety/.
- 34. **Corey, Samuel.** Detroit teens reimagine criminal justice with alternative to new jail. *Detroit Metro Times*. October 5, 2018.
- 35. **Wilkinson, Richard, [perf.].** How Economic Inequality Harms Societies. [prod.] www.TED.com. Youtube.com, 2011.