

Annual Report of the Public Lighting Authority



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"My neighbors were talking about leaving because the lights weren't working. Now my neighbors say, 'Maybe I can stay here now, because the lights are back on.' Our city is coming back, and it's coming back fast."

> **Dell Young,** Charlevoix Village Association

# R

"You cannot underestimate or over-exaggerate the need for lighting when you're talking about a business thoroughfare. I believe you develop a city through the neighborhoods through neighborhood commerce, and one of the key factors is a well-lit area that gives you a sense of place and excitement that attracts other people."

#### Rufus Bartell,

owner of Kuzzo's Chicken and Waffles, Livernois Avenue-Seven Mile Road



### **The History**

For decades, Detroit's streetlighting system was not only a national embarrassment, it was a safety issue for its citizens. Some 40% of the lights in our city did not work. Our streets were dark. Our residents felt unsafe. Our city needed to do something.

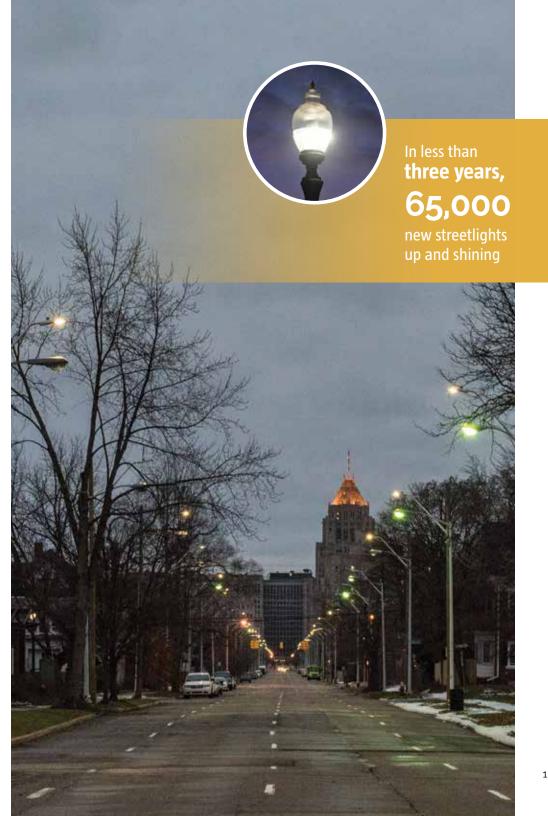
The Public Lighting Authority was created by the state to develop and implement a plan to get the system working again – and to keep it working well into the future. In February 2014, the PLA began work in the neighborhoods. Today, Detroit is completely relit, with 65,000 new streetlights up and shining. In less than three years, the PLA completed a task that many thought they'd never see - and the Authority did it on time and under budget.

### **The Mission**

The Public Lighting Authority's mission is to improve, modernize and maintain all streetlights in the City of Detroit with brighter, more reliable and more energy-efficient lights.

### **The Leadership**

The PLA is a separate legal entity from the City of Detroit and run by a five-member board, all of whom are Detroit residents. Detroit Mayor Mike Duggan and the Detroit City Council each appoint two board members; the fifth member is picked by Council from a list of candidates provided by the mayor.



## RICK SNYDER GOVERNOR

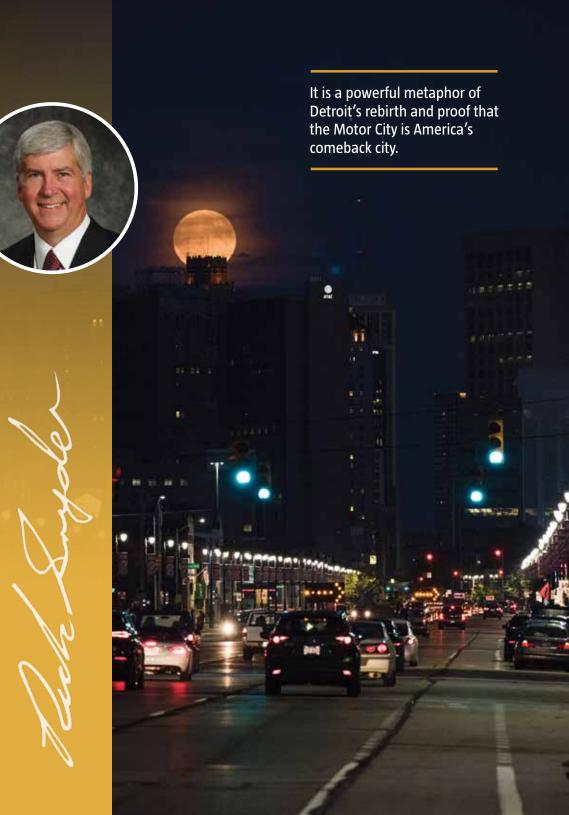
Just three years ago, much of Detroit was in chronic darkness. I partnered with the Michigan Legislature and Detroit's leaders to approve legislation creating the Public Lighting Authority. The result is a real solution to a serious problem that had gone on for far too long.

This is proof of what we can accomplish when we work together, across branches of government and across party lines to make the lives of our residents better.

The PLA was created to develop and implement a plan to get the street lighting system operating effectively and to provide funding to make the badly needed improvements to Detroit's public lighting system. It did just that.

The PLA got the lights on, as promised, on time and under budget. This is proof that when governments work together, we can make our state a better place for the people of Michigan. For Detroit's renaissance to be a true success, getting the streetlights back on was an essential task. Not only is it important to public safety, but it is a demonstration of the real improvements happening in the city every day.

I extend my congratulations to the PLA and everyone who helped make this possible. I'd also like to congratulate the residents of Detroit on their new, brighter, more energyefficient streetlight system. It is a powerful metaphor of Detroit's rebirth and proof that the Motor City truly is America's comeback city.



## MIKE DUGGAN MAYOR

It's hard to describe how far we've come together in such a short time. Just three years ago, 40 percent of our city – including entire neighborhoods – was in the dark.

Now, for the first time in a generation, Detroiters can step outside at night anywhere in their city and have an expectation that their street will be lit to the national standard.

Detroiters have always deserved a first-class lighting system, and now they've got one. Our new system is not only twice as bright as before, it is also more energy-efficient. If a light goes out, we are able to fix it in a matter of days.

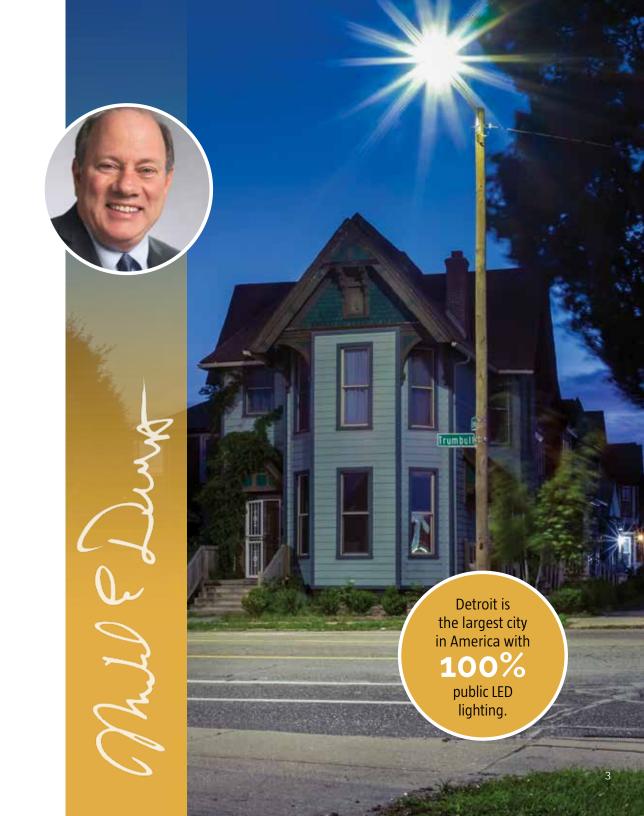
For decades, our city was known for its disinvestment and aging infrastructure. Today, Detroit is the largest city in America with 100% public LED lighting.

None of this would have been possible without the hard work and dedication of so many people. First, I'd like to thank Governor Rick Snyder and the Michigan Legislature for passing legislation that gave us the opportunity to lift ourselves up. I'd also like to thank all the members of the PLA board, who spent hours and hours, without pay, to help make this possible, as well as CEO Nicolette Carlone.

We appreciate the Obama administration for its financial and technical support along our journey. And, of course, we all owe the men and women who did the work of restoring our lighting system our gratitude.

In Detroit, our streetlights are no longer a symbol of decay. They are a sign of hope and progress that can be seen as close as our own neighborhood blocks – and from as far as the International Space Station.

Thank you, and congratulations on a job well done!





Nicolette J. Carlone Chief Executive Officer Public Lighting Authority

The relighting of Detroit is an example of what a dedicated team can accomplish working with a singular focus on getting the job done.

When we came downtown to finish relighting Detroit we faced a unique combination of potential obstacles. Though more than 90 percent of our work in the neighborhoods was overhead wiring, downtown was 100 percent underground in an area with many other underground utilities.

We had to build an entirely new 120-volt network to connect with DTE feedpoints, coordinate our work with dozens of other construction projects and use temporary lights to assure that no area of downtown went dark when we interrupted power to an area.

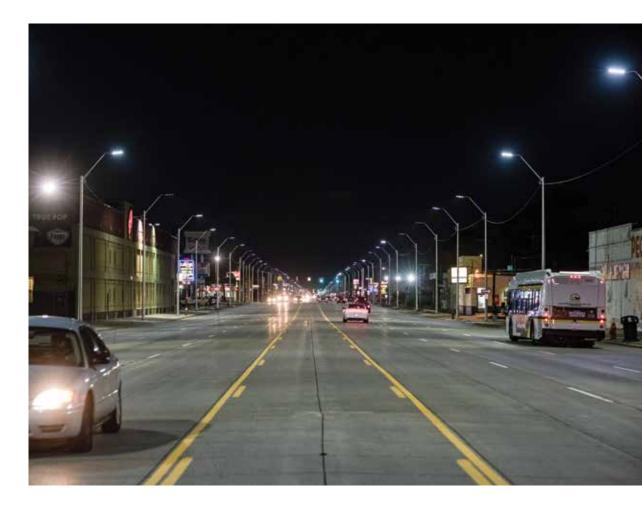
Despite these challenges, we got the job done.

We also have been able to utilize resources that exist within the City of Detroit, with 63 percent of our contractors being Detroit-based businesses and 36 percent of our vendors based in Detroit, offering us unique opportunities for work force development.

Heartfelt thanks go to every PLA employee and every contractor who were a part of this magnificent effort. You can see the results of your dedication every night driving around our city on well-lit streets and thoroughfares.

Muslette Carlone

Nicolette Carlone joined the PLA as Chief Financial Officer in February 2014 and was named Chief Operating Officer in August 2015. She became CEO in February 2016. Carlone has been involved in all aspects of PLA operations throughout her tenure at the Authority and was instrumental in securing the \$185 million financing that made the capital project possible. With more than 30 years of experience, Carlone has extensive financial and management experience. Prior to joining the PLA, she served as a consultant, facilitating companies with chief financial officer projects, merger and acquisition integrations and treasury services. Carlone, a Certified Public Accountant, is a lifelong Michigan resident and holds a Master of Business Administration degree from Eastern Michigan University and a Bachelor of Science degree from the University of Michigan Dearborn.





**Lorna Thomas,** M.D. Chair Public Lighting Authority

On time and under budget.

When we embarked on our mission to relight Detroit three years ago, many people thought what we were trying to do was impossible. Well, we have done it, on time and under budget.

We have relighted Detroit, from Eight Mile to the River, Alter Road to Telegraph. There are more than 65,000 new LED streetlights across the city. This is an example of how government should function: working together to make the lives of our residents better.

Today we are a national leader, as the first major U.S. city to be entirely lit by LED lights. As the New York Times noted recently, the new lights are a "signal that no matter where you live in Detroit, you are no longer forgotten — that government here can finally keep its basic promises."

And now that the lights are back on, we're going to ensure that they stay on. We have implemented new, simple ways to report a streetlight that's out and strive to have them fixed in three to five days.

The relighting of Detroit is a remarkable achievement for our city. We hope all Detroiters are as proud of this accomplishment as we are.

Lorna Thomas, M.D., a ninth-generation Detroiter from the east side, has been a physician for more than 31 years while serving as a committed advocate for the City of Detroit, and the city's civic, cultural and social endeavors. Dr. Thomas is a graduate of the University of Michigan Medical School. She completed her internship and postgraduate residency training in Dermatology at Henry Ford Hospital, where she became the first African-American chief resident in Dermatology. She is board-certified in Dermatology and is a fellow of the American Academy of Dermatology, the American Society for Dermatologic Surgery and the American Society for Laser Medicine and Surgery. She is Chair of the Board of Directors of the Detroit Medical Center Foundation, a member of the Legacy Board of the Detroit Medical Center and a member of the boards of the Detroit Institute of Arts and Michigan Opera Theatre.



### Public Lighting Authority **Board Members**



Rod Parker, CPA Treasurer

Rod Parker is a financial manager with more than 30 years of experience. He started at the Ernst & Young CPA firm, where he received his Certified Public Accountant's License. Parker worked at DTE Energy for 30 years, where he retired as a manager in the Controllers Area in 2013. While there, he worked in the following areas: General Accounting, Property Accounting, Financial Systems, Interconnection Sales and Division Controller for Distribution Operations and customer service. He also has served as controller for a number of DTE's non-regulated subsidiaries, (i.e. DTE Energy Trading, International Transmission Company). In addition, he was on the system projects for the PeopleSoft and SAP Financial Systems. Parker is a lifetime resident of the City of Detroit and has served on the Boards of several nonprofits, including DESC, DAPCEP and Core City Neighborhoods.



David W. Jones At Large

David W. Jones is a partner in the law firm Allen Brothers, Attorneys and Counselors, PLLC, and has practiced law for more than 17 years. His practice focuses in the areas of litigation, municipal and real estate law. Jones is a former prosecutor, Special Assistant Attorney General and counsel for large commercial entities. While serving his appointment as Special Assistant Attorney General by Attorney General Mike Cox, Jones developed the "Joshua Project," an initiative aimed at reducing gun violence. In addition to investigating and prosecuting cases, he was the Attorney General's liaison to the community and governmental agencies. Jones received his undergraduate degree in Corporate Finance from Wayne State University and his law degree from the University Of Detroit-Mercy School Of Law. He is active in the community as a high school basketball and football official, as well as a college basketball official



Donnell R. White At Large

Donnell White is Executive Director of the Detroit Branch of the NAACP, a position he has held since 2011, when he became the youngest Executive Director in the history of the NAACP. White also serves as Vice-Chair of the Detroit Board of Police Commissioners. a position he has held since December 2010. In addition, he is a member of the Detroit Future City Steering Committee, Co-Chair of the ClearCorps/ Detroit, Member of the Federal Bureau of Investigations Multicultural Advisory Committee, Member of the Michigan Department of Transportation's Detroit Transportation Workforce Diversity Forum, Member of the Wayne State University Board of Governors Community Retention/Oversight Advisory Group, Member of the Wayne State University President's Advisory Group, Member of the Fellowship Chapel Men's Christian Fellowship, Commissioner of the Detroit Crime Commission, and Board Member of The Youth Connection (Detroit). He is a graduate of Michigan State University, where he earned a B.A. degree in Finance.



Patrick L. Padgett, P.E. At Large

Patrick Padgett, P.E., is a professional engineer who is leading the growth of the global manufacturing, installation and service operations for the GE SPINlab product, working with medical research institutions in North America, Europe and Asia. Prior to joining GE in 2007, he was a fuel system engineer with Ford Motor Company working in Germany, Dearborn and Poway, California. He is a veteran of the U.S. Navy and holds two U.S. patents for his development work.

Lorna Thomas, M.D. Chair

Nicolette J. Carlone Chief Executive Officer

#### Past Board Members

- 2015: Eva Garza Dewaelsche Nicole B. Spieles
- 2014: Mark C. Smith
- 2013: Maureen Stapleton Marvin Beatty John Davis Cedric Dargin Michael Einheuser

### The Plan

The PLA's mission is to improve, modernize and maintain all of Detroit's 65,000 streetlights with brighter, more reliable and more energy-efficient lights. To achieve this goal, the PLA made several changes from the old lighting system, which had grown unreliable.

To improve reliability, it did away with the city's old series circuit-lighting system, commonly referred to as "Christmas tree light" wiring, in which multiple lights were on one circuit. If one light burned out, the entire circuit went down until the one light was fixed. In the new lighting system, if one light goes down, the others stay on.

To improve illumination and energy efficiency, the PLA switched from the old high-pressure sodium lights to new, state-of-the-art Light-Emitting Diode

lights, better known as LED. The new lights are twice as bright as the old ones, while also being more energy efficient, saving Detroit taxpayers money.

To improve reliability, and also to deter scrap-metal theft, the PLA switched from copper wiring to aluminum wiring. The old lights also had a copper coil at the base of each lamp, something that the new lights do not require. By keeping vandals and thieves off our lights, we can keep the lights on.

Finally, in another step to improve reliability, the PLA has implemented an aggressive repair operation that addresses most problems within three to five days. This is a vast improvement over the old system, where residents could wait years for a light to be repaired – if it was ever repaired at all.



### **Customer Service**

In addition to modernizing Detroit's streetlights, the Public Lighting Authority is dedicated to providing outstanding customer service to all Detroiters. That means keeping the new streetlights on and responding quickly to any problems, should they appear.

In 2016, the PLA exceeded that goal by repairing streetlights within three to five days. These lights were not working because of factors such as a car hitting a pole. Overall, the PLA responded to more than 4.575 inquiries from residents who called to report a light being out, ask about construction-related issues or to learn more about future lighting plans.

Our maintenance team consists of:



Inspectors



Contractors

By the end of 2016, we were maintaining 65,000 LED lights. All maintenance requests were completed within three to five days with the exception of issues that required a third party to be involved, such as:

- DTE (power outages).
- Public Lighting Department (arc circuits).
- AT&T (communication cables).

When dealing with knocked-down poles, we are on site in less than 30 minutes to make the location safe. Wooden poles usually go back up within three to five days.



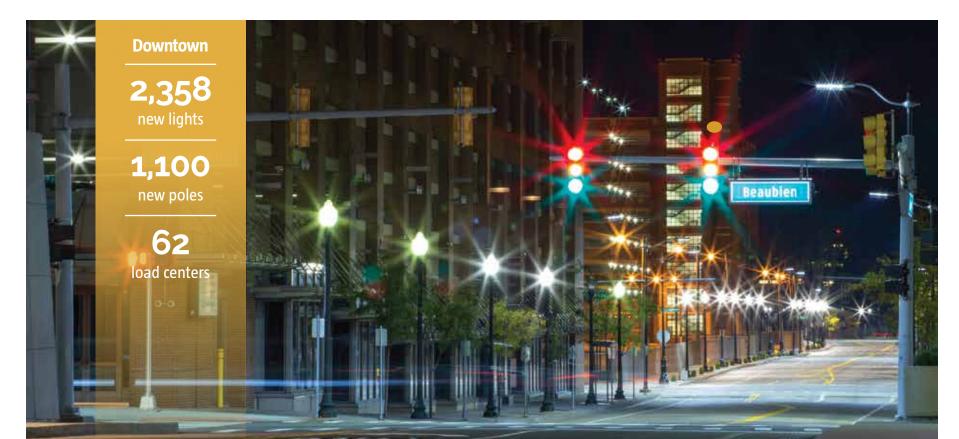
#### **Downtown work**

For the first two years of the relighting project, the PLA focused its efforts on city neighborhoods. By the end of 2015, the neighborhoods were basically completed, with more than 59,000 new lights installed. That left the city's downtown – the area bounded by the Lodge Freeway, I-75, I-375 and the Detroit River.

Work downtown began and was completed in 2016, bringing 2,358 new lights, 1,100 new poles and new underground circuits that connect to 62 load centers. The work was complicated by downtown's underground utility grid, some of which is more than 100 years old. As new lights and circuits were installed, it was necessary to disconnect old circuits to provide a safe work environment. As the old circuits were disconnected and removed, it was important to ensure that downtown stayed well lit throughout the process. The PLA brought in portable lights to illuminate areas in which power had been disconnected.

When completed, the process resulted in the installation of 57 new lighting cabinets and thousands of feet of cable. In addition to power challenges, our contractors had a number of obstacles during construction because of the underground utility maze that exists downtown. They were able to conquer those challenges and bring a once defunct and outdated lighting system into the 21<sup>st</sup> Century.





# Detroit Celebrates Its New Lights

On December 15, more than 300 people gathered along the Detroit riverfront to celebrate the relighting of Detroit – on time and under budget. Even frigid weather with temperatures hovering in the low teens couldn't dampen the excitement!

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The PLA turned on the last of 65,000 new LED streetlights on December 15, completing a massive relighting program that began in February 2014. At a ceremony held at dusk, Mayor Mike Duggan, PLA Board Chairwoman Dr. Lorna Thomas, PLA CEO Nicolette Carlone and representatives of Governor Rick Snyder and President Obama joined with residents to flip a ceremonial switch on Atwater Street, the last stretch of lights to be replaced in the city. Also taking part in the ceremony were partners in the effort, such as DTE Energy, Citi Group and PLA contractors.

On display inside the tent were photographs by College for Creative Studies students showing the difference that the new LED streetlights have made in the lives of Detroiters. Some of those photos have been used inside this annual report.

Detroit Mayor Mike Duggan and PLA Board Chair Dr. Lorna Thomas flipped a ceremonial switch to turn on the last of the streetlights.

**Left, from top:** Shaun Donovan, director of the federal Office of Management and Budget, congratulates the PLA and Detroit on behalf of the White House. PLA Board Chair Dr. Lorna Thomas, left, and PLA CEO Nicolette Carlone present Carla Walker-Miller of Walker-Miller Energy Services, a PLA contractor, with an award. The Cass Tech High Madrigal Singers perform the national anthem as the event kicks off. Ric Preuss of the International Brotherhood of Electrical Workers represents those who installed the lights.

## **Engaged with the community**

From the beginning of the project, PLA has made a significant effort to utilize resources that exist within the City of Detroit to complete the lighting project. 36% of the vendors working with the PLA are based in Detroit, and 63% of the contractors completing the street light construction are Detroit-based businesses.

Our LED vendors have partnered with local non profits to provide funding for youth training and education. During 2016, Cree Inc. donated approximately \$53,000 to the Detroit Area Pre-College Engineering Program (DAPCEP), a 501(c)3 focused on connecting metro Detroit youth to exciting educational opportunities in STEM – science, technology, engineering, and math. PLA sponsored a lighting project course (Photography and Public Lighting) in partnership with the College for Creative Studies, which began when the lighting project started. This course has allowed the photography students to capture the transformation of the lights as they were being constructed and turned on. At the completion of the project in

December 2016, the College for Creative Studies provided a visual display of the overall transformation for all to see during the Last Light Ceremony on December 15.

of the vendors used to support PLA operations are based in Detroit.



of the contractors completing the street light construction are Detroit-based businesses.



### Belle Isle solar

The PLA has replaced the antiquated lighting infrastructure on Belle Isle with 198 fully solar-powered lights. This will not only benefit the city through financial savings, but is also a greener option for the City. These lights reduce the City's carbon footprint, which means they're not only good for the City, they're good for the environment.

The Belle Isle solar project is unique as it is the only park in the state of Michigan that has LED streetlights using sunlight for power. These lights use photovoltaics and long-lasting deep cycle batteries for the power. The project also included removal of existing poles and foundations.





## What they're saying about the lights

- The streetlight campaign has been a huge success. We're seeing lights in neighborhoods that we haven't seen in years. When a neighborhood is clean and safe and lit properly, values go up and crime goes down."
  - John George, Founder of Motor City Blight Busters, District 1
- People didn't want to go out to eat or shop after the sun went down. Foot traffic almost fell to zero after dark. Since the lights came on, it's up 15 percent across this neighborhood."
  - Rufus Bartell, owner of Kuzzo's Chicken and Waffles, District 2
- It's adding to the resurgence of the city, the renaissance. ... You cannot rebuild a city just focusing on downtown and Midtown; you must move to the communities. I think this is a step in the right direction."
  - Kimberly Hill Knott, Director of Policy for Detroiters Working for Environmental Justice

- Sixty-five thousand lights is nothing short of a small miracle—there's a lot of coordination that goes on at many different levels. People were dedicated, and they understood the importance and the value. It's easy for things to work well... when people are on the same page."
  - Ric Preuss, International Brotherhood of Electrical Workers
- Performance of Detroit's most overlooked features is bringing residents peace of mind and a renewed sense of hope in the city's revival — its streetlights."
  - New York Times, January 10, 2017
- You're starting to see less 'For Sale' signs on Michigan Avenue, and you're starting to see new people moving in. It just feels good for the city. This is where the city's going to go in the future, and it's going to grow, and become better than what it was."
  - Joe Gappy, owner Prince Valley Market, District 6





- **e** Detroit streetlights go from tragedy to bragging point."
  - Detroit Free Press, December 15, 2016
- It was really scary to be out there. We were so happy to see that light. We're more at ease, more comfortable. I can see what's out there before I even open my door. We're able to do more things. ... I feel empowered."
  - Minnie Ramirez, Southwest Detroit resident for Environmental Justice
- It was one of the more notorious signs of Detroit's decay and disarray: block after block of darkened city streets, lined by rows of nonworking streetlights. But now, two years since the city's exit from bankruptcy, streetlighting is becoming a shining example of the city's rebound."
  - Detroit Free Press, December 13, 2016
- I can't imagine a more symbolic and real step forward that ... could be more important than bringing light back to every street, every neighborhood in this city. You're now an example to the rest of the country. Now others are following you and we're trying to help them with your example. So you are a beacon to the world, to the rest of this country and the world."
  - Shaun Donovan, director of the White House Office of Management and Budget.
- When Mayor Mike Duggan came to our community and said he was going to turn the lights on, we didn't believe him. And now, with his help and the Public Lighting Authority, I don't have to walk my streets in the dark anymore. This is a dream for me and my city."
  - Bryan Ferguson, Schoolcraft Improvement Association, District 1



### How the PLA is funded

The Public Lighting Authority is funded through \$185 million in bonds sold on its behalf in June 2014 by the Michigan Finance Authority.

As a separate municipal corporation from the City of Detroit, with a dedicated revenue stream from a portion of the city's Utility User Tax, the PLA was able to secure a strong investment grade rating of "A-" from Standard & Poor's and "BBB+" from Fitch.

The bonds are being repaid from a portion of the proceeds of the City of Detroit's Utility User Tax, under provisions passed by the Michigan Legislature. The legislation was signed by Governor Rick Snyder authorizing the formation of an authority.

The legislation allocated \$12.5 million a year from the Utility User Tax to provide the needed revenue stream to pay off the bonds. The Utility User Tax originally was levied to pay for public safety activities, and it was chosen because effective public lighting is an integral part of fighting crime.

The legislation also allocated a portion of the city's income tax to public safety to cover the \$12.5 million that was going to public lighting.

In December 2013, U.S. Bankruptcy Judge Steven Rhodes issued a ruling that the PLA is a separate municipal corporation and that all financing secured by the PLA was not affected by the City of Detroit's bankruptcy proceedings that were then underway in his courtroom.

That ruling cleared the way for the sale of an initial interim financing of \$60 million to get the relighting underway and then the sale of the full bond issue in June of 2014.

Because of the security offered by the legislation forming the Authority and Judge Rhodes' decision, demand was so strong that the all-in interest rate for the 30-year transaction averaged 4.53 percent. That enabled the sale of an additional \$25 million in bonds, resulting in an additional 10,000 streetlights above the Authority's original plan. As a result, a total of 65,000 new LED streetlights were installed by the end of 2016.



## **Financials**

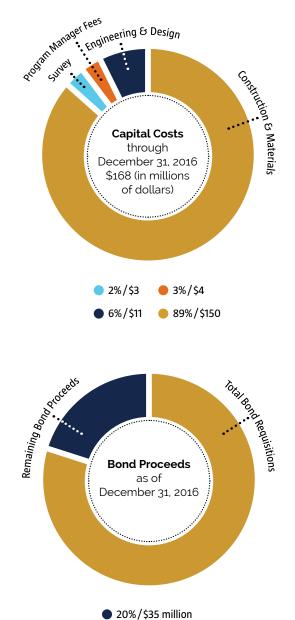
#### Independent Auditors Verified Statements

To ensure transparency and accountability, and to identify opportunities to streamline and improve operations and promote industry best practices, these statements are pursuant to the audit performed by George Johnson & Company, a certified public accounting firm.

Net Position, End of Period	\$ 24,879,588	\$ 19,108,424	
Net Position, Beginning of Period	\$ 19,108,424	\$ 16,541,497	
Net Increase in Net Position	\$ 5,771,164	\$ 2,566,927	
Expenditures	\$ 16,758,370	\$ 16,706,571	
Revenue	\$ 22,529,534	\$ 19,273,498	
	FY 2015-2016	FY 2014-2015	
	<b>Enterprise Funds</b>		

Independent Financial Audit for the Fiscal Years Ended June 30

To view the complete auditor's report, the annual budget and more about our financials, visit pladetroit.org/finances.





🛑 80%/\$149 million

17



## Financials





Public Lighting Authority **Statement of Net Position** December 31, 2016

#### ASSETS

Current Assets	
Cash and Cash Equivalents	\$ 20,280,879
Investments	\$ 34,644,524
Inventory	117,180
Prepaid – Operations & Maintenance	\$ 96,910
Total Current Assets	\$ 55,139,493
Non-Current Assets	
Capitalized Construction Cost	\$ 168,028,407
Equipment (Net)	\$ 535,885
Total Non-Current Assets	\$ 168, 564,292
Total Assets	\$ 223, 703,785
LIABILITIES & NET POSITION	
Current Liabilities	
Accounts Payable	\$ 6, 801,214
Bond Payable — Short Term	\$ 3,120,000
Total Current Liabilities	\$ 9, 921,214
Non-Current Liabilities	
Bond Premium	\$ 10,297,604
Bond Payable — Long Term	\$ 175,840,000
Total Non-Current Liabilities	\$ 186, 137,604
Total Non-Current Liabilities Total Liabilities	186, 137,604 196, 058,818
Total Liabilities	
Total Liabilities Net Position	\$ 196, 058,818



#### Statement of Revenue, Expenses and Changes in Net Position

For the Six Months Ended December 31, 2016

#### REVENUE

Utility User Tax Revenue Operations & Maintenance Investment Income Other Revenue	\$ 6,250,000 4,919,053 125,004 61,216
Total Revenue	\$ 11,355,273
<b>EXPENDITURES</b> Debt Service Expenses Operations & Maintenance Expenses Operating Expenses	\$ 4,263,446 2,217,197 2,109,253
Total Expenditures	\$ 8,589,896
Change in Net Position	\$ 2,765,377
Net Position — Beginning of Period	\$ 24,879,590
Net Position — End of Period	\$ 27,644,967



#### Partners

The Public Lighting Authority gratefully acknowledges its partners who have worked hand-in-hand to relight Detroit.

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Allen Law Group \* Asplundh Tree Expert Co. Azteca Systems, Inc. \* Bob Maxey Ford, Inc. Cadillac Tower \* Center for Automotive Research \* Citigroup Citizens Insurance City of Detroit **Clarus Lighting Controls** College for Creative Studies \* Computech Corporation\* Consulting Engineering Associates, Inc.\* Corby Energy Services, Inc.\* Cree, Inc.\* Detroit Area Pre-College Engineering Program (DAPCEP) \* Detroit Economic Growth Corporation Detroit Regional Chamber **DNR Tree Service** Downtown Detroit Partnership

DTE Energy \* Duren Resources, Inc. Dykema Gossett \* **ESRI** Fifth Third Bank Fitch Rating Inc. Flagpoles, Inc. Focus: HOPE \* George Johnson & Co. \* Global Design Goss Group, Inc. \* Gregory Terrell & Co. \* International Brotherhood of Electrical Workers (IBEW) J. Ranck Electric, Inc. \* Jaffe Raitt Heuer & Weiss \* Jefferson Chevrolet JPMorgan Chase King Luminaire Leotek Electronics USA Corp. \* Lewis & Munday\* M-1 Rail\*

MEC Consulting\* Media Genesis\* Metro Engineering Solutions\* Michigan Department of Transportation Michigan Finance Authority \* Michigan Lighting Systems Michigan Municipal League Midtown Detroit, Inc. \* Miller, Canfield, Paddock and Stone PLC\* Motor City Electric Co.\* Next Energy Niland Co. Offshore Spars \* **Overhead Lines LLC P&K Tubular Products** Parsons Brinckerhoff \* PFM Group, Inc.\* Power Advocate Principal Financial Group Robert Half Finance & Accounting

Robert W. Baird & Co. Shotspotter \* SS Stripping\* Standard & Poor's State Line Construction and Maintenance LLC State of Michigan Stresscrete Group Tetra Tech Inc. \* The Hartford The Sterling Group \* Trillium Capital Development U.S. Department of Energy Valmont Structures Van Dyke Horn Public Relations\* Wade Trim \* Walker-Miller Energy Services \* Wilmington Trust\* **Xtreme Powerline Construction** 

PHOTO CONTRIBUTIONS Andrew Potter College for Creative Studies

\*Denotes a contract with PLA

## What **65,000** new LED streetlights look like from space

NASA astronaut Shane Kimbrough, commander of the Expedition 50 crew at the International Space Station, tweeted this photo taken at night in January from the space station of southeastern Michigan and northern Ohio. What really shines about Detroit in this photo is you can see **the effects of the 65,000 new LED streetlights that are illuminating the entire city.** 

See for yourself; compare Detroit lights to Cleveland, Toledo, Ann Arbor, Flint and Lansing. Our LED streetlights are much brighter!

#### In reply to Shane Kimbrough

Mayor Mike Duggan @MayorMikeDuggan • Jan 18 @astro\_kimbrough Great shot! Our city is looking good from down here, too. We'd love for you to visit and get a closer look.

**↑** 3 • **17** 21 • ♥ 101

#### Joe Manzella @JoeManzella · 45m

@MayorMikeDuggan @astro\_kimbrough Note the different color temp of Detroit light vs. neighbors - thanks to 65,000 NEW LED streetlights!

**6**<sup>3</sup> • **47**<sup>1</sup> • **●**<sup>1</sup> • • •

#### Andy Tuttle @Tuttl1am • 3h @astro\_kimbrough cool to see the whole LEDs of Detroit vs the yellows of Cleveland/Toledo.

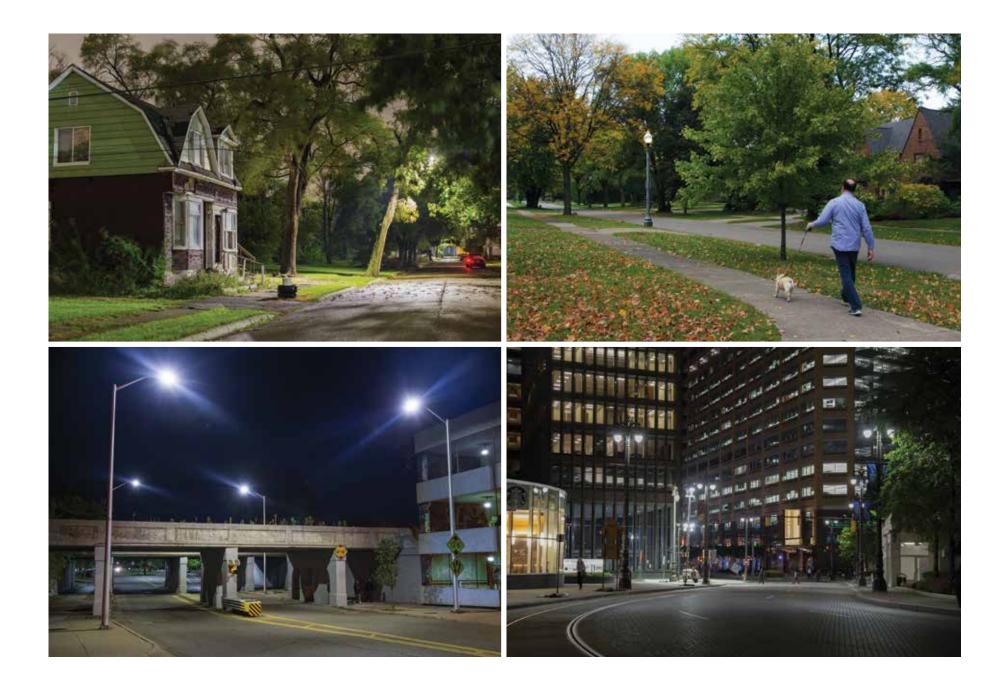
★ ₹₹ ♥ •••

**Detroit Free Press** A big reason Detroit is so bright in this photo. The 65,000 LED streetlights that were installed over the past couple years.

http://www.freep.com/.../detroit-streetlights.../95483846/

**Sandra Brinker** Awesome! Detroit is coming back and I am very pleased about it. Thanks to all who are working to make it better.

Like • Reply • 🕐 15 • 4 hrs



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