

Annual Progress Report of the Public Lighting Authority



James Bryant, 23, rides the bus to and from his workplace in northwest Detroit. The new streetlights along Greenfield made a big difference in his commute home last winter. It was just really dark — you could just barely see a half-mile down. Now it feels a lot safer, a lot more comfortable. I don't have to look over my shoulder as much and things of that nature.

Detroit Free Press, Nov. 12, 2015



Refore they fixed the lights you could tell where Hamtramck started, because it was so much brighter over there. But the contrast disappeared when workers installed the LEDs last month — including one in front of my house.

Claire Nowak-Boyd, Detroit resident

THE HISTORY

Detroit's street lighting system has been in increasingly serious disrepair for some time, with minimal infrastructure investment having been made for at least the last 20 years. Approximately 40 percent of the lights in the system were not working for reasons that included copper theft, bulb outages, vandalism, obsolete technology, lack of repair staff and a lack of funds to pay for repairs.

The Public Lighting Authority was created by the state to develop and implement a plan to get the system operating effectively and to provide a vehicle to secure the funds to make these badly needed improvements to Detroit's public lighting system that will last well into the future. It is a completely separate legal entity from the City of Detroit.

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, more energy-efficient lights.

THE LEADERSHIP

The PLA is 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, and the fifth member is picked by Council from a list of candidates provided by the Mayor.

RICK SNYDER GOVERNOR

The success of the Public Lighting Authority is a prime example of what can be accomplished when we team up in a bipartisan way to develop good public policy.



In December 2012, the Legislature, with support from both sides of the aisle, approved legislation authorizing the creation of a public lighting authority in Detroit, complete with an independent dedicated source of funding. I very gladly signed it, and the Public Lighting Authority was established shortly thereafter by the Detroit City Council.

Today, the Authority has made tremendous progress in relighting Detroit. It is far ahead of its original schedule and has created a system that is providing dependable, efficient streetlights throughout the city. More than 90 percent of planned lights — in excess of 60,000 — have been installed and are working reliably in every neighborhood in the city. In addition, if a light goes out, it is repaired within five days — a far cry

from the old days when residents could wait months, if not years, for a broken streetlight to be fixed.

This dependable lighting is a key component of the successful ongoing efforts to protect public safety and rebuild neighborhoods in Detroit.

The Authority board and its staff are to be congratulated for the tremendous progress they have achieved in making reliable street lighting once again a reality in Detroit. I look forward to the successful installation of the remaining lights on main thoroughfares and downtown in the coming months as the Public Lighting Authority completes the relighting of Detroit.



MIKE DUGGAN MAYOR

When you drive around Detroit, it's hard not to be constantly reminded of the tremendous progress that the Public Lighting Authority is making in creating a modern, reliable lighting system in our city.



Everywhere you go, new LED lights line the streets, bringing reliable illumination to our neighborhoods for the first time in a generation. Residents in the neighborhoods are saying that, for the first time in decades, streetlights are no longer a constant source of frustration. And who could blame them for having felt that way? They were tired of living in a city where barely half the lights worked.

Today, every neighborhood in the city has new lights, and they're twice as bright as the old ones. The new lights also will last longer and are far more energy-efficient. That means the city will realize substantial savings in operating costs well into the future. And now, if a light does go out, it is fixed within five days — not months, not years.

Not only has the PLA's lighting project improved the quality of life for residents in our neighborhoods, it has provided economic opportunity for Detroiters along the way: Sixty percent of the contractors working on this ambitious project are Detroit-based businesses.

On behalf of the people of Detroit, I want to thank PLA Board Chairwoman Dr. Lorna Thomas and the rest of the PLA board, CEO Odis Jones and the PLA staff, as well as our hardworking installation crews, for the service they are providing to all Detroiters. Their combined efforts are making a major, visible difference in Detroit's turnaround.

Congratulations on a job well done.





The Public Lighting Authority made tremendous progress in 2015 in reconstructing Detroit's public lighting infrastructure:

- We finished the year with more than 60,000 new lights installed on neighborhood streets, on collector streets and on main thoroughfares, meaning we finished the year with more than 90 percent of the overall project's installation process completed.
- We have kept our maintenance schedule on track, repairing broken lights within three to five days of receiving a report of a problem.
- We have eliminated the problem of copper theft which historically had plagued the public lighting system by switching to aluminum wiring. Aluminum is much less valuable than copper, which makes it much less attractive to potential thieves.
- We are accomplishing all this while keeping our construction work ahead of schedule and under budget.

All of these factors have dramatically improved the reliability of streetlights in the City of Detroit.

This remarkable achievement — being ahead of schedule, under budget and much more reliable — is due to the dedicated efforts of our PLA staff and contractors, especially the lighting crews, who have been steadfast in their efforts throughout the entire year.

At the same time, we have made a priority of contracting work with Detroit-based businesses. A total of 60 percent of our outside contractors are Detroit-based businesses.

With the momentum we have achieved, we are confident that 2016 will see the completion of the relighting of Detroit, ahead of schedule and under budget.



Odis Jones, CEO
Public Lighting Authority



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

Current Public Lighting Authority Board Members



Lorna Thomas, M.D. Chair

Lorna Thomas, M.D., a ninth generation Detroiter from the east side, has been a physician for more than 32 years while serving as a committed advocate for the City of Detroit, and the city's civic, cultural and social matters. 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.



Eva Garza Dewaelsche Vice Chair

Eva Garza Dewaelsche is president and CEO of SER Metro-Detroit, Jobs for Progress, Inc., a workforce development organization she has served more than three decades. While at SER Metro, she established a nationally accredited, post-secondary technical school serving both Detroit and Chicago, and served as principal of the SER Casa Academy, a charter school to serve high risk youth from the City of Detroit. She is a former Detroit Police Officer and former member of the Detroit Police Commission.



Rod Parker, CPA Treasurer

Rod Parker is a financial manager who worked at DTE Energy for 30 years before retiring as a manager in the Controllers Area in 2013. While Accounting, Property Accounting, Financial Systems, Interconnection Sales, and as Division Controller for Distribution Operations and customer service. He also served as controller for a number of DTE's nonregulated subsidiaries. Parker currently provides accounting and auditing services to a number of local CPA firms.



Nicole B. Spieles Secretary

Nicole B. Spieles, partner with Greeley and Hansen, has 20 years' experience as an engineer improving urban environments and developthere, he worked in: General ing innovative solutions in the design and construction of water and wastewater facilities. She has successfully administered hundreds of water, wastewater and water reuse projects. Spieles is deeply involved in the Detroit community and was recognized as Outstanding Environmental Consultant by the Michigan Water Environment Association.



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, a former prosecutor, served as Special Assistant Attorney General to Attorney General Mike Cox where he developed the "Joshua Project," an initiative aimed at reducing gun violence. He is also active as a high school basketball and football official and a college basketball official.

Odis Jones, MPA | Chief Executive Officer | July 2013 - February 2016



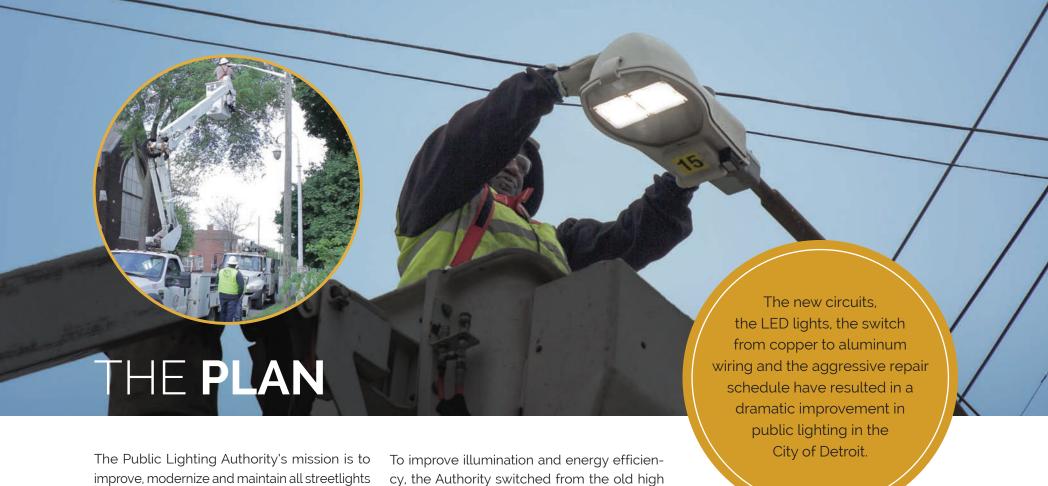
Odis Jones is a Detroit native who has served as Chief Executive Officer of the Public Lighting Authority since its formation. Before assuming this position, he was the economic development director for the City of Cincinnati. Prior to his service in Cincinnati, Jones was director of urban and site development for the New Jersey Economic Development Authority, where he oversaw two Urban Fund opportunities in excess of \$200 million. He holds a Master of Public Administration degree from Western Michigan University and a Bachelor of Science degree from Central Michigan University.

Past **Board Members**

2014: Mark C. Smith

2013: Maureen Stapleton **Marvin Beatty Cedric Dargin**

Michael Einheuser



The Public Lighting Authority's mission is to improve, modernize and maintain all streetlights in the City of Detroit with brighter, more reliable, more energy-efficient lights. To achieve this goal, the Authority made several major changes from the old lighting system that had grown so 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 was inoperable until the one light was fixed. In the new lighting system, a multiple series circuit system, if one light goes out, the others stay on.

To improve illumination and energy efficiency, the Authority switched from the old high pressure sodium lights to new, state-of-the-art Light Emitting Diode (LED) lights. The new lights are twice as bright as the old lights while being much more energy efficient, resulting in substantial savings in energy costs.

To improve reliability, the Authority switched from the old copper wiring to aluminum wiring, which is much less valuable on the scrap market and thus not a target for vandals and thieves who used to remove copper wiring and sell it for scrap. The old lights also had a copper coil at the base of each lamp, something the new lights do not require, so the problem

of lights becoming inoperable due to theft and/or vandalism has been greatly reduced.

Finally, in another step to improve reliability, the Authority has implemented an aggressive repair operation in which, in the event a light does go out due to a pole being hit by a car or any other reason, it is repaired within three to five days. This is a dramatic improvement over the old system, when residents could wait months or even years to have a light repaired once it was out.





The Authority's goal is to fix any reported streetlight outage within

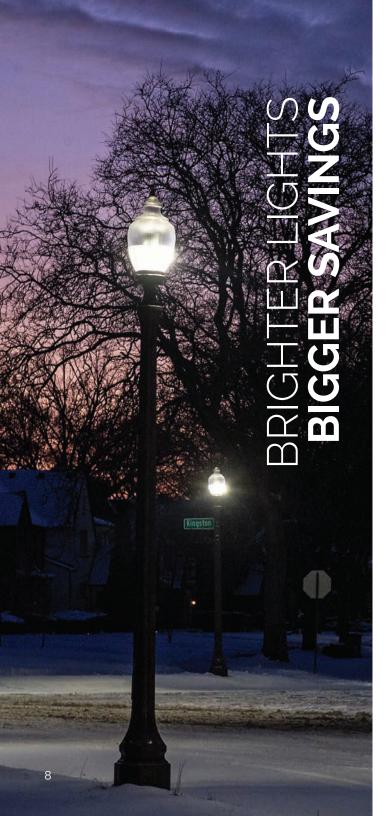
FIVE DAYS

In addition to modernizing Detroit's streetlights, the Public Lighting Authority is committed to providing outstanding customer service to all residents of the city. That includes keeping the new LED lights on once they are installed, and responding quickly to any problems if they should appear.

In 2015, the PLA exceeded that goal, repairing within three to five days some 1,800 streetlights that were not working due to such factors as a car hitting a light pole. Overall, the Authority responded to more than 6,000 inquiries from residents who called to report a light outage, ask about construction-related issues or to learn more about future lighting plans.

The PLA has project managers assigned to each City Council District who drive the district during the day to oversee contractors, keep track of construction progress issues and look for other possible issues. The Authority also has a staff of community night surveyors who drive up and down every street in the entire city once a week to check for streetlight outages and other possible issues.

In addition to its constant monitoring activities, the PLA also relies on citizens to report outages as soon as they occur, either by phone or by going on its website.



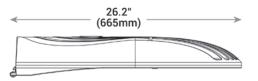
As it installs new streetlights throughout Detroit, the Public Lighting Authority is following standards for roadway lighting developed by the Illuminating Engineering Society of North America. The national standards provide for consistent design criteria throughout the city using Light Emitting Diode (LED) streetlights that are twice as bright as the old High Pressure Sodium (HPS) lights.

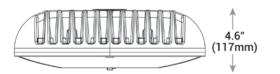
Reduced Energy Costs & Lowered Maintenance Costs

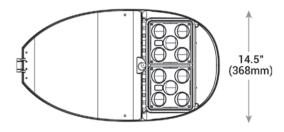
In addition to being brighter, LEDs consume approximately 50 percent less energy than the old HPS lights, resulting in millions of dollars of annual savings on the City of Detroit's electric bill. LED lights also last considerably longer than HPS lights, with an average life estimated at 20 years, more than five times the life of the old HPS lamps, resulting in more reliable lighting while at the same time saving on maintenance costs.

Improved Visibility

LEDs also produce bright white light — not that orange glow of sodium lights — so objects such as people and bicycles are seen more clearly.







The net result is a system that is brighter, more efficient and more reliable than the old system that will assure state-of-the-art public lighting for Detroit far into the future.

WORKING WITH **NEIGHBORHOODS**

As the PLA has installed new lights throughout the city, some neighborhoods have requested the installation of alternative light poles rather than the standard poles being used throughout the city.

In order to treat every neighborhood equally, the PLA has required neighborhoods requesting alternative light poles to pay the difference in cost between a standard pole and the alternative pole.

When neighborhoods agree to pay the additional cost, the PLA works with each neighborhood association to identify the style of pole that fits within the price the association is willing to pay. As a result, neighborhoods such as Sherwood Forest, Boston Edison and Indian Village have had historically styled poles installed that fit in with the character of the neighborhood.





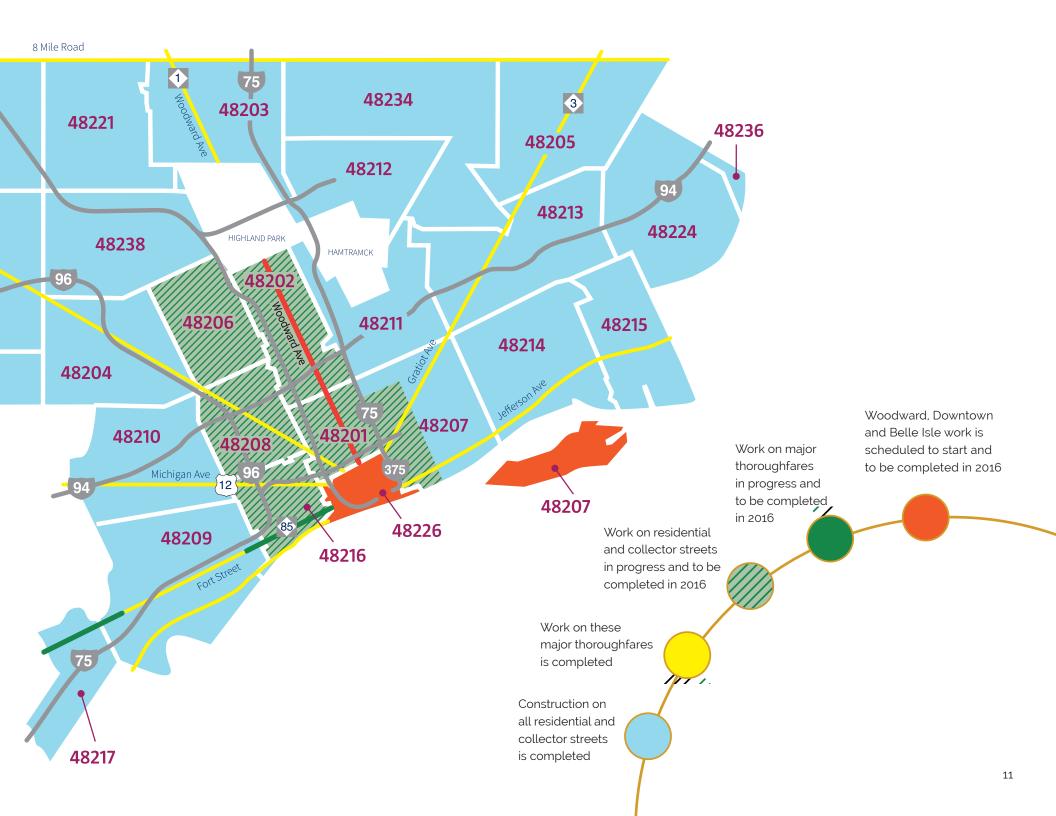
At the end of PLA's second year, more than 60,000 new lights shine across Detroit's Neighborhoods

Detroit's streetlights have come a long way since the Authority installed the first new LED light in February of 2014. Before the PLA started, more than 40 percent of the streetlights were not working and it could take months or even years to fix a light if it went out. In addition, vandalism, including theft of copper wiring, continued to plague the system.

At the end of 2015, more than 60,000 new lights have been installed in neighborhoods, collector streets and main thoroughfares. Lights that experience a problem are being repaired in three to five days. In addition, the problem of copper theft was eliminated by a discontinuation of the use of copper wiring, replacing it with aluminum wiring, which is much less valuable on the scrap market.

This map shows areas where the new lights have been installed throughout the city, where construction is underway and where lights will be installed in the coming months.







From day one, the Authority has worked to assure that resources that exist within the City of Detroit are used to carry out its work. That means involving qualified Detroiters and Detroit-based companies in all aspects of its operations.



Approximately 60% of PLA contractors are Detroit-based.



Nearly 25% of the workforce installing streetlights are Detroit residents.

At the same time, the PLA's vendors

have formed local partnerships to provide funding, equipment, training and education for Detroit middle and high school students.

PLA vendors have donated some \$60,000 to the Detroit Area Pre-College Engineering Program (DAPCEP) and Focus: HOPE for materials, supplies and general support.

Last summer, for the second year in a row, the Authority's annual Summer Youth Work Project worked to involve six young Detroiters in employment opportunities and/or internships through the PLA and its contractor partners. The goal was to provide hands-on training for young people in the emerging field of lighting and lighting construction, as well as to begin to build a pool of qualified job-seeking candidates for future full-time employment positions.

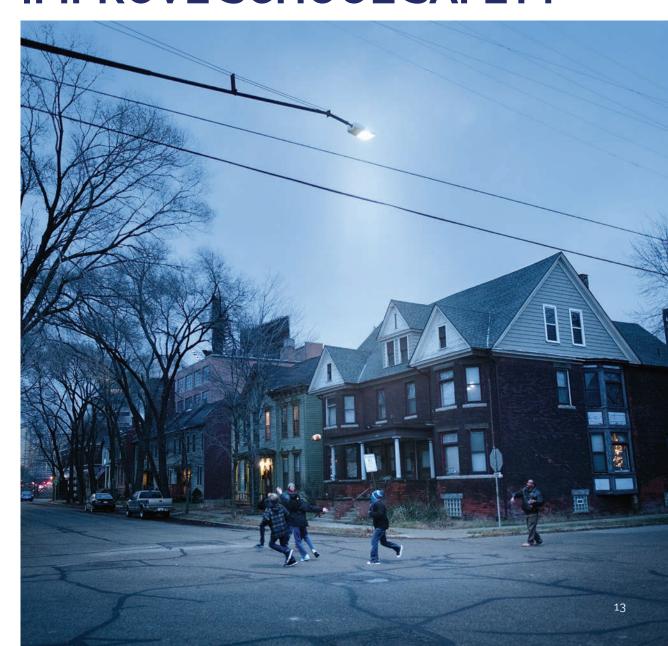
5,400 BRIGHTER LIGHTS IMPROVE SCHOOL SAFETY

Working with the Detroit Public Schools and the Education Achievement Authority, the PLA has installed some 5,400 lights along school safe routes to help keep children safe on their way to and from school.

These brighter 250-watt equivalent lights are especially important during the winter months, when the morning trip to school often occurs before the sun comes up, and many after school activities occur during evening hours.

The improved lighting along school-identified safe routes, including crosswalks, more clearly illuminates areas of pedestrian activities, increases driver visibility and improves nighttime pedestrian security.







CITIGROUP PARTNERS WITH PLA TO MAKE LIGHTING POSSIBLE TELLS DETROIT'S LIGHTING STORY TO THE NATION AND THE WORLD

As the Public Lighting Authority was going to the bond markets in 2014 to secure initial funding to begin its work, the City of Detroit filed for bankruptcy.

Despite the fact that the PLA is an independent legal entity completely separate from the city, the filing made the search for financing much more difficult.

At a time when other banks walked away, Citigroup committed to the project, using its own balance sheet to commit \$60 million to get the initial financing off the ground and encouraging other early investors to get involved.

Then, working closely with the State of Michigan and the Michigan Finance Authority, Citi issued bonds and raised \$185 million in permanent financing for the project, \$25 million more than was originally anticipated. The result was enough to pay for 65,000-plus energy-efficient LED lights across the city, 10,000 more lights than originally planned.

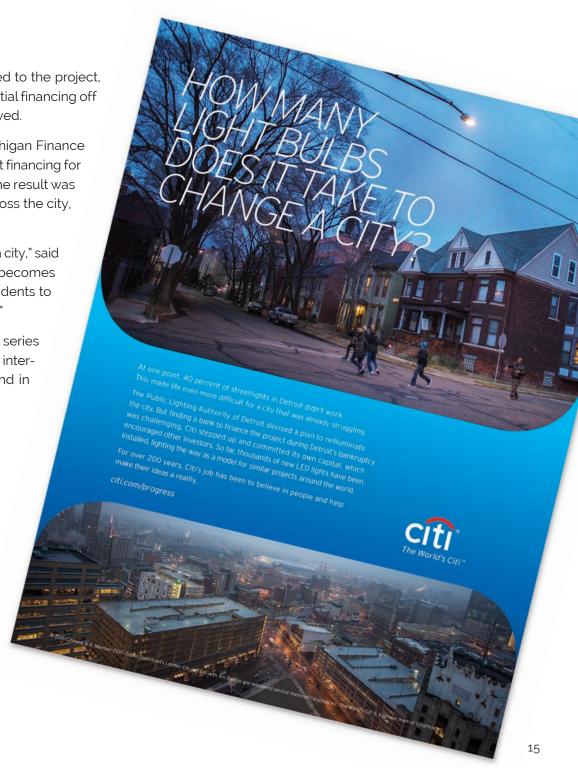
"In many ways, streetlights are indicative of the overall health of a city," said Citi managing director, Guy Logan. "Without well-lit streets, it becomes difficult for people to go about their daily lives, difficult for students to get to school and difficult for communities to grow and thrive."

In 2015, Citi told the story of its partnership with the PLA in a series of print and broadcast advertisements that ran nationally and internationally. The PLA was highlighted on national television and in publications throughout the U.S. and the world.

Here are some of the print ad placements:

Bloomberg BusinessWeek
Boston Globe
Crain's Detroit Business
Detroit Free Press
Forbes
Fortune
Global Finance
Michigan Chronicle
MIT Technology Review
New Republic
New York Times

Politico Magazine
Roll Call
The Atlantic
The Banker
The Bond Buyer
The Economist
The Hill
The New Yorker
Time
Wall Street Journal
Washington Post





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 effective crime fighting. The legislation also allocated a portion of the

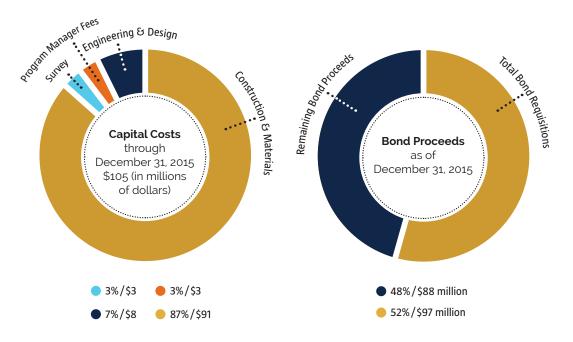
city's income tax to public safety to cover the \$12.5 million that was going to public lighting.

In December 2013, U.S. Bankruptcy Judge Stephen 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 will be installed throughout the city by the end of this year.





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.

Independent Financial Audit for the Fiscal Years Ended June 30

Enterprise Funds

	FY 2014-15	FY 2013-14
Revenue	\$ 19,273,498	\$ 18,310,154
Expenditures	\$ 16,706,571	\$ 2,807,108
Net Increase in Net Position	\$ 2,566,927	\$ 15,503,046
Net Position, Beginning of Period	\$ 16,541,497	\$ 1,038,451
Net Position, End of Period	\$ 19,108,424	\$ 16,541,497

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



Public Lighting Authority Statement of Net Position*

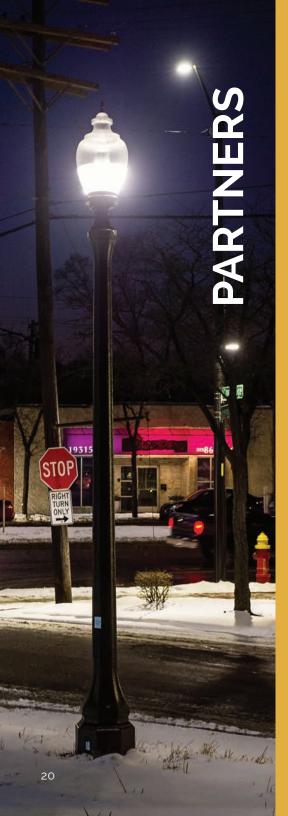
December 31, 2015

ASSETS

Total Liabilities & Net Fosition	Ą	4,402,522
Total Net Position Total Liabilities & Net Position	\$	23,978,168
Net Position Unrestricted	\$	23,978,168
Total Liabilities	\$	200,504,354
Total Non-Current Liabilities		189,632,062
Bond Payable — Long Term		178,960,000
Non-Current Liabilities Bond Premium	\$	
Total Current Liabilities	\$	10,872,292
Bond Payable — Short Term	\$	3,030,000
Interest Payable	\$	4,487,62
Accounts Payable	\$	3,354,667
LIABILITIES & NET POSITION Current Liabilities		
Total Assets	\$	224,482,522
Total Non-Current Assets	\$	106,004,317
Equipment (Net)	\$	574,713
Non-Current Assets Capitalized Construction Cost	\$	105,429,604
Total Current Assets	\$	118,478,20
Prepaid	\$	13,208
Investments	\$	
Current Assets Cash and Cash Equivalents	\$	48,556,15

^{*}Unaudited financial statement





The Public Lighting Authority gratefully acknowledges its partners working hand-in-hand to relight Detroit.

Allen Law Group* Asplundh Tree Expert Co. Azteca Systems, Inc.* Berg Muirhead & Associates* 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 & Company* Global Design Goss Group, Inc.* Gregory Terrell & Co.* International Brotherhood of Electrical Workers (IBEW) J. Ranck Electric. Inc.* Jaffe Raitt Heuer & Weiss* Jefferson Chevrolet JP Morgan 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 Company** 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 Wade Trim* Walker-Miller Energy Services* Wilmington Trust* **Xtreme Powerline Construction**

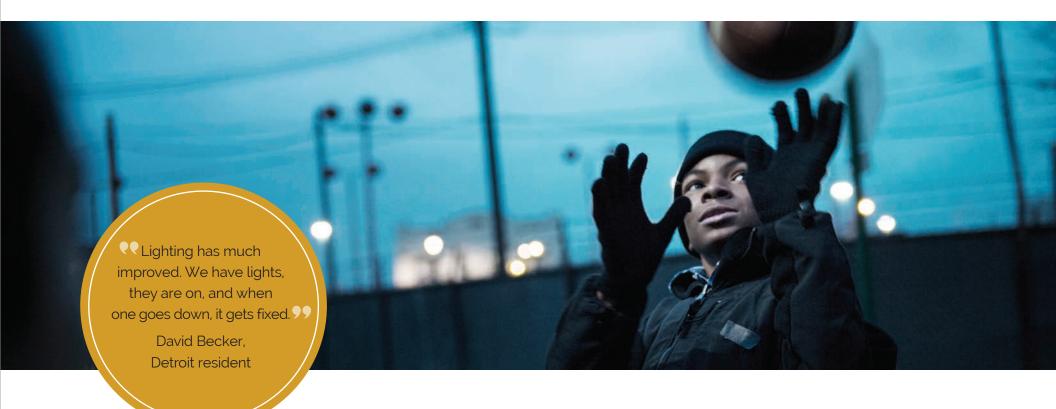
PHOTO CONTRIBUTIONS

Andrew Potter
Citigroup
College for Creative Studies

*Denotes a contract with PLA

Pl just wanted to pass on how delighted our entire neighborhood is with the new lights, fixtures, poles and bases. The Authority was extremely responsive during this process. I'm very glad the project turned out so well and that we now even have a park that is lit too.

Patrice McKinnon, Nicolet Cooperative Treasurer



Overall, 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

