

City Council Hearing: Baltimore City Conduit

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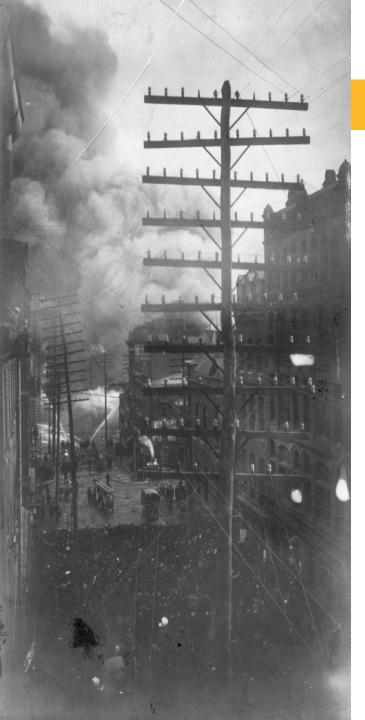
July 22, 2025



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Fast Facts

- First Duct Installations Began in 1900
- Following the Great Baltimore Fire in February 1904, Aerial Utilities Forced Underground
- Initial Construction Investment: \$7 Million
- Currently 3.7 Million Feet of Conduit (Roughly 700 Miles)
- Currently 25 Million Feet of Duct (Roughly 4,735 Miles)
- Over 12,000 Manholes





What is the Municipal Conduit System?

A series of manholes linked together by underground conduits or ducts, forming a network to facilitate the **delivery of power** and **communication services** to City residents and businesses.







Purpose of the System

- Provides Pathways for Electric, Communication, and Fiber Optic Cable Services.
- Houses Both Public and Private Assets
 - City Traffic Signals, Public Safety, and Street Lighting
 - Over 40 Lessees BGE is the Largest Tenant.



How does the System Work

City Owns Ducts and Manholes that house cables.

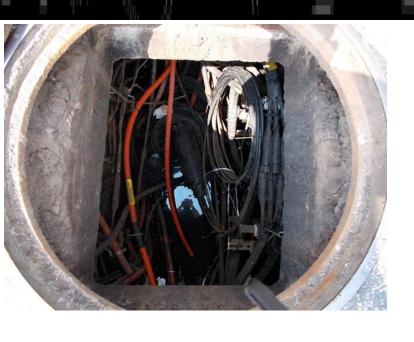
Lease Agreements with Tenants

- Lease Conduit Space per linear foot of Cable.
- Lease Revenue Utilized to Manage & Maintain Conduit System.

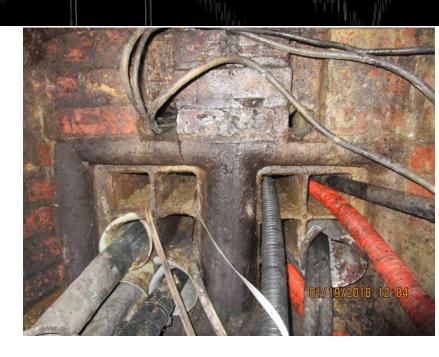
Developer Agreements

- Grows Conduit Asset at No Cost to City.
- New Conduit is Built per City standards to developers needs.
- City assumes ownership at project completion.

Examples of Inside the System











Benefits of the System

Public Safety

- Signal interconnect, street lights, traffic signals,
- Emergency Agency communications.

Economic Growth

• Infrastructure in place and ready for tenants to provide services.

Municipal Control of Asset

- City oversees activity within Public Right of Way
- Collaboration with other Government Agencies.



Benefits of the System

System Reliability

 Underground utilities reduce likelihood of stormrelated outages.

Achieve Citywide Mayoral Initiatives

- B-More Bright
- Smart City
- Build it Once

Management of the System

The mission of Conduit Division in DOT is to provide a reliable and efficient conduit system in a state of good repair.

Conduit Division Responsibilities

- Programs include:
 - Conduit Engineering
 - o Plan, Design, Construct, Lease, and Manage System
 - Conduit Field Services
 - Maintain, Repair, and Rehabilitate System
 - Inspect Cable Occupancy
 - Inspect Developer built Conduit assets
 - Conduit Asset Management
 - Maintain conduit infrastructure records using Geographic Information Systems (GIS)

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2023 Settlement Agreement

BGE will invest **\$120 million over 4 years into the Conduit system** in lieu of lease fees. BGE also pays the City \$1.5 million per year for maintenance of the system.

The **City still owns and maintains the conduit system**. BGE utilizes the revenue they previously paid to the City to do the major design/construction.

- To reactively/proactively repair conduit obstructions.
- To repair/replace conduit manholes.
- To design and construct new/parallel conduit systems.

Conduit Division manages the planning of where these construction efforts take place and inspects the work while it is performed.

Brandon M. Scott Mayor

The City ultimately still owns all the assets associated with the City conduit system.

Emergency Response

- Arrive on scene and coordinate with OEM and BCFD.
- Contact Traffic for support with street closures and Traffic Enforcement Officers.
- Contact DOT Maintenance for support with signal outages.
- Determine what Conduit assets are involved.
- Work with BGE Underground to determine what needs to be fixed and when.
- Coordinate work for BGE Capital teams to address obstructions.
- Contact Lessees and discuss outages.
- Determine access priority for BGE/fiber lessees for repairs.



Moving Forward

- Working with engineering firm RTI to do a forensic analysis of the Charles St, and South St. fires.
- Part of their analysis is to provide us with contributing factors to fires.
- Then we will work with BGE on making capital investments in the areas with contributing factors.





BCFD Response

Fire Chief James Wallace

July 22, 2025



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Underground Fires





Overview

The Baltimore City Fire Department reports that on June 28, 2025, an underground fire occurred in downtown Baltimore, resulting in heavy smoke emanating from multiple manholes. The fire self-extinguished and OEM, BGE and DOT were contacted for support. No injuries were reported, but there was significant infrastructure impact—including steam damage and utility disruption. The origin of the fire is under active investigation.

Timeline

2:57 PM, Saturday, June 28	911 Dispatch receives multiple 911 reports of heavy smoke from four manholes at the intersection of East Baltimore Street & Guilford Avenue, near City Hall
3:00-3:05 PM	Fire units respond and confirm heavy smoke rising from four manhole covers; flames seen shortly thereafter.
3:05–3:15 PM	BCFD crews prepare for fire suppression, delayed due to the involvement of high-voltage equipment. Four manholes are vented to allow smoke and steam to escape .
3:15-4:00 PM	BGE is called to de-energize utilities around the scene for safety. DOT/OEM establishes road closures around East Baltimore & Guilford .
Late Afternoon-Evening	Area secured, BCFD maintains presence and continues to monitor the scene. No known residential power outages, but traffic lights and streetlights are down. BCFD hands command of the scene over to BGE who continued to work through the night.
Saturday Night	BGE crews work through the night to vent additional manholes and patch damaged conduit and ductwork .



Map of Previous Underground Fires



