



City of Anaheim  
**PUBLIC UTILITIES DEPARTMENT**

**DATE:** JUNE 28, 2017  
**TO:** PUBLIC UTILITIES BOARD  
**FROM:** PUBLIC UTILITIES DEPARTMENT  
**SUBJECT:** PROPOSED FIVE-YEAR UNDERGROUND CONVERSION  
PLAN FOR FISCAL YEARS 2017/18 TO 2021/22

**RECOMMENDATION:**

That the Public Utilities Board recommend that the City Council, by Motion, approve the proposed Five-Year Underground Conversion Plan for Fiscal Years 2017/18 to 2021/22 (Proposed Plan).

**DISCUSSION:**

The Public Utilities Department (Department) prepares an annual update on the Underground Conversion Program which outlines the status of ongoing projects and recommends approval of new projects, if any, into the five-year planning process. On February 22, 2017, the Department presented a new project on Beach Boulevard to the Underground Conversion Subcommittee (Subcommittee) for its review and consideration. At that meeting, the Subcommittee, by motion, recommended that the Public Utilities Board (Board) add the Beach Boulevard project to the Proposed Plan. If recommended by the Board, the Proposed Plan will subsequently be presented to the City Council for consideration and approval.

**Background**

The City Council, on June 5, 1990, approved a Citywide Underground Conversion Program (Program) to convert electrical and communication infrastructure located along the City's major thoroughfares from overhead to underground. The Program provides many benefits to residents and businesses including enhanced electric service reliability for customers served by the underground facilities, upgraded street lighting, as well as aesthetic improvements along Anaheim's main transportation corridors.

Underground Districts (Districts) are established by resolution of the City Council, which requires each utility with overhead systems serving customers within the City's boundaries to underground its facilities at its own expense. The cost for converting the Department's overhead electric and communication facilities to underground is funded by a 4% surcharge included on Anaheim customers' electric utility bills.

Districts are selected on the basis of the following criteria: coordination with other City projects, electrical reliability and engineering considerations, geographical

diversity which now includes consideration of City Council Districts, aesthetic improvements, and available funding. Approved Districts require coordination with other departments and agencies that have impacted facilities. Additionally, the Department coordinates with property owners to discuss any impacts that may be caused as a result of the project, and in some cases, to obtain easements for placement of electrical equipment.

The Underground Conversion Program targets the 240 circuit miles that traverse arterial and collector roadways, and areas that may be undergrounded for reliability purposes such as at freeway crossings. A circuit mile is the length of a set of high voltage wires carrying electrical current either between substations or to transformers that eventually serve customers. Through Fiscal Year 2016/17, the Department has completed undergrounding 128 circuit miles, or 53% of the identified overhead circuits.

### Proposed Plan

The Proposed Plan highlights one completed project, and includes eleven projects carried forward from the current plan, and one new project on Beach Boulevard (Attachment 1). In coordination with the City's Planning Department and as recommended by the Community Advisory Committee, undergrounding of the overhead utilities is an integral part of the Beach Boulevard Specific Plan. The Specific Plan outlines the improvements to the Beach Boulevard corridor that also include roadway and property improvements, signage, and upgraded street lighting.

However, Beach Boulevard also includes Southern California Edison (SCE) on jointly owned utility poles. SCE passes through the City boundaries on Beach Boulevard, but does not serve customers. As such, the California Public Utilities Commission, who regulates SCE, has determined that SCE is not obligated to fund undergrounding in jurisdictions where SCE does not serve customers and therefore collects no corresponding revenues. There are approximately 37 circuit miles in Anaheim where SCE is co-located on utility poles.

To avoid Anaheim electric ratepayers subsidizing SCE, the Department is recommending to borrow the necessary funds to underground SCE lines from the Program reserve, and then pay itself back over time by utilizing half or more of undergrounding revenue allocated for the General Fund Transfer, which is not restricted. A preliminary estimate of SCE undergrounding on Beach Boulevard is in the \$4 to \$6 million range. The General Fund Transfer from undergrounding revenue is approximately \$600,000 per year, and half or more will be utilized to pay back the cost to underground SCE lines. When the borrowed funds are repaid, additional projects with SCE lines may be pursued in the future. The Underground Conversion Program funding and outstanding amount would be audited each year to ensure proper accounting.

The Department's portion of Beach Boulevard undergrounding, which includes significantly more infrastructure to serve customers, is estimated to cost \$10.5 million. Also on the utility poles are AT&T, Charter, and Edison Carrier Solutions

communication companies. The Department will install civil structures and will be reimbursed for their proportionate costs for trenching and roadway repairs. The project is tentatively scheduled to begin construction in May 2019 following design activities by all utilities.

### Progress Update

The Proposed Plan includes the following project updates:

- **Miraloma Phase 2 (Department Undergrounding Completed):** On Miraloma Avenue, between the 57 Freeway and Miller Street, and on Miller Street, from north of Miraloma Avenue to La Palma Avenue, the overhead electrical facilities were placed underground in June 2017. Roadway resurfacing is being coordinated with the Public Works Department and is scheduled to be completed in September 2017. There are four telecommunication companies that are in various stages of installing underground facilities, and they are expected to be complete with their removals by April 2018.
- **Lincoln/Rio Vista (Under Construction):** Undergrounding on Lincoln Avenue, crossing the 57 freeway to Rio Vista Street, and on Rio Vista Street, from Lincoln Avenue to La Palma Avenue, began construction in July 2016 and is scheduled for completion by July 2018. The project has been coordinated with the California Department of Transportation (Caltrans) for tunneling under the 57 and 91 freeways to eliminate overhead freeway crossings to improve electric reliability. Work in front of Rio Vista Elementary School was coordinated to minimize construction impacts.
- **Orangewood (Under Construction):** Construction on Orangewood Avenue, between Eugene Street and Lewis Street began in May 2017. The project has been coordinated with the Ponderosa Park and Family Resource Center project schedule and location of permanent underground facilities. The Department's undergrounding will be completed by September 2018, with the phone, internet and cable TV lines to follow within 12-18 months, thereafter. The construction project has been coordinated with the Public Works Department to also include street and sidewalk improvements.
- **Euclid (Under Design and Easement Acquisition):** A project on Euclid Street from Broadway to Orangewood Avenue is currently in design. This project is being coordinated with Loara High School for the placement of new electric equipment. Construction is tentatively scheduled from February 2018 to April 2019.

The balance of projects in the Proposed Plan are in various stages of planning and preliminary design. Residents and businesses are informed of upcoming undergrounding through mailed notifications about District formations. Customers also receive an informational letter prior to the start of construction, and notices are provided 48-hours in advance of planned outages. Information is available on the

City's website and on project construction signs. Customer surveys are sent following the project completion to help improve future projects.

**IMPACT ON BUDGET:**

Sufficient funds for the Proposed Plan are budgeted in the Department's Electric Capital Improvement Program for FY 2017-18, and funds for subsequent years are subject to City Council approval. Beginning in FY 2018-19, half or more of the Department's General Fund Transfer allocated from undergrounding revenue will be utilized to repay the Department for undergrounding SCE electric lines.

Respectfully submitted,



Dukku Lee  
Public Utilities General Manager



**Attachment:**

1. Proposed Five-Year Plan Projects List

**City of Anaheim**  
**Public Utilities Department**  
**Underground Conversion Program 5-Year Plan**  
**FY2017/18 to FY2021/22 Projects List**

Projects	Council District	Construction Schedule
<b>Miraloma Ave Phase 2:</b> Miraloma Avenue from the 57 Freeway to Miller Street and on Miller Street from north of Miraloma Avenue to La Palma Avenue	5 & 6	Electrical facilities placed underground June 2017; roadway resurfacing September 2017; communication removals April 2018
<b>Lincoln / Rio Vista:</b> Lincoln Avenue crossing the 57 Freeway to Rio Vista Street, and on Rio Vista Street from Lincoln Avenue to La Palma Avenue	5	July 2016 to July 2018
<b>Orangewood:</b> Orangewood Avenue from Eugene Street to Lewis Street	4	May 2017 to September 2018
<b>Euclid:</b> Euclid Street from Broadway to Orangewood Avenue	2, 3 & 4	February 2018 to April 2019
<b>Santa Ana Canyon Rd / Royal Oak:</b> Santa Ana Canyon Road from Lakeview Avenue to Imperial Highway, and on Royal Oak Road from Santa Ana Canyon Road to Nohl Ranch Road	6	December 2018 to September 2020
<b>Beach (Proposed):</b> Beach Boulevard from Crescent Avenue to s/o Ball Road	1	May 2019 to February 2021
<b>Cerritos / Nutwood:</b> Cerritos Avenue from Nutwood Street to Euclid Street, and on Nutwood Street from Cerritos Avenue to Katella Avenue	2	December 2019 to January 2021
<b>La Palma/ Anaheim:</b> La Palma Avenue from Harbor Boulevard to Olive Street, and on Anaheim Boulevard from La Palma Avenue to Carl Karcher Way	3	August 2020 to October 2021
<b>La Palma / East:</b> La Palma Avenue from East Street to State College Boulevard	5	January 2021 to February 2022
<b>Olive / Vermont:</b> Olive Street from South Street to Vermont Avenue, and on Vermont Avenue from Anaheim Boulevard to State College Boulevard	4	May 2021 to October 2022
<b>Ball / Brookhurst:</b> Ball Road from Brookhurst Street to Euclid Street	2	July 2022 to April 2024
<b>Santa Ana / State College:</b> Santa Ana Street from Vine Street to State College Boulevard	3, 4 & 5	February 2023 to July 2024
<b>La Palma / Sunkist:</b> La Palma Avenue from State College Boulevard to the 57 Freeway, on Sunkist Street from La Palma Avenue to Lincoln Avenue, and on Miraloma Avenue and Sunkist Way from La Palma Avenue to Romneya Drive	5	August 2023 to July 2025