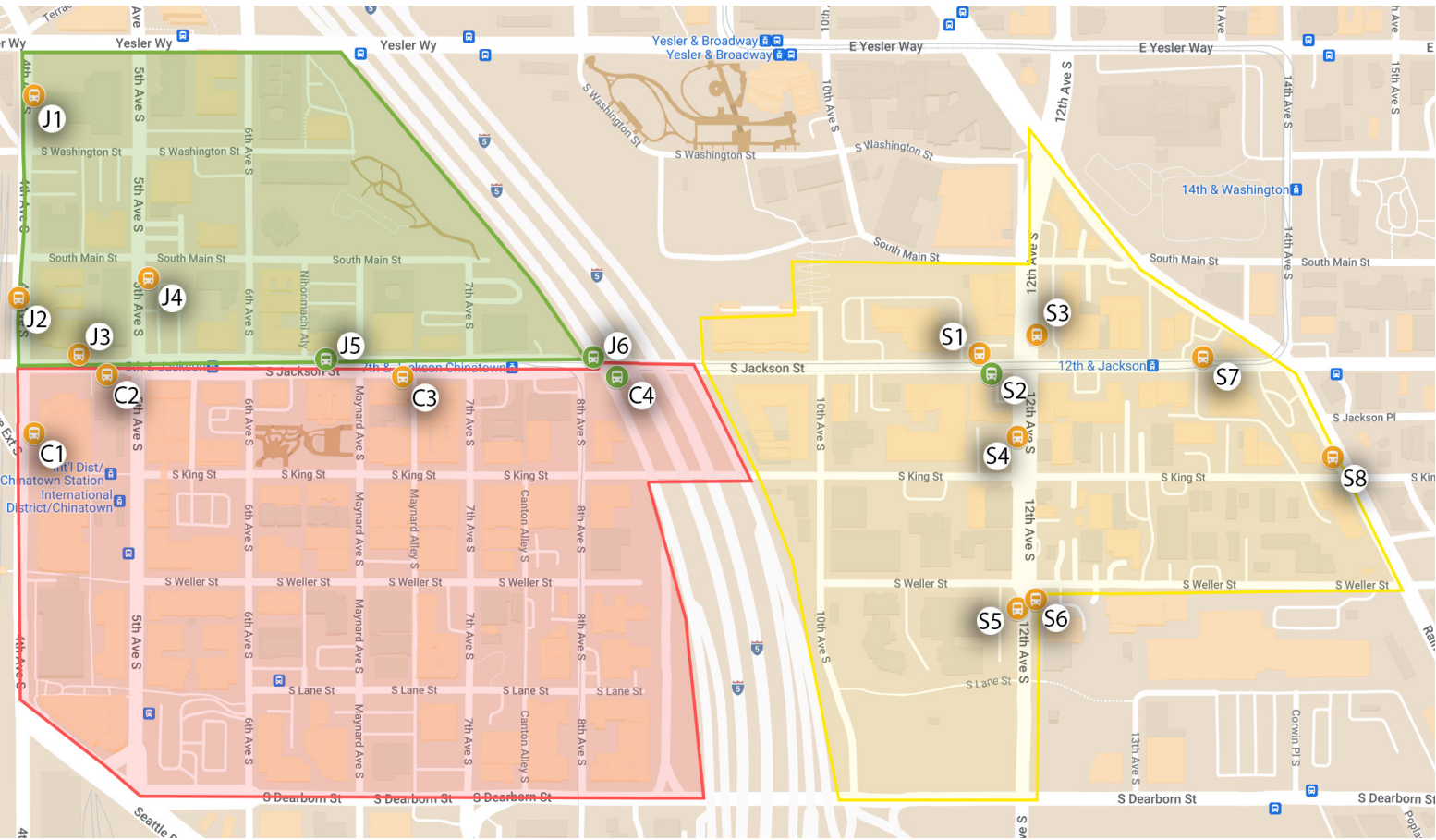


# Bus Stops and Storefronts Lighting Improvement

## Project Intent

This project aims to identify, analyze, and propose lighting improvement for bus stops, streets sign, and storefronts. The current lighting conditions at bus stops can be further improved to better serve the community. Underlit storefronts, landmarks, and streets throughout the neighborhood can be repaired and enhanced. A visually pleasing night-time environment may not only improve safety by encouraging more positive street foot-traffic, but also contribute to the future development of the neighborhood.



Neighborhood Bus Stop Map

## Recommendation summary:

### 01 BUS STOP LIGHTING RECOMMENDATIONS

- TREE PRUNING
- SOLAR PANEL SHADOWING
- REPAIRS AND MAINTENANCE
- HARDWIRING
- SUPERIOR METRO FIXTURE

### 02 STOREFRONT LIGHTING RECOMMENDATIONS

- CANOPY LIGHTING IMPROVEMENTS
- REMOVING WINDOW COVERINGS
- GENERAL REPAIRS AND MAINTENANCE

### 03 NEIGHBORHOOD LIGHTING RECOMMENDATIONS

- “KING” FIXTURES

### 04 IMPROVING FEATURE ELEMENTS

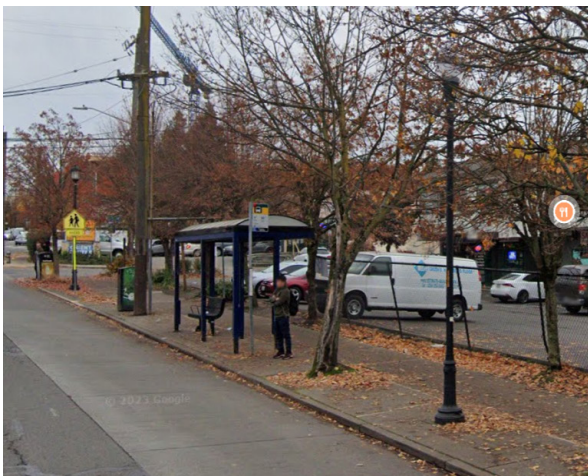
- VARIOUS

# 01 BUS STOP LIGHTING RECOMMENDATIONS

The bus stops and shelters in the Chinatown-International District contribute greatly to overall neighborhood presence.

## TREE PRUNING

Insufficient lighting conditions are often caused by nearby trees. Overgrown tree branches block the light coming from street lights that may otherwise provide sufficient bus stop illumination.



S3



S6

## SOLAR PANEL SHADOWING

Roadway street lights and surrounding building lighting often contribute sufficient and comfortable amounts of light to bus stop areas however, the presence of solar panels on canopy structures often reduces the amount of light in shelter waiting areas by blocking light that passes through the translucent roof. Hardwiring to electric lighting within shelters at all locations is recommended, and often practical given the prevalence of municipal infrastructure. Lastly, with the high-rise buildings and limited sunlight conditions in Seattle, solar-powered fixtures faces difficulties in sustaining their power.



J2



C2



S5



S8

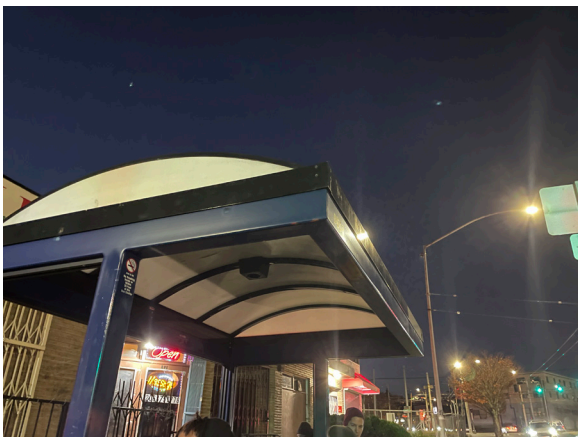


# 01 BUS STOP LIGHTING RECOMMENDATIONS

The bus stops and shelters in the Chinatown-International District contribute greatly to overall neighborhood presence.

## REPAIRS AND MAINTENANCE

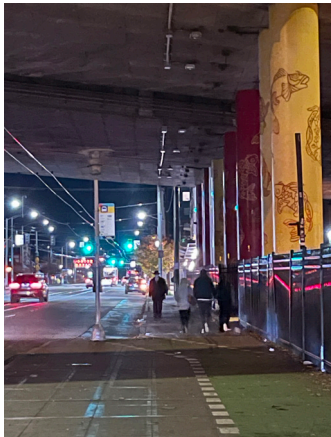
Many sheltered stops rely on integrated fixtures due to the poor lighting conditions around them and numerous fixtures were found not to be working. Where bus stops do not have shelters nearby electric lighting from street lights (or other nearby light sources), are especially important. If this lighting is not functioning these stops feel unsafe.



C1



C3



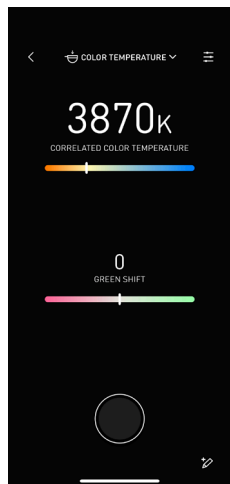
C4

## SUPERIOR METRO FIXTURE

This is an excellent example of bus shelter lighting with hardwired fixtures, terrific light distribution, good color temperature, good color rendering. The fixtures emit a soft distribution of light that illuminates pedestrian faces easily and creates a comfortable, warm atmosphere with appropriate illumination (2.8 Footcandles). The placement of light is also ideal, as it is above eye level, and mounted to the side of the shelter. The shelter appears well lit as viewed from a distance.



J4



## HARDWIRING

Several stops use solar-powered downlights. These downlights cast a harsh pool of downlight with minimal optic shielding and an unsettling cool color temperature. The downlight produced emphasizes eye socket shadows making it difficult to recognize facial features. These lights feel high-contrast and high-glare. Additionally, these low-output lights do not illuminate the shelter itself so the stop is not perceived as an obviously lit destination. The solar lights are so low output that often the shelters to not appear lit at all.



J1



C1



S6

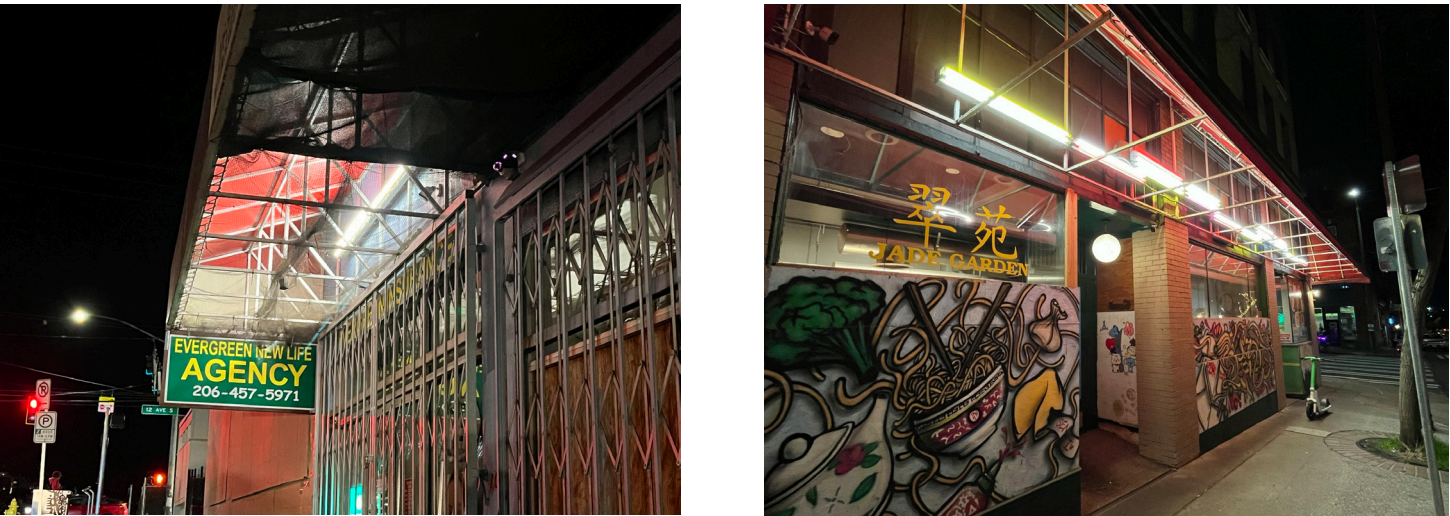


## 02 STOREFRONT LIGHTING RECCOMENDATIONS

The storefronts of the Chinatown-International District contribute greatly to the pedestrians sidewalk experience, allow for visual comfort, and support neighborhood identity.

### CANOPY LIGHTING IMPROVEMENTS

Strip lighting located withing canopy structures is a multipurpose, functional lighting method, as described in the ISRD (International Special Review District) guidelines for the C-ID. Often wall-mounted, these linear fixtures provide sufficient lighting for both signage and sidewalk areas below. They diffusely backlight signage canopies and emit diffuse light for fascial recognition, and often front-light for the building storefront.



Example of canopy lighting: Evergreen New Life Agency (Left) & Jade Garden (Right)

### REMOVING WINDOW COVERINGS

Interior lighting can contributes greatly to the lighting the sidewalk. Covered windows prevent light to spill out and generally improve sidewalk vibrancy.



Example of covered windows, various locations



# 02 STOREFRONT LIGHTING RECCOMENDATIONS

The storefronts of the Chinatown-International District contribute both illumination and interest to the sidewalk experience, supporting visual comfort and neighborhood identity.

## REPAIRS & MAINTENANCE

Some storefronts, doorways, and buildings have light fixtures that lack facade fixtures or are no longer working.



BarClay Seafood (left) is unlit in contrast to the store next door (right), which provide some lighting for the sidewalk



The Ding How Center lighting would benefit from additional lighting as well as having the “Ding How Center” sign lit



The Tai Tung Restaurant’s newly refurbished neon sign has one section that is not turned on or has failed



The Louisa Hotel’s façade is dark and could use some lighting or illumination of the large sign



The “Gift Shop” sign is distinctive and would benefit from repair



This historic “Milwaukee Hotel” signage would benefit from repair



The Maynard Alley, overall, is decently lit. However, some downlights in entry vestibules and wall lights over doors are not working



Focused light fixtures for the Chong Wa Benevolent Association’s Sun statue should either be fixed or turned on

*Note, this is not a comprehensive list*



# 03 NEIGHBORHOOD LIGHTING RECCOMENDATIONS

Select, distinctive elements, carefully placed throughout the neighborhood have the potential to improve neighborhood identity.

## ADDITIONAL PEDESTRIAN SCALE POLE “KING” FIXTURES

King Street, in Little Saigon, has the potential to be a future primary pedestrian corridor and would benefit from both improved lighting uniformity, and continuity of neighborhood presence.



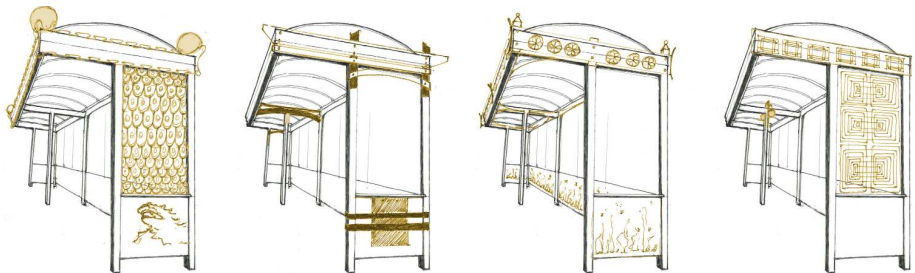
King Street is not uniformly lit. Sidewalk lighting varies greatly, with some areas brightly lit by fixtures mounted to buildings or pole lights, and other areas dark, sometimes shadowed by trees. Low light levels make it hard to identify an approaching person. Additional ornamental pedestrian scale pole fixtures would be beneficial along the entire street in either a staggered or even configuration.



Note, the sidewalk of 12th Ave and Weller is not uniformly lit. The west side of the street has many “King” fixtures. Fixtures are located close together whereas the east side has very few light fixtures.

## BUS SHELTER ARTWORK

Metro has a program where communities can obtain funding for an artist to create unique shelter artwork. This normally consists of primed panels for mural painting, with paint kits at no cost. Elsewhere in Seattle, there is precedent for laser cut steel artwork attached to bus shelters which could be used to further emphasize neighborhood identity.



2018 C-ID Lighting Design Vision and Action Strategy



# 04 IMPROVING FEATURE ELEMENTS

Lighting these feature elements will both help improve lighting conditions in select areas and highlight the cultural characteristics.



**Bulletin Board near Louisa Hotel:** A potential neighborhood meeting point or identity-bringing destination, the ornate bulletin board awning would benefit from accent lighting.



**Historic Chinatown Gate:** The light for the Chinatown gate is not as grand as it could be. The gate would benefit from additional fixtures and improved / warmer color temperature, black (not white) lights.



This feature sculpture/sign would benefit from a higher output source under the cap.

Investigation of the fixture shows that there is lighting integrated into the cap behind diffuse lenses. Source is likely not current technology.



The distinctive, historic noodle bowl neon would benefit from refurbishment.

*Note, this is not a comprehensive list. There are many other feature elements in the neighborhood worthy of update/repair/lighting augmentation.*