

## Crenshaw LAX Operating Plan Review

### Analysis Process:

**July 26, 2018, 4 pm:** Elected official Background Briefing (Transit Operators Working Group members, Metro South Bay Service Sector members, city staff are also invited) at the SBCCOG Offices.

*2 or 3 Metro public workshops – Dates TBD early August (tentatively at Crenshaw Shopping Center, Proud Bird, near Norwalk if Gateway COG wants a workshop in their area).*

**August 23, 2018:** SBCCOG Board Action on Operating Plan Routing Options.

**September 27, 2018:** Metro Board Action on Routing Alternatives.

### Constraints:

Frequency of trains from the three branches is limited by the at-grade triple wye limiting crossing movements. In fall 2019, three rail routes will use the wye at the intersection of the Crenshaw-LAX line and the Green Lines. Metro has identified eleven routing options. See illustrations of the Wye and options on page 2.

Traction power limitations and street running on the Crenshaw-LAX line north of La Brea to Exposition limit train frequency in each direction to 5 minutes.

This limitation also restricts train frequency on the rest of the network so that travel in this segment would require a 10-minute minimum combined frequency on trains that interline between the Green Line and Green Line South to the Crenshaw-LAX line.

In order to allow more frequent service for riders on either the Green Line from Norwalk to the Wye or the Green Line South from Redondo Beach to the Wye, trains that are not destined for the Crenshaw / LAX corridor north of the La Brea Station, Green Line and Green Line South riders will have to transfer to the Crenshaw-LAX Line at either the Aviation/Imperial

Green Line Station or the Aviation/Century Station or La Brea /Downtown Inglewood Station on the Crenshaw-LAX Line to allow trains to turn back using siding tracks being constructed northeast of the La Brea Station.

Train lengths are limited by 2-car stations at Aviation/Imperial, Mariposa, El Segundo, Douglas and Marine. Originally designed for automated operations with 2-min. frequency in each direction where 2-car trains would be adequate, the current manual operations limit train frequency to 6 minutes on the Green Lines necessitating longer trains. It would cost \$10 million per station to extend platforms to accommodate 3- car trains at the Aviation, Mariposa, El Segundo, and Redondo Beach stations.

Train Car availability is currently limited to <48-50, which is too few to allow three car trains on all three branches.

Regular Crenshaw/LAX Schedules will likely not change for Stadium or LAX Connector opening; additional gameday service will be added as special event service which will supplement regular service.

Metro has developed eleven operating options (see page 2). All options reduce frequency of current Green Line trains during peak hours due to the need to provide operating slots through the Wye for Norwalk-to-Expo and Redondo-to-Expo trains.

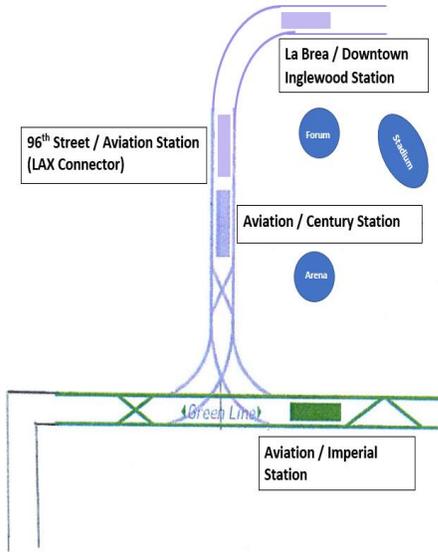
The current Green Line operates between Norwalk and Redondo Beach (trains are full in a.m. peak which is 5:30 -7:00 a.m.)

**Expo to Redondo Beach** (Travel time from Federal EIR): 12 miles, 21.4 mins.

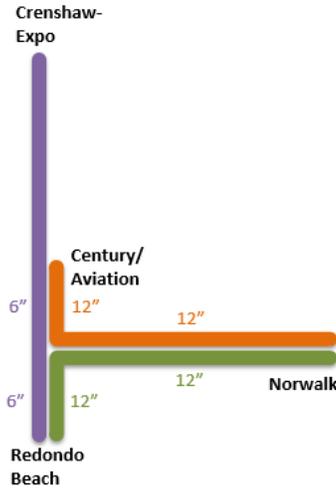
**Redondo Beach to Norwalk** (Travel time from timetable/schedule): 20 miles, 34 mins.

**Expo to Norwalk** (Travel time from FEIR + schedule): 28 miles, 40 mins.

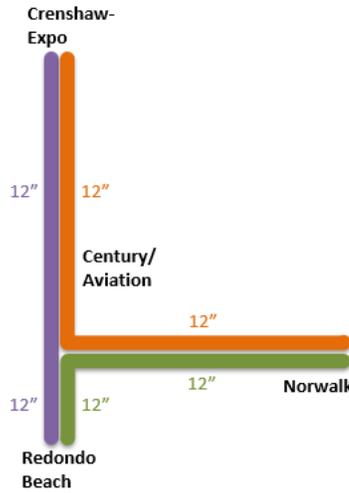
Current Green Line & Crenshaw/LAX Wye



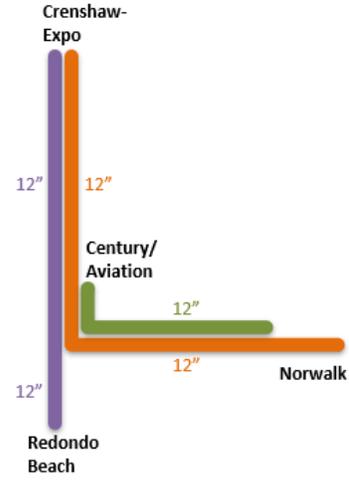
Alt B-1: Crenshaw/Redondo Green Branch (EIR)



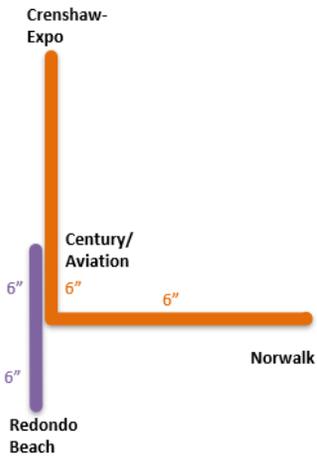
Alt B-2: Crenshaw/Green Branch



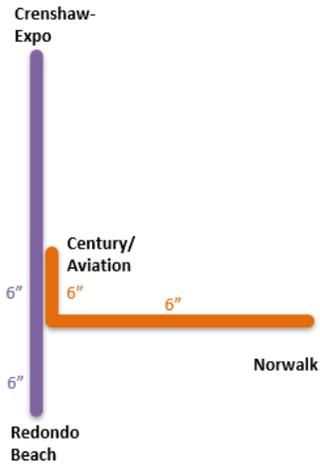
Alt B-3: Willowbrook/RP – Century/Aviation Shortline



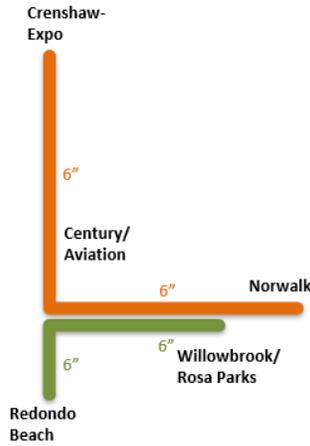
Alt C-1: Crenshaw/Norwalk Interline with Redondo Shuttle



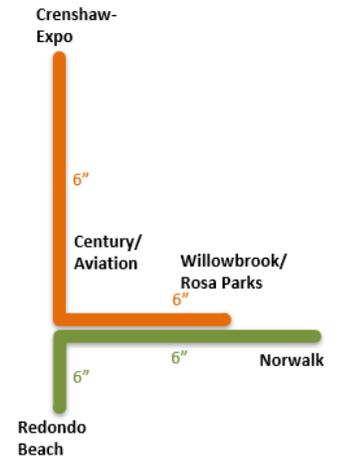
Alt C-2: Crenshaw/Redondo Interline, Norwalk Shortline



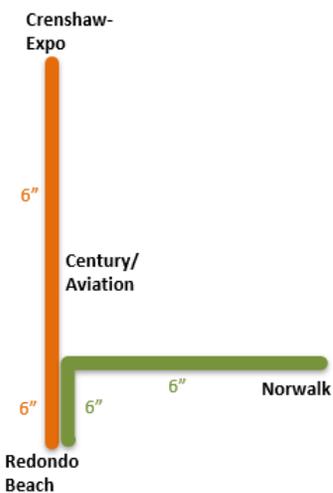
Alt C-3: Green Line shortline, Crenshaw to Norwalk



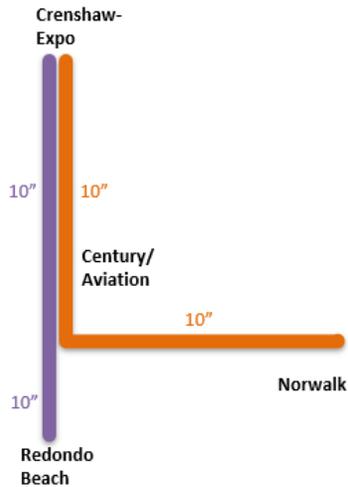
Alt C-4: Green Line, Crenshaw To Willowbrook/Rosa Parks



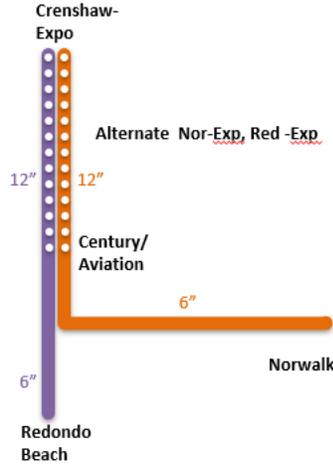
Alt C-5: Green Line, Crenshaw To Redondo Beach



Alt D-1: Alternate Norwalk/Crenshaw, Redondo/Crenshaw



Alt D-2: Alternate Norwalk/Crenshaw, Redondo/Crenshaw



Alt D-3: One Way Operations

