



CRENSHAW/GREEN LINE SERVICE PLAN AND BUS/RAIL INTERFACE PLAN



Expo/Crenshaw Station

JUNE 21, 2018

SERVICE PLAN CRITERIA



- **Connection to LAX** – Direct connection to Aviation/Century all three directions
- **Consistent Headways** – Consistent headway along each segment to ensure even loads from train to train
- **Minimize Transfers** – Minimize connections by optimizing transfer times at 3 min, half of a 6 min headway, and cross platform transfers
- **Ridership** – Connect segments with similar ridership and travel patterns



OPERATIONAL CONSTRAINTS



- **Junction Limitations** – Branched operations (e.g. Expo – RB followed by Expo – Norwalk) at a 6 min headway results in uneven headways (e.g. 5 min, then 7 min, then 5 min, etc. vs. an even 6 min headway)
- **Design Capacity** – Design capacity does not allow better than a 5 min headway along the Crenshaw/LAX Line

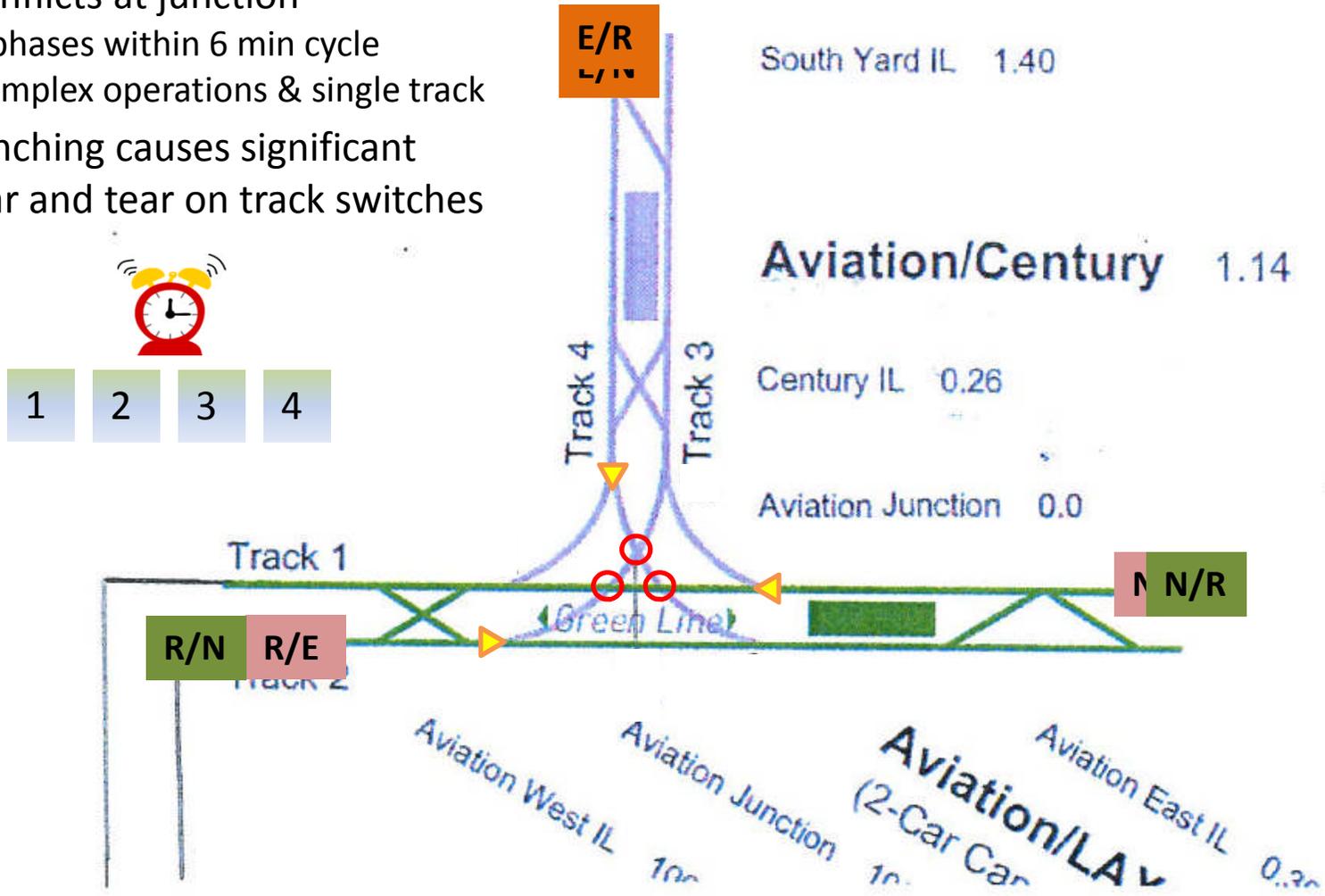


JUNCTION OPERATIONS

Branch Operations



- 3 conflicts at junction
 - 4 phases within 6 min cycle
 - Complex operations & single track
- ▲ Branching causes significant wear and tear on track switches

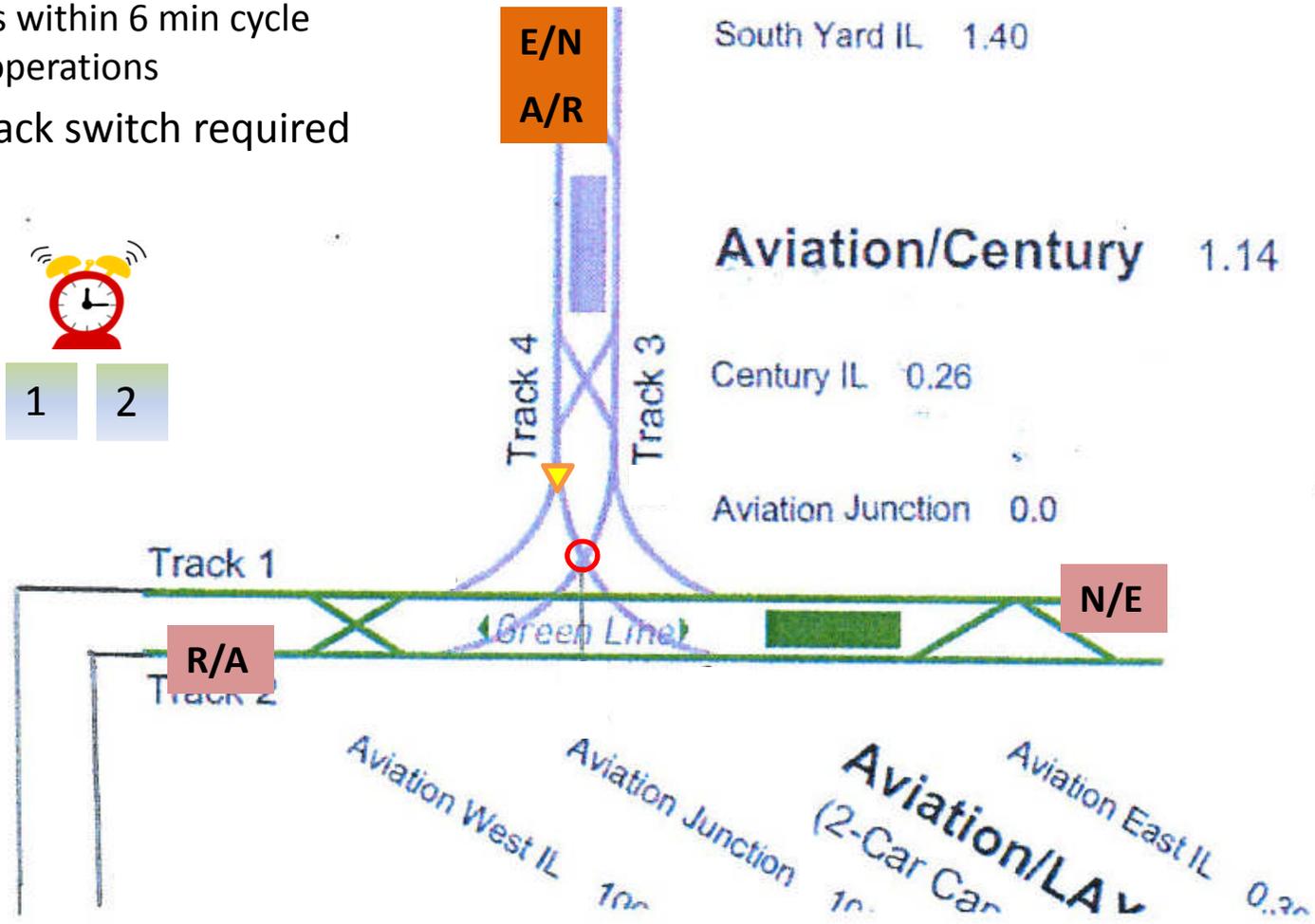


JUNCTION OPERATIONS

Consistent Route Operations



- 1 conflicts at junction
 - 2 phases within 6 min cycle
 - Simple operations
- ▲ Only 1 track switch required



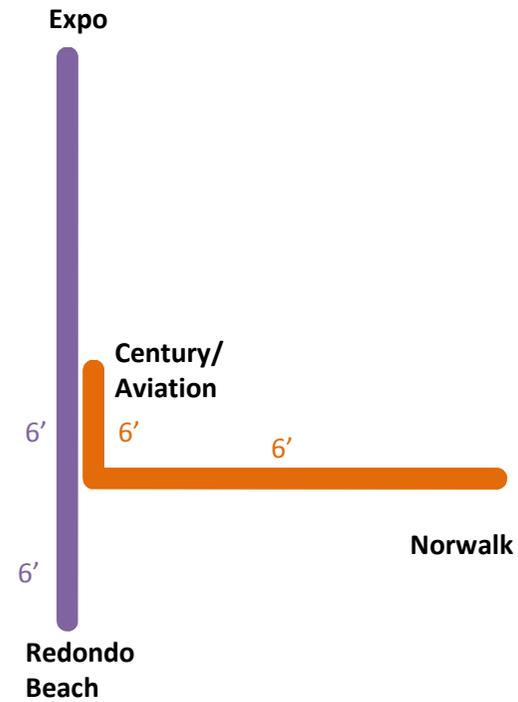
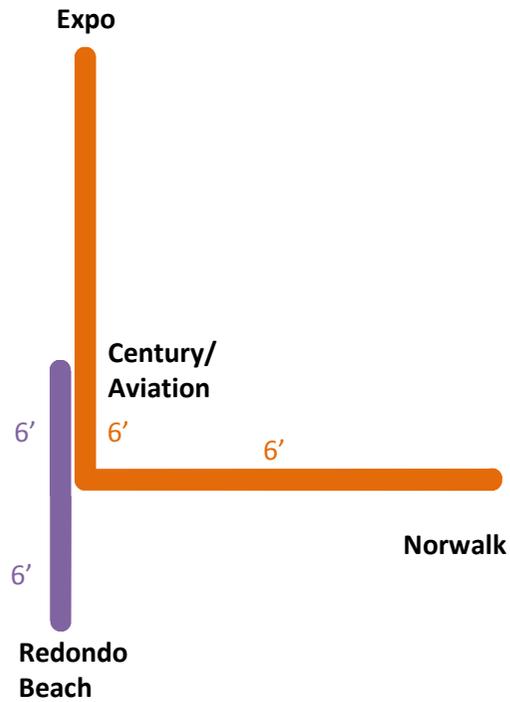


CRENSHAW/GREEN LINE

Alternative Operating Scenarios

Alt 1: Expo – Norwalk
Redondo Beach – Aviation/Century

Alt 2: Expo – Redondo Beach
Norwalk – Aviation/Century



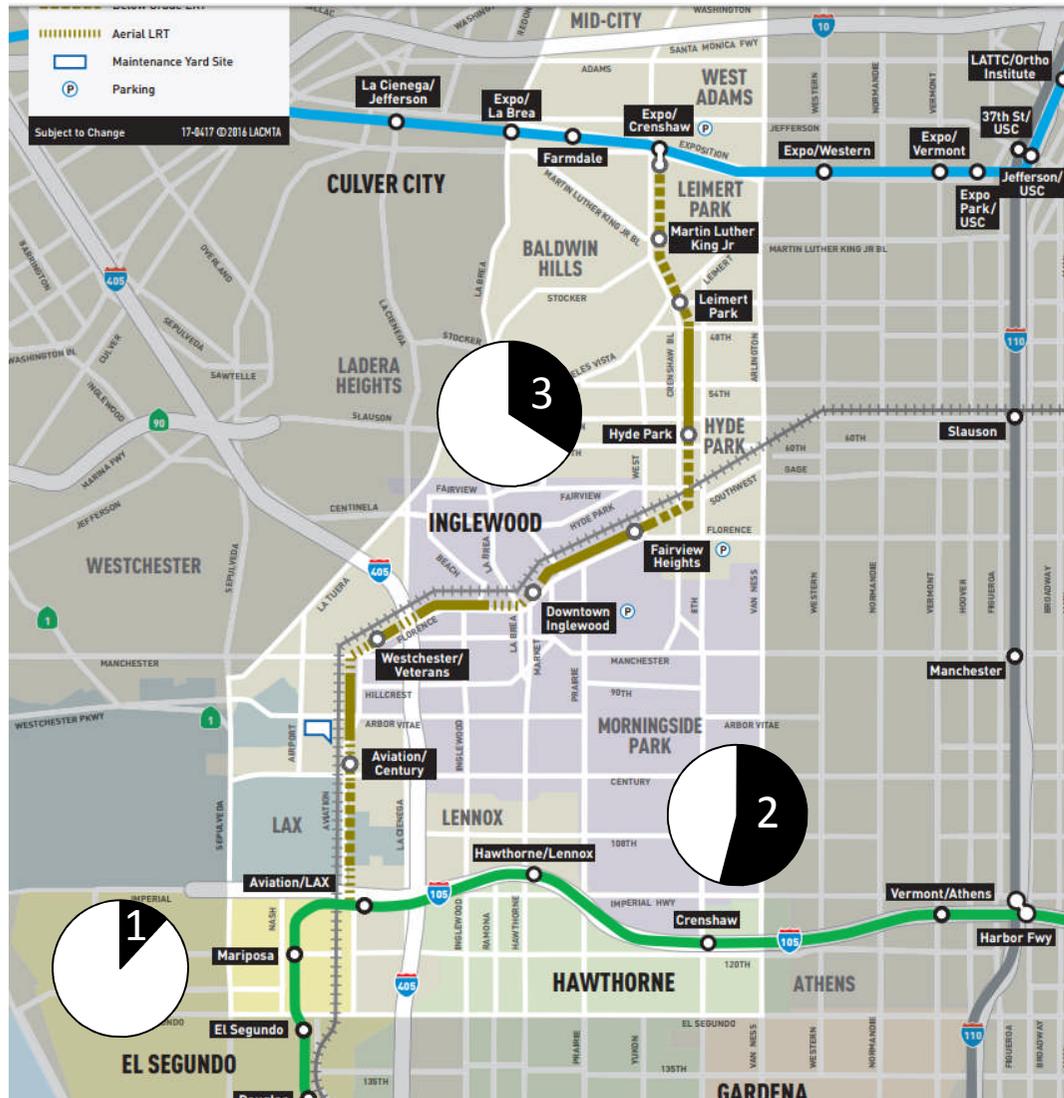
CRENSHAW/GREEN LINE

Average Daily Boardings (Weekdays)

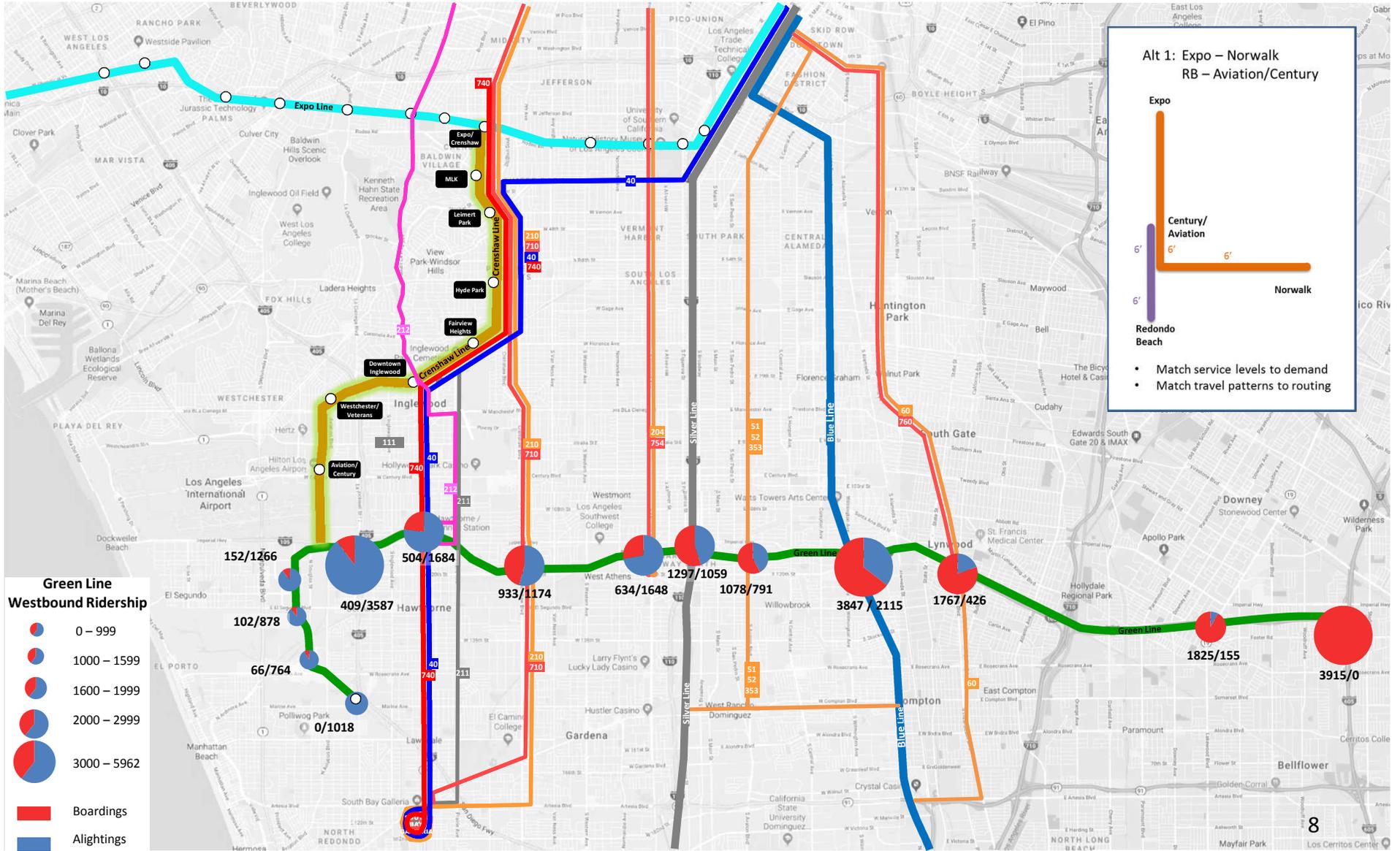


Avg. Daily Boardings

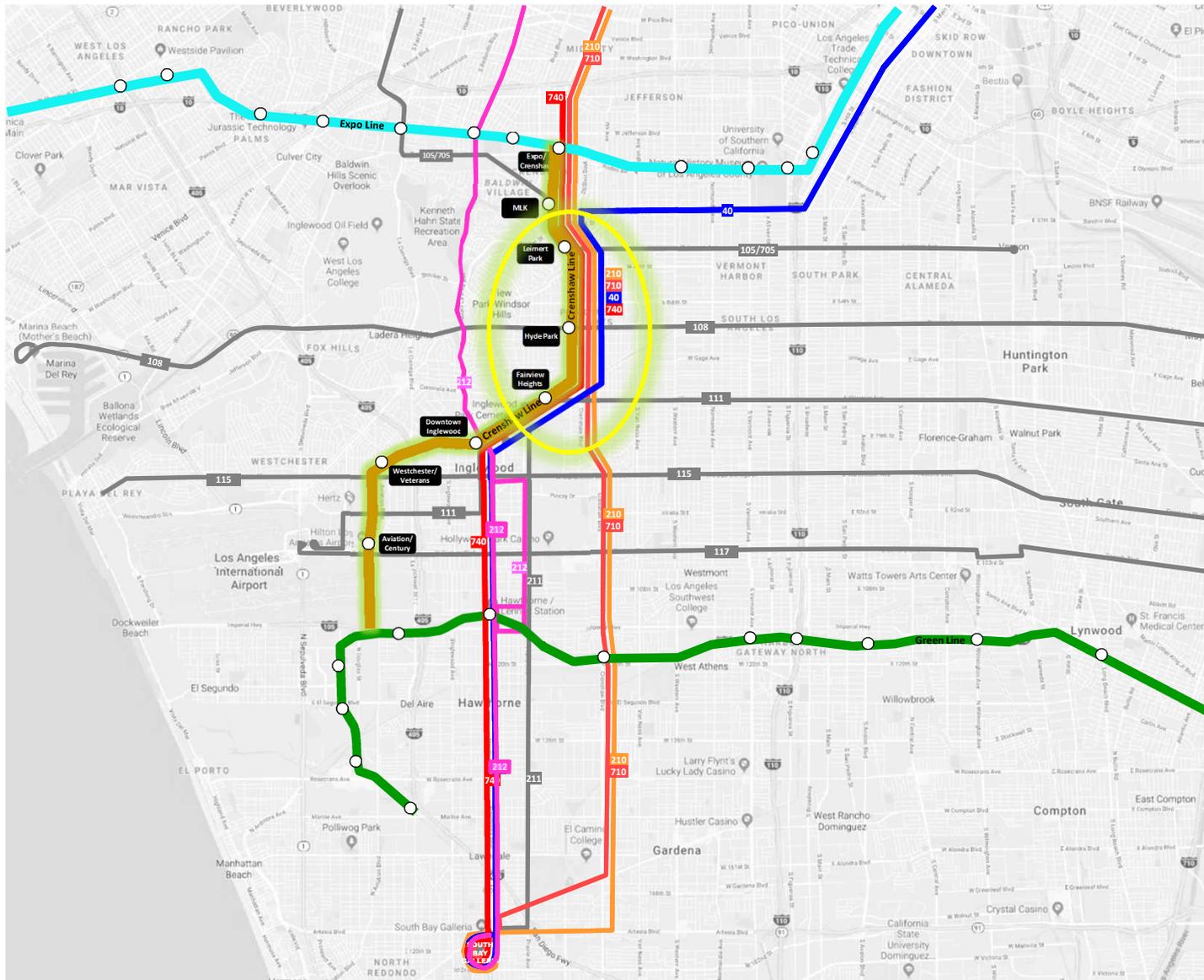
- 1) 5,764 Redondo Segment
- 2) 26,090 Norwalk Segment
- 3) 16,400 Est. Crenshaw + AMC



CRENSHAW/GREEN LINE Optimal Service Plan



CRENSHAW/GREEN LINE Bus/Rail Interface Plan





QUESTIONS?

Expo/Crenshaw Station