

Data available at Inclined Plane

Foundations

Number required: 16

Average size: 5.5 feet wide, 8 feet deep, 30 feet long

Total concrete: 723 cubic yards

Lights

114 sodium lights

2 sizes of conduit: 1" (2800 ft), 1.75" (950 ft)

wiring: 70,000 feet

Flag & Pole

Flag size: 30 ft by 60 ft

Weight: 45 lbs

Pole height: 133 ft total (121 ft above ground, 12 feet below ground)

Weight: 3 tons

Total distance from top of flag pole to Roosevelt Blvd: 683 feet

Elevations (above sea level)

Roosevelt Blvd: 1165.6 ft

Top Station: 1692.75 ft

Lower Station: 1187 ft

Base of flag: 1727.75 ft

Top of flag: 1848.75 ft

Total travel distance: 524.75 ft

Steps to Flag

8 steps to landing

50 steps to top

Maximum car capacity: 65 people

Current Fares

Adults \$4/\$2.25

Child (ages 2-12) \$2.50/\$1.50

Children under 2 are free

Senior citizens free during non-peak hours

Cars \$6 (includes driver)

Motorcycles \$4 (includes driver)

Cables

North cable: 1075 ft, 7955 lbs

South cable: 1068 ft, 7903 lbs

Safety cable: 982 ft, 7267 lbs

Total length: 3125 ft Total weight: 23,125 lbs

Structural Steel

Lbs of steel: 900,000

of girders: 45

of bolts: 8,000

Ties

720 ties

12"x12"x14'

weight: 700-800 lbs each

life expectancy: 15-20 years

total weight: 540,000 lbs

Rails

Weight: 85 lbs per yard

Ave. length: 37.5 feet

Total weight: rails: 101,603 lbs

Splice bars: 4,550 lbs

Tiers: 14,400 lbs

TOTAL WEIGHT: 120,553 lbs

Cars

15 ft (high) x 15.5 ft (wide) x 34 ft (long)

22 tons

undercarriage 16 tons

each car total 38 tons

Dates

May 1, 1890

June 1, 1891

Cars replaced in 1921

Rises at 35 degree angle

Peak year: 1919

1,356,293 people

124,825 vehicles

1891 fares

single: 5 cents

horse & rider: 10 cents

small wagon: 25 cents

Motor Room Legend

1. 400 horsepower electric motor
2. main hoisting drum – alternates directions each trip, (cable over top of drum attached to north car, cable under bottom of drum attached to south car)
3. drum brakes – wood-lined, emergency braking
4. front service brake – band brake, routine braking
5. Lilly Governor – cuts electricity if cars go too fast
6. air compressors

