Chords Bridge

CEE 491
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Infrastructure

- **Designer:**
  - Santiago Calatrava

- **Location:**
  - Jerusalem, Israel

- **Construction Time:**
  - Construction began in 2002 and was completed on June 25, 2008

- **Cost:**
  - Projected Cost: $35 million
  - Final Cost: $70 million

- **Structure:**
  - Harp-type cable stayed bridge with 66 steel cables.
  - Curved over 90 degrees of rotation.
  - Length: 469 ft long
  - Height: 387 ft high
Project Use & Benefits

• Project Use:
  – To carry pedestrians and light rail cars through Jerusalem.

• Social benefits:
  – Pedestrian safety & accessibility
  – Reduced traffic and pollution
  – World known landmark

• Economical benefits:
  – Lower negative impact on businesses
  – Reduced noise
  – Attract tourism
  – Light rail is more energy efficient if utilized enough
  – Reduces health & Environmental issues
  – Raises maximum occupant capacity per hour
Technical Issues

- Cracks were discovered at the base of Chords Bridge.
- Construction Costs were double the original budget.
- Total project is running four years behind schedule.
- The project is expected to sit for another few years, as they work on the light rail portion of the project.
Social Problems

• The bridge is criticized by local residents, calling the bridge the “Clothesline”.

• Many citizens feel that the bridge is out of place and doesn’t visually fit in the city.

• Critics say that the project is too costly and the problem could have been solved by cheaper means.
Policy Challenges

• Veola Environment and Alstom are both being sued by the Palestine Liberation Organization for involvement with the project.

• Jerusalem Mayor-elect Nir Barkat may attempt to scrap the project due to high maintenance cost.

• Halt to construction due to an act of terrorism before the bridge was opened.
THE END

Thank You!