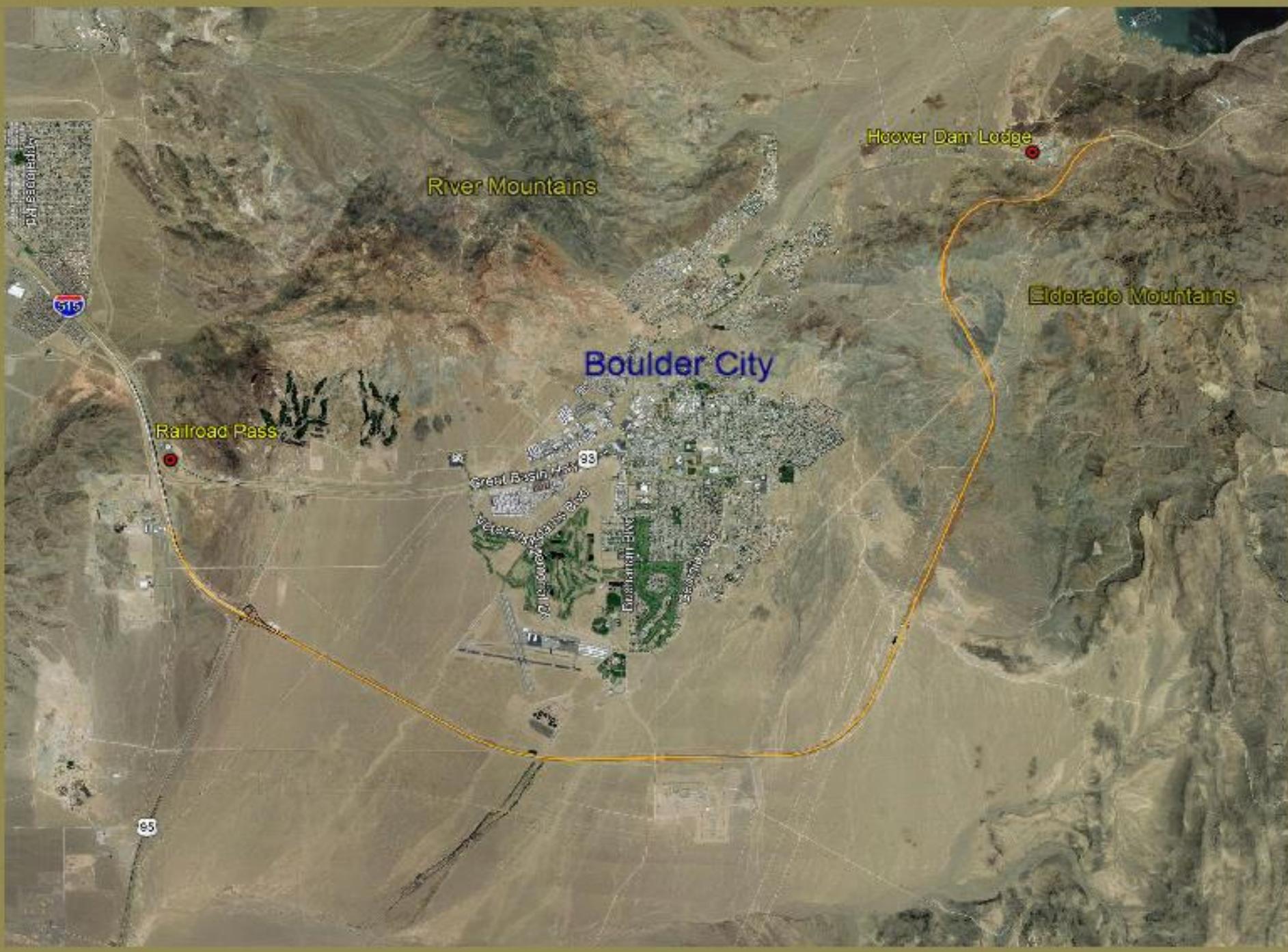




# Boulder City Bypass Project

- Boulder City/US 93 Corridor Study EIS finalized in 2005 and Record of Decision Issued.
  - Connects the Las Vegas to Phoenix leg of the CANAMEX Trade Corridor with a modern transportation upgrade.
  - Facilitates commerce transportation by linking up with the Mike O'Callaghan-Pat Tillman Memorial Bridge (Hoover Dam Bypass).
  - Alignment selected avoids congestion and safety concerns in Boulder City by looping around developed areas and traversing relatively undeveloped areas of the Eldorado Mountains.



River Mountains

Hoover Dam Lodge

Eldorado Mountains

Boulder City

Railroad Pass

93

93

Great Basin Forest

Peterson Canyon Park

Encore Park

Encore River

Encore Park

Pahrump Valley

15



# Boulder City Bypass Project

Record of Decision cont.

- Obligated NDOT and Federal Highway Administration to work with the National Park Service, NDOW and other affected agencies ensuring that wildlife crossings and other features and actions be incorporated into the project design addressing wildlife/vehicle collision potential, associated safety concerns, and maintaining habitat connectivity.
- Emphasis placed on desert bighorn sheep and habitat connectivity.



# Boulder City Bypass Project

- Completion Timeline:
  - Clark County adopted the Fuel Revenue Indexing ordinance in 2013 and in combination with federal funds signaled the project's progression.
  - Project would be constructed in two phases:
    - NDOT managed the 2.3 mile segment linking I-515 with the US95 and US93 interchanges.
    - Regional Transportation Commission of Southern Nevada (RTC) assumed construction of the 12 mile segment linking up with the Hoover Dam Bypass
    - And,

A 4-year completion commitment using the design-to-build approach.





# Boulder City Bypass Project

- NDOT, FHWA, RTC, NPS, and NDOW met to discuss the project mid-October 2013.
- USGS & Arizona Game and Fish Department's Wildlife Contracts Branch also invited:
  - USGS's familiarity with bighorn studies and activities associated with the preceding Hoover Dam Bypass project.
  - The Arizona Game and Fish Department (AGFD) presented its experiences and findings from bighorn sheep underpass and overpass studies.
  - AGFD demonstrated a great deal of sound expertise and ingenuity; offering its advice early on in the discussion and initial inter-agency field tours.



# Boulder City Bypass Project

- Mindful of RTC's project completion deadline and Design-Build approach, inclusion of AGFD playing an active on-the-ground part in the project was the logical option for meeting FHWA's and NDOT's obligations. Justification included:
  - Although having an important role, NDOW had insufficient resources and experience with projects of this kind to participate in daily activities.
  - Direct involvement of AGFD brought the experience, the personnel and the ability to quickly tool-up to provide the services required.
  - All parties involved would learn a great deal from the partnership and be in a better position to address other future challenges of this nature.
  - An MOU among NDOT, NDOW, and AZGFD was developed facilitating the easiest way to maximize funds for meeting wildlife goals and objectives without additional administrative costs incurred should NDOW and NDOT were the sole MOU parties.



# Boulder City Bypass Project

## Oversight and Evaluation of Measures to Promote Desert Bighorn Sheep Highway Permeability: Boulder City Bypass Phase II

- Multi-year monitoring and data interpretation from bighorn sheep collared with GPS-telemetry before, during, and post-construction at the landscape scale.
- Providing recommendations during Design/Build activities to engineering and construction teams.
- On the ground monitoring of construction of wildlife crossing structures and features (e.g. wildlife fence, highway jump-outs, double-wide cattle guard).
- Monitoring frequency of attempted and successful crossings by bighorn sheep at the wildlife overpass and 4 bridge under crossings, and other locations of interest using camera trap technology.



Hoover Dam Lodge

B9

B8

B7

B6

B5 Wildlife Overpass

Boulder City





**I-11 GRAND OPENING**

Railroad Hiking Trail

Hoover Dam Lodge

Great Basin Hwy

93

Water Treatment Ponds

Bridge 9

Goldstrike Paralel Rd

Goldstrike Pass Rd



2018-10-30 16:09:19

M 3/3

72°F



I-11 UP1 CAM3



2018-08-31 13:39:00

M 2/3

100°F



I-11 UP1 CAM3

RECONYX

2018-12-10 16:20:03

M 2/3

63°F



I-11 BCB UP4-8

RECONYX





2018-08-31 11:08:31

M 3/3

93°F



I-11 OP1 CAM1

RECONYX





## Partnership

The combined efforts of the below agencies and entities got this project off to a good start and results from future efforts, data interpretation should prove useful in managing roadway-wildlife interactions:

NDOT, RTC, FHWA, NPS, Bureau of Reclamation, USGS, Las Vegas Paving, AGFD, Berger Engineering, NDOW, and the many workers and volunteers taking part in various activities along the way.



2018-08-20 08:13:07

M 1/3

95°F



**Thank  
Ewe**

I-11 UP1 CAM4

RECONYX