



I-11 Boulder City Bypass Public Information Meeting October 21, 2014

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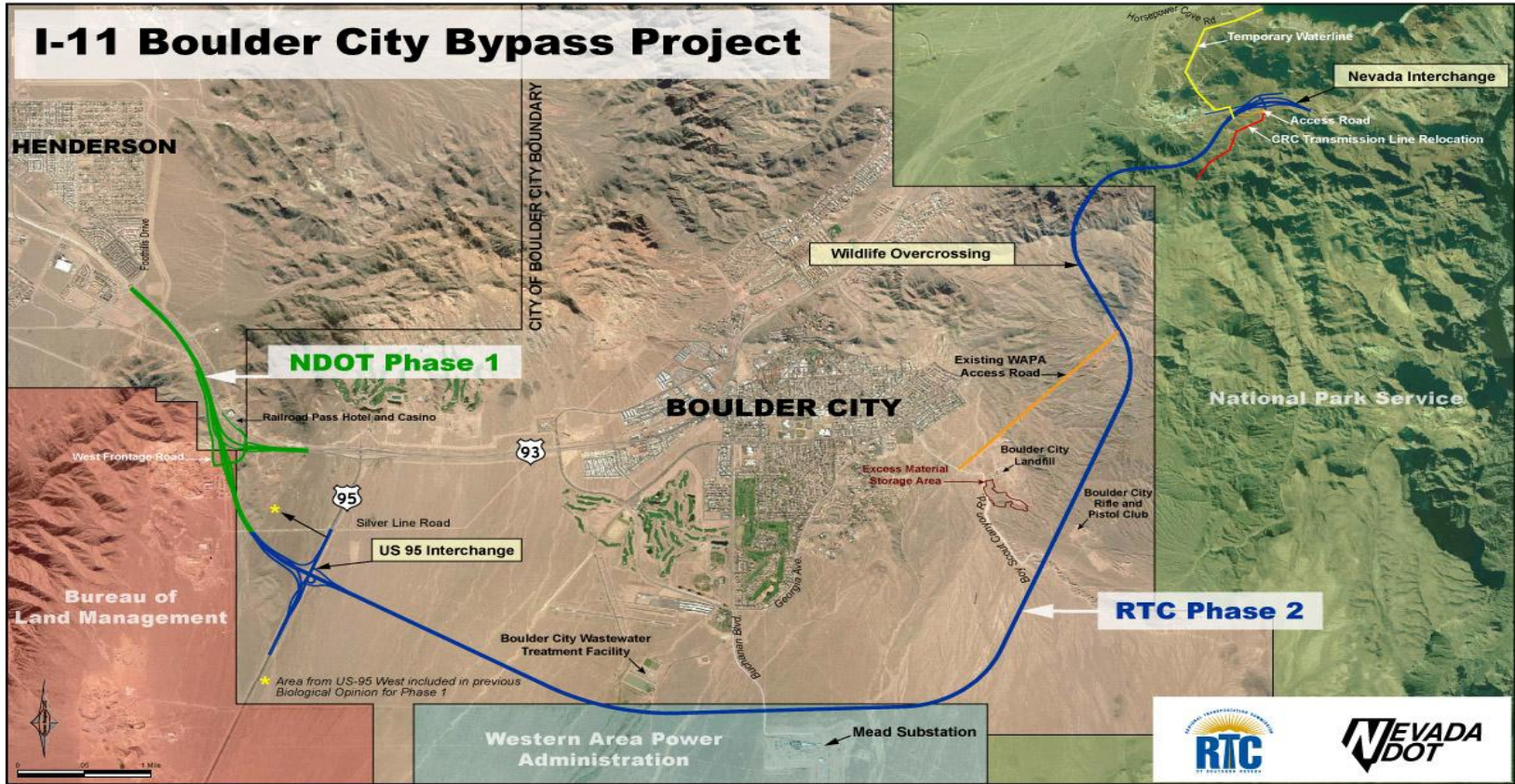


Purpose for Tonight's Meeting

- Inform and update you about the Boulder City Bypass project
- Document the discovery of Naturally Occurring Asbestos (NOA)
- Discuss NOA study results and EIS Reevaluation Process



I-11 Boulder City Bypass



All information presented is preliminary subject to revision.





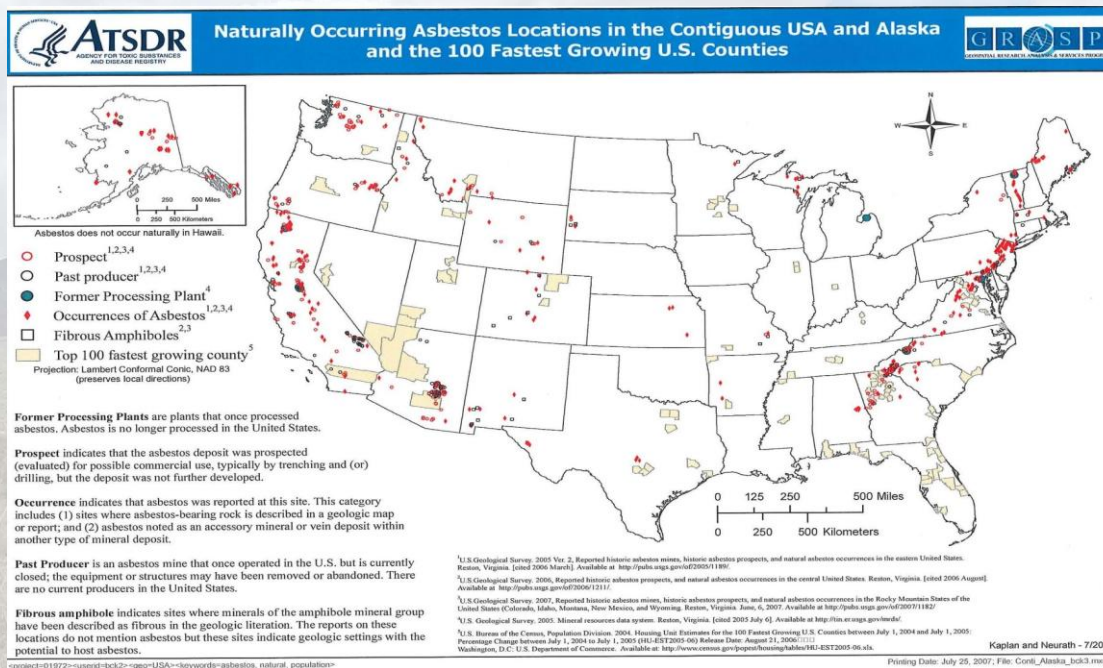
What is Naturally Occurring Asbestos (NOA)?

- NOA occurs in rocks and soil as a result of natural geological processes. Natural weathering and human activities may disturb NOA-bearing rock or soil and release mineral fibers in the air, which poses a potential risk for exposure by inhalation.
- NOA does not refer to commercially processed, asbestos-containing material, such as insulation and fireproofing in buildings or automobile brake linings.



NOA Locations Nationwide

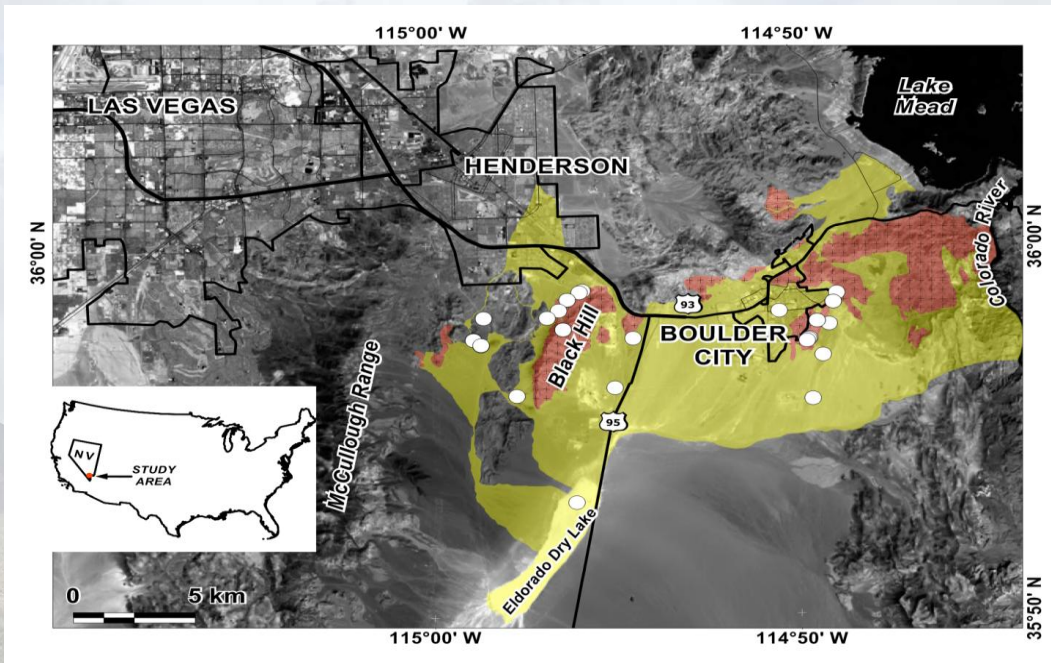
- Occurs in at least 35 States
- 44 out of 58 counties in California have documented occurrences of NOA





UNLV Study

- 2013 study identified the presence of NOA at various locations in and around Boulder City.



Potential naturally occurring asbestos rock outcrops (red) and potential NOA bearing soils (yellow). White circles are sample locations (taken from Buck et al. 2013: Figure 2).



Boulder City Bypass NOA Team

- Initial NOA Team (FHWA, RTCSN and NDOT)
- Augmented Team with assistance from the Volpe Center* and consulting environmental engineers and scientists
- Volpe Center assembled Expert Panel

* U.S. Department of Transportation Center of Expertise



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Boulder City Bypass NOA Team





Site Characterization

- Environmental engineering firms tested soil and rock samples along the alignment
 - 611 samples were collected from depths ranging from the surface to 200' below ground in large rock cut areas
- Samples were tested to determine if NOA was present
 - If so, where it occurs and at what concentrations



Site Characterization





Site Characterization

NOA sampling results

- 597 samples test below 1%
 - 406 were non detect
 - 154 had concentrations of less than 0.25%
 - 37 had concentrations between 0.25% and 1%
- 14 samples test above 1%
 - 13 between 1% and 2%
 - 1 at 6.38%
- Overall: Comparatively higher concentrations of NOA are located in foothills and mountainous areas east of Boulder City



Ambient Air Characterization

- Established 12 monitoring stations (4 locations in Phase I and 8 in Phase II) to determine possible presence and concentrations of NOA in the air
- Monitoring station locations included residential and public-use areas outside highway project boundaries

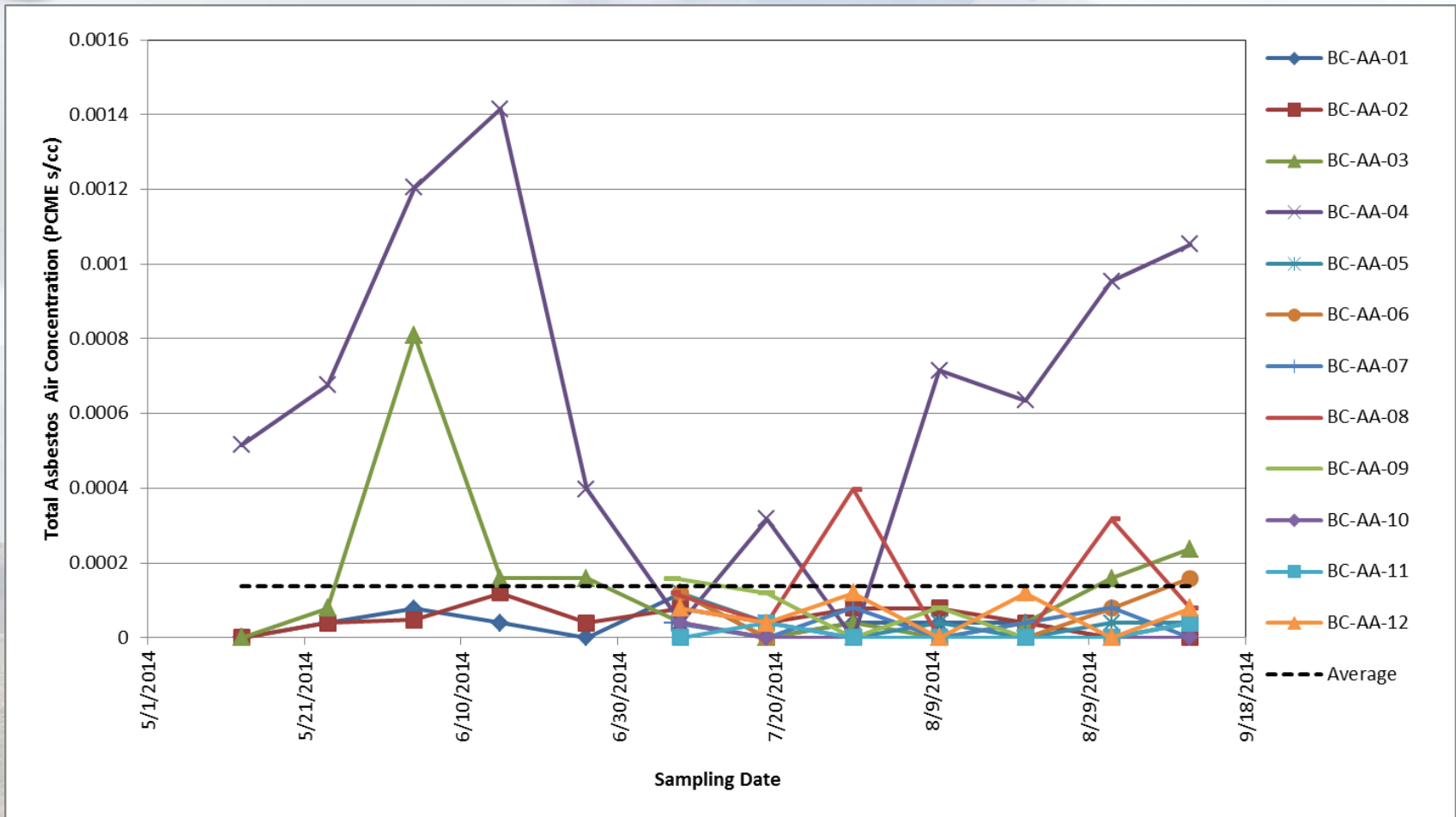


Ambient Air Characterization





Ambient Air Characterization Results





NOA Regulations

- **EPA:** Regulates asbestos under three laws but none pertain to NOA
- **OSHA:** Regulates asbestos for worker safety
- **State of Nevada:** No statutes or regulations specifically for NOA
- **Southern Nevada Health District :** Regulates transport of asbestos greater than 1 percent by weight
- **Clark County Department of Air Quality:** Regulates only dust





NOA Mitigation Measures

- Agencies referenced
 - Caltrans (California DOT)
 - California Air Resource Board (CARB)
- Mitigation measure outcome
 - Modeled mitigation measures after California regulations (CARB) and best practices



NOA Mitigation Measures

- Thoroughly wet work areas and unpaved road surfaces using water trucks, hoses, spray systems or sprinklers
- Reduce vehicle driving speeds in the work area to limit dust generation
- Reduce drilling and excavating speeds
- Excavate and blast during periods of calm or low wind speeds



NOA Mitigation Measures

- Avoid overloading trucks to prevent “spill out”
- Clean equipment and vehicles to prevent tracking soil out of the project work area
- Limit NOA concentration to less than 0.25 percent for surfacing material (topsoil, landscaping, etc.)



Mitigation Measure Compliance

- Clark County Air Quality Permit
- NDOT/RTC and Contractor mitigation compliance teams
- Implementation of NOA Management Plan
 - Describes the managerial approach, strategy, characterization, and quality procedures to achieve all of the requirements for NOA mitigation
- Project ambient and perimeter air sampling





NEPA Re-evaluation Process

- FHWA regulations allow for a re-evaluation process for completed EIS documents and outline when a Supplemental Environmental Impact Statement (SEIS) is required
 - 23 CFR 771.129(c) and 130(c)
- Develop appropriate studies to assess the impacts of the changes
- Conclusion: By implementing the proposed NOA mitigation measures, the Boulder City Bypass Project will not result in a significant impact to the environment, therefore not warranting the preparation of a SEIS.



Open Comment Period

- Please state your full name and address prior to your question or statement
- Three-minute verbal comment per individual
- A court reporter is available to take comments after the presentation





Discussion Panel

- **Volpe Center (Expert Panel Oversight)**
 - Mark Raney, Senior Environmental Engineer
 - Chris Zevitas, Senior Environmental Engineer
- **Tetra Tech Inc. (Air Monitoring and Phase I Field Sampling)**
 - Ed Surbrugg, PhD, Senior Soil Scientist
 - Rob Tisdale, PhD, Senior Chemist
- **Kleinfelder (Phase II Field Sampling)**
 - Bradley Erskine, PhD, Senior Geologist
- **CDM-Smith Inc. (Data Compilation/Construction Specifications)**
 - Lynn Woodbury, Asbestos Risk Assessment
- **Clark County Department of Air Quality (AQ Compliance)**
 - Chuck Richter, Dust/Asbestos Air Quality Supervisor

