



What a difference a year makes! These photos show the paving progress on Bear Valley Parkway between May 2015 (top) and July 2016 (bottom).

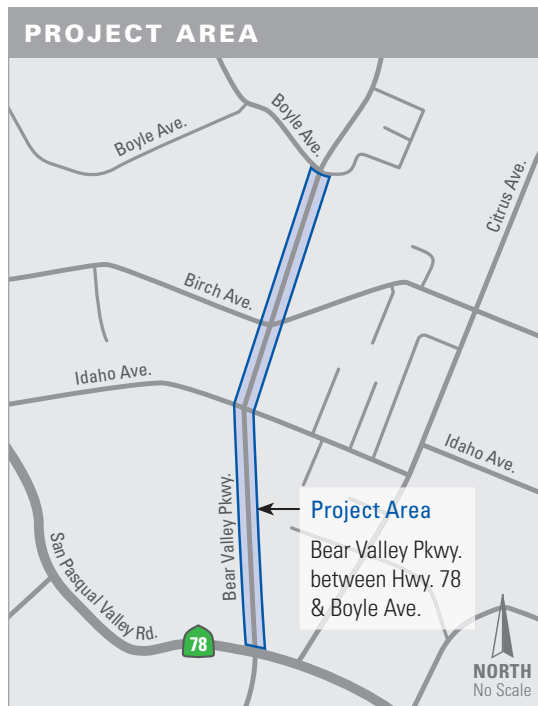
Full Pave Ahead!

In July, crews will pour the final layer of asphalt along the entire alignment of Bear Valley Parkway. This marks a significant milestone for the project. After a complex process - from excavating and undergrounding utilities to framing curbs and gutters to base-paving - crews are now finishing the roadway transformation for travel this summer.

The final paving brings the roadway up to the final alignment level, provides a protective top coating, and smooths out any areas that may have settled over time. It includes the following stages:

- › **Asphalt Pouring:** Using asphalt, which binds together with bitumen (a petroleum product), crews will heat the mixture up to 300 degrees and use a paver machine to pour it over the surface of the roadway in lengths, similar to the way a baseball field is mowed. When crews pour and pave all the way down a length of the roadway, they turn around and pour the opposite direction next to the freshly paved lane, until the entire alignment has been poured.
- › **Asphalt Compacting:** As the paver machine pours the hot mixture of asphalt onto the roadway, a crew follows behind with an industrial compactor that applies pressure to the poured asphalt to create a smooth, even surface that is ready for traffic.
- › **Directional Paint Striping and Signage:** After all asphalt has been poured, compacted, and set to cure, crews will use a road-marking machine to paint directional striping along the alignment. Striping includes double-yellow lines, white dashed lines, dedicated bicycle lane lines, and pedestrian safety features like crosswalks.

To complete this asphalt paving, crews will maintain one lane of traffic in each direction during the second week of July, and open both lanes to traffic upon completion. Look for these improvements this month on Bear Valley Parkway.



Project Update: Current Construction Activities

In July, crews are:

- › **Base-Paving Boyle Avenue:** Crews are preparing the remaining areas on the roadway for final paving work, which includes base-paving a corner of Boyle Avenue.
- › **Final Paving along the Alignment:** Crews are pouring a final layer of asphalt over the roadway, which will make the roadway smooth and level for drivers. After the paving, crews will paint the roadway with directional traffic striping.
- › **Installing Survey Monuments:** Crews are placing markers at the

property lines and significant points on the project site to keep an accurate record of property boundaries and right-of-way for future surveys.

- › **Landscaping:** Crews are continuing to plant landscaping along the project site and install features to collect and purify stormwater runoff (bioswales) at the Birch Avenue intersection.
- › **Installing Traffic Signs:** Crews are installing signs and remaining light features to provide directional signage for drivers on Bear Valley Parkway.



Crews plant trees along Birch Avenue

Machines Work Among Us

Asphalt paving is a precise science that combines multiple layers of asphalt to form a permanent roadway that will retain its form and function for decades.

In addition to a skilled crew, roadway asphalt paving requires heavy duty machines to accurately pour, compact, and level asphalt. Machines are also used to smooth the roadway to prevent potholes and settling from wearing down the road over time. Some examples of machines used on the project site include:

1› Oil Distributors: These distributors apply coats of oil adhesive on the base-paved roadway in preparation for final paving. They can be truck-mounted or trailer models, and are considered the most important piece of equipment on any asphalt surface treatment project.

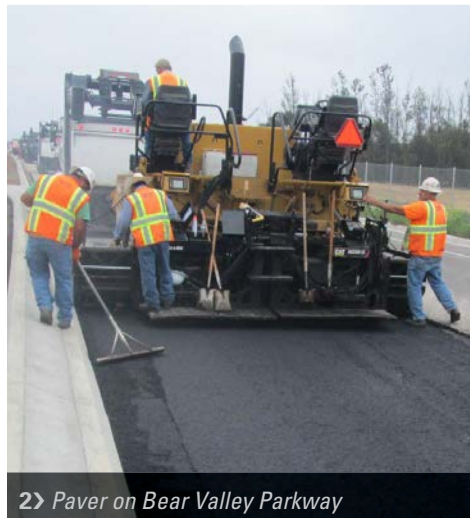
2› Pavers: Pavers (in this case, Paver Finishers) are normally fed by a dump truck that supplies the hot asphalt mixture. Pavers evenly distribute the asphalt mix across the roadway in even sheets.

The asphalt distribution by the pavers is a precise movement and requires a skilled and patient crew.

3› Vibratory Roller Compactors: These machines are composed of large steel drums, and compact soil, gravel, concrete, or asphalt in the construction of roads and foundations. Vibratory rollers are especially useful for asphalt finish rolling, because of their ability to densely (and quickly) compact materials and roll-out air bubbles from under the surface.



1› Oil Distributor preparing roadway 03/25



2› Paver on Bear Valley Parkway



3› Vibratory Roller Compactor in driveway