Washington State Department of Transportation

SR 520 Bridge Replacement and HOV Program

I-5 to Medina: Bridge Replacement and HOV Project

Lighting update: 7/28/2016

Dear Project Neighbors,

Thank you all for your recent feedback regarding lights on the new SR 520 regional shared-use path.

WSDOT has heard your concerns regarding the brightness of the lights along the path. Our staff has been working to investigate these concerns, which is a two-fold effort to maintain safety on the path while reducing light visibility for our project neighbors.

Last week crews installed lower wattage bulbs to help reduce the light that can be seen north of the bridge. This resulted in about a 50% reduction in the measurable light from the path; however, we understand that the lights still appear bright to some who live north of the bridge. We are coordinating with the engineering team and the contractor to determine if there are practical and reasonable operational or technical options that might produce a further reduction of light while still maintaining a safe environment on the path.

Below we've captured some of the questions raised since last Friday. Please know that we are continuing to work on this issue and will keep you updated as more information becomes available.

We appreciate your patience as we sort through these technical issues on the new bridge.

Sincerely,

Julie

Julie Meredith
Program Administrator
SR 520 Bridge Replacement and HOV Program
Washington State Department of Transportation

July 28, 2016

Most recent questions regarding the lighting on the SR 520 regional shared-use path

What lights are visible from the north side of the floating bridge?

1. Highway safety lighting at the east and west merge points
2. Sentinel lights (architectural features marking the ends of the floating portion of the bridge)
3. Regional shared-use path and viewpoint (belvedere) area safety lights
4. Underdeck lighting for bridge maintenance (only on during nighttime maintenance activities)
5. Blue safety lighting for indicating location of emergency call boxes for distressed boaters
6. Red/green navigational safety lights required by the Coast Guard.
7. Headlights from vehicles traveling westbound on the East Approach

Has WSDOT reviewed how lighting levels on SR 520 floating bridge compare to those on I-90 floating bridge?

Yes. WSDOT has studied these light levels at various distances from both bridges. WSDOT found that at 100 feet from each of the bridges, the lighting levels are similar. At distances greater than 100 feet, the new SR 520 bridge is roughly 0.1 to 0.3 footcandles (fc) brighter than I-90. A footcandle is a measurement of illumination equivalent to the illumination produced by a source of one candle at a distance of one foot.

How did WSDOT address the initial lighting concerns it received?

Beginning on April 8, 2016, WSDOT received several complaints that the new lights on the north side of the bridge were too bright. In response, WSDOT turned off all non-essential lights on April 12, 2016. On May 3-4, WSDOT began taking lighting measurements along the RSUP and to the north of the bridge. After taking these measurements, we determined that we could reduce the wattage of the bulbs along the path from 100W to softer 50W bulbs while still maintaining safety lighting recommendations. On July 22, we re-opened the RSUP with the lower wattage bulbs.

Has WSDOT studied the effect of lighting on marine life?

Yes. WSDOT, through the environmental process, reviewed appropriate levels of lighting to avoid impacts to marine life. To avoid impacts, the maximum level allowed is 2.0fc. Currently, the lighting measured above the water, near the bridge is approximately 0.05fc. You can find more information about the allowed limit of light for aquatic species in the Oct. 2012 NEPA/SEPA Environmental Reevaluation (page 11 of the report.)