## SENATE CONCURRENT RESOLUTION

REQUESTING THE DEPARTMENT OF TRANSPORTATION TO COMPLY WITH COUNTY ORDINANCES AND STANDARDS RELATING TO OUTSIDE LIGHTING AT AIRPORTS AND HARBORS, AND TO PROVIDE CUT-OFF OR FULLY SHIELDED LENS FIXTURES TO DIRECT ARTIFICIAL LIGHTING DOWNWARD TO PREVENT DIFFUSION THE LIGHT INTO THE ATMOSPHERE, ON THE ISLAND OF HAWAII AND THE ISLAND OF MAUI.

WHEREAS, Hawaii is home to two of the world's premier astronomy observatories, Haleakala on Maui and Mauna Kea on Hawaii; and

WHEREAS, Mauna Kea is considered to be the finest site for astronomy observation in the world; and

WHEREAS, one of the most critical needs for preserving the value of these sites is to reduce bright sources of light that illuminate the dark night sky; and

WHEREAS, recent nighttime images from the international space station revealed that some of the brightest sources of light on Maui and Hawaii are the airports and harbors on both islands; and

WHEREAS, astronomers on Mauna Kea are now detecting artificial light sources from urban areas that diminish the telescopes' ability to do research; and

WHEREAS, over the last decade, artificial lighting on the island of Hawaii has slowly increased, and is now threatening the ability of the telescopes on Mauna Kea to study faint objects in the night sky; and

WHEREAS, the spectral signatures of high-pressure sodium lamps and mercury lamps are now seen, despite Hawaii County attempts to regulate those sources by ordinance; and

WHEREAS, a dark night sky is essential to the continued success of the Mauna Kea observatories; and

WHEREAS, every one percent of artificial brightening of the night sky results in an effective loss of telescope aperture by one percent; and

WHEREAS, according to scientists at Mauna Kea observatory, much of the lighting at the airports and harbors on the Island of Hawaii does not conform to the county lighting ordinance that was intended to protect the dark sky over Mauna Kea; and

WHEREAS, the ramp lighting at Kahului Airport points directly at the summit of Haleakala and is not properly shielded; and

WHEREAS, the lighting along the approach road to Kona Airport, along the roads where the rental car companies are located at Kona Airport, and in the Hilo Airport parking lot should be changed to low-pressure sodium lighting so that astronomers would be better able to filter out light emitted from them; and

WHEREAS, the Department of Transportation has jurisdiction over commercial harbor pursuant to chapter 266, Hawaii Revised Statutes, and over airports pursuant to chapter 261; and

WHEREAS, it is essential that the Department of Transportation take immediate steps to diminish the adverse effects on astronomy of bright night lights at airports and harbors on the island of Hawaii and the island of Maui; now, therefore,

BE IT RESOLVED by the Senate of the Twenty-third Legislature of the State of Hawaii, Regular Session of 2006, the House of Representatives concurring, that the Department of Transportation is requested to comply with county ordinances and standards relating to outside lighting to the extent practicable and not in conflict with any safety regulation or federal law, regulation, or mandate, and to provide cut-off or fully shielded lens fixtures to direct artificial lighting downward to prevent diffusion the light into the atmosphere, at airports and harbors in the County of Hawaii and the County of Maui; and

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BE IT FURTHER RESOLVED that the Department of Transportation work collaboratively to resolve or otherwise ameliorate the bright night light problem with the appropriate county agencies of Hawaii and Maui; and

BE IT FURTHER RESOLVED that certified copies of this Concurrent Resolution be transmitted to the Director of Transportation, Governor of Hawaii, the Mayor of Hawaii County, and the Mayor of Maui County.

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OFFERED BY: France Guonge

