

2018 IHS Green Champion Award Winners

Energy & Fleet Management Award

IHS Phoenix Indian Medical Center Utility Energy Service Contract

The IHS Phoenix Indian Medical Center (PIMC) team executed the first Utility Energy Services Contract (UESC) in Indian Health Service's history at PIMC, a campus of 20 buildings with 285,000 square feet of healthcare space in Phoenix, Arizona. Through the UESC, the Phoenix Indian Medical Center was able to conduct a campus-wide energy audit that identified areas for energy and water conservation measures. This included installing a parking shade structure with a photovoltaic system, campus-wide equipment repair and upgrades, boiler improvements, lighting upgrades and water system upgrades. Following the completion of these projects, PIMC is now saving a total of 9,400 million British thermal units and \$282,000 per year.

Good Neighbor Award

IHS Remote Monitoring Program

Timothy Eby, Michael Eastham, Alan Mitchell

The Remote Monitoring (RM) program at the IHS Alaska Native Tribal Health Consortium (ANTHC) helps communities maintain their sanitation facilities and avoid catastrophic failures by providing data on infrastructure. The program includes 65 sanitation facilities in 46 communities across Alaska. Alerts are set up to text operators and/or responsible personnel when the data is outside safe parameters. The data from failure scenarios is analyzed, and new alerts are developed to prevent similar failures from occurring in other facilities. The RM program provides automated communication between Alaska's rural operators, regional Remote Maintenance Workers (RMW), and ANTHC's engineering staff. Because operators do not have to actively send and receive data to realize the benefits of the program, communities preserve their autonomy while maintaining efficient systems. The RM program facilitates the sustainability of rural sanitation facilities and in turn saves federal funds by preventing catastrophic failures.

Sustainable Design & Facilities Award

IHS Fort Yuma Care Center Replacement

Michael Young, Brandon Groh, Paul Ninomura, Samuel Vega-Cotto, Alex Gamble

The new IHS Fort Yuma Health Care Center in Winterhaven, California, is a 76,300-square-foot out-patient facility with a projected annual energy usage of 963 MWh, about half of the average energy usage intensity of typical properties. The building design supports current methods of health care delivery, is well-suited for the surrounding environment, and is LEED (Leadership in Energy and Environmental Design) Gold certified. The new clinic has an increased patient capacity nearly 50 percent greater than the old clinic.

The surrounding environment was kept in mind while designing the facility. The “U” shaped building and its orientation shields entrances and courtyard spaces from prevailing southwest and western winds. Additionally, storm water run-off is managed at pre-development conditions. Natural light supplements the installed lighting system with great success. To minimize the use of potable water, the landscaping irrigation will come from cooling tower blowdown water which would be otherwise wasted. Rammed earth walls, made with native soil mixed with a small amount of cement, are utilized both inside and outside the building. This practice cuts down on waste and materials while embracing the local landscape.

IHS Southeast Alaska Regional Health Consortium Lighting Renovation

Due to a need to reduce electrical energy consumption, a project to replace interior fluorescent lighting with light emitting diode (LED) technology was completed at the IHS Mt. Edgumbe Hospital in Sitka, Alaska. The current facility dates back to pre-World War II and overtime the electrical demand on the main distribution panel has grown to 96% of its total capacity. With projects, such as increased MRI and mammography and a future Operating Room Suite air handling unit replacement, on the horizon a change needed to be made to avoid exceeding the amount of available power from the grid. This situation was considered critical considering the need for the hospital to deliver high quality health care and the limited availability of electrical power due to the isolated nature of the electrical grid. Over 2000 fixtures were updated, resulting in a 10% decrease in electrical energy consumption. This eliminates the concern for overloading the grid and also saves \$40,648 in energy costs annually.

Wellness Award

IHS Healthy Native Food Coalition

Darian R. Schaubert, Percetta Red Willow, Grant Vincent, Michael Trahan, Richard Long Feather, Petra Harmon One Hawk, Teresa Bowman, Margaret Knox Sitting Bull, Alicia Gourd, Jessica M. Crowshoe

The IHS Fort Yates Indian Health Service Hospital built partnerships with the Standing Rock Sioux Tribe Community to establish a coalition of Tribal and community members working together to build Native Seed gardens and educational programs. Part of these programs included promoting how gardens can be good for physical and mental health, and how they can be built for significant water savings while producing native organic foods that have been shown to prevent chronic disease. The team built large low cost, energy efficient and low maintenance vegetable and flower demonstration gardens. These gardens beautify hospital grounds, promote a healthy image of native foods, promote the physical and mental health benefits of native gardening, and promote the economic impact and efficiency utilizing unused areas of land to produce large amounts of healthy foods. These demonstration gardens are being used to build other community gardens used by Aging Services, Schools, Tribal BIA programs, Postal Office to support local food banks and community organizations.