NIH GREEN ZONE NEWSLETTER

The Newsletter of the NIH Environmental Management System

MAY 2018

Bike to Work at NIH!

NIH continues to be a strong supporter of biking to work. This form of commuting is beneficial to human health and is an environmentally friendly mode of transportation with zero emissions. In contrast, motor vehicles create emissions that are harmful to both human health and the environment. Studies have linked motor vehicle emissions (specifically particulate emissions smaller than 2.5 micron in diameter) with increased risk of respiratory diseases such as asthma and bronchitis.[1] Considering the environment, sulfur dioxide (SO_2) and nitrogen oxides (NO_X) from vehicle emissions react with water in the atmosphere to form acid rain.[2] Additionally, the NO_X emissions undergo many reactions in the atmosphere that can contribute to the formation of other pollutants. Other vehicular emissions include carbon dioxide (CO_2), nitrous oxide (N_2O), and methane (CH_4), which are examples of greenhouse gases. Greenhouse gases trap heat in the atmosphere and make the planet warmer.[3]

Federal agencies are required to reduce greenhouse gas emissions by 2025, as stated in Executive Order 13693. By definition, greenhouse gas emissions from vehicles not owned or controlled by the agency, but related to agency activities are classified as Scope 3 greenhouse gases.[4] Although Scope 3 greenhouse gases are created by a variety of activities, employee commuting is the largest contributor, representing approximately 80% of the Scope 3 total. NIH emitted 65,053 metric tons of carbon dioxide equivalent ($MTCO_2e$) from employee commuting in FY17, which marks a 5% decrease from FY16. The dedication of employees that bike to work has certainly played a role in this reduction.

The emissions created by commuting to and from NIH are calculated from the distance that employees travel using different modes of transportation. NIH commuters travelled more than 244,066,000 miles in personal vehicles, vanpools, buses and trains in 2017. This travel produced large amounts of greenhouse gases, such as carbon dioxide (CO_2), methane (CH_4) and nitrous oxide (N_2O). Single car commuting causes the highest amount of greenhouse gases per mile, while bicycling is one of the most environmentally friendly forms of transportation causing zero greenhouse gas emissions.

NIH is once again supporting bicycle commuting by participating in the annual Washington D.C. Area Bike to Work Day (BTWD). This year's BTWD is being held on May 18, 2018. The NIH had the most employees registered for the D.C. Area BTWD in 2017. This year, too, NIH is encouraging all staff to participate in the BTWD event. Please read the "Take Action" article to learn more about the Bike to Work Day event.

NIH provides a comprehensive bicycle commuting program with showers, lockers, bike racks and bicycle repair kits. The NIH Bicycle Commuting Club offers further support by describing routes and connecting cyclists with other riders. You can learn more about the amenities provided by NIH at the NIH Bike Program website. You can learn more about the NIH biking community by visiting the NIH Bicycle Commuting Club website or by reading the "Staff Spotlight" article.

TAKE ACTION

Participate in the 2018 Bike to Work Day

Get healthy and save the environment by biking for your daily commute! Read inside to learn more about the 2018 D.C. Area Bike to Work Day event on May 18 and discover how you can participate.

LEARN MORE

STAFF SPOTLIGHT

Meet the NIH Bicycle Commuting Club Chair, Dr. Vernon Anderson

In honor of biking to work, we're highlighting the chair of the NIH Bicycle Commuting Club, Dr. Vernon Anderson. He has been biking to work for years and encourages any interested staff to learn how to get started!

LEARN MORE

NEMS TRAINING

Did you know? The D.C. Area Bike to Work Day started with a few hundred participants in 2001 and has now grown to over 18,700 participants in 2017. Become a part of this movement and join the 2018 Bike to Work Day! To learn more about the greenhouse gas reduction initiatives at NIH, please visit the NEMS Training webpage to view a short (20 minute) NIH environmental awareness training video.

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