

Climate and Healthcare

UNMC and Nebraska Medicine

University of Nebraska
Medical Center



Nebraska
Medicine

United States Emissions

- Ranks #2 in the world for CO2 emissions

U.S. Healthcare

- Energy Intensive
 - 24/7/365 business
 - No recirculating air
- Would rank #7 in the world if counted as its own country



Healthcare?

In 2013, pollution from U.S. Healthcare resulted in:

**470,000 lost YEARS of
“healthy” life**

We can have a far-reaching, positive impact by
reducing emissions



Sustainability at UNMC & Nebraska Medicine

Mission Oriented:

“...Leading the world in transforming lives, creating a healthy future for all individuals and communities...”

We can't meet our mission without doing this.

Working towards Zero Net Emissions reduces pollution, can demonstrate a direct link to:

Asthma Attacks

Chronic Bronchitis

Premature Death

Lost Work Days

Reduced Emergency Room Visits and Hospital Stays

This is healthcare.



Environmental Impacts (2010-17)

- Reductions of 251,384,865 kilowatt hours (kwh)
- Equivalent of 237,338 Metric Tons of CO2
 - GHG Emissions from 50,833 passenger vehicles (581,833,333 miles driven)
 - CO2 Emissions from 26,711,826 gallons of gasoline consumed
 - CO2 Emissions from 35,580 homes' electricity use for one year
 - Carbon sequestered by 6,152,182 tree seedlings grown for 10 years



Health Impacts (2010-17)

- Changes from baseline result in reductions of:

- SO₂, 636.63 tons
- NO₂, 477.44 tons
- CO₂, 237,388.43 tons
- Mercury, 11.38 tons

- Benefit to local health; reducing:

- Premature death, chronic bronchitis, asthma attacks, hospital visits, respiratory symptoms, & work loss days

- Saves:

- \$ 2,773,534 in Direct Medical Costs
- \$19,853,585 in Societal Value



2030 SUSTAINABILITY GOALS



**Net zero
building emissions**

Reduce energy use in buildings and use only renewable energy sources



Zero Waste



Divert 90% of materials from the landfill through reuse and recycling



**54% reduction
of water use**



Water use equal to the amount of water that falls on campus in a year



Promoting Biking, Busing, Carpooling, & Walking



Free bus pass

**New bus benches/shelters
around campus**



Free access to lockers and showers

**Free indoor/secure bike parking
and additional outdoor racks**



Free carpool pass

**Free carpool matching
program**



Emergency Ride Home

A free and quick ride home is available if an emergency occurs on a day that you bike, bus, carpool, or walk.



Risk-Free Trial Period

If you decide to cancel your parking permit, you have a 3-month trial period to request it back for the same parking lot.



Daily-Rate Flexible Parking

If you cancel your parking permit, you can use convenient \$3 daily-rate flexible parking when you need to drive alone to campus.

Results:

~500 staff/students have cancelled parking permits

- Numerous people who don't get parking permits as new employees/student.
- Open stalls on a daily basis from those who have a permit but still participate.
 - Allows overselling of lots, decreases administrative expenses
- New, 600 car parking garage will cost a minimum of \$22Million
- Less cars on campus = Less traffic
 - Less congestion around campus
 - Better experience for patients and visitors
 - Decrease in tailpipe emissions
 - Less pollution
 - Increase in health
 - Aligns with “Little Steps Big Impact” campaign
 - EPA air quality standard with economic impacts



Active Transportation

Numerous health benefits to participants

- Lower Stress Levels
 - More time to do something else
 - No traffic/weather concerns
 - Time to finish work or decompress
- Increases Physical Activity
 - Use this time instead of going to gym, essentially multitasking
 - Weight loss/lower BP
 - Decreases risk for diabetes, heart disease, cancer
 - Lowers health care costs



1,500 Solar Panels

0.5MW total on 3 buildings, is the largest rooftop solar array in Nebraska

Equal the average annual electricity use of 60 Omaha homes



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