

Session 13: Passenger Rail as a Healthcare Lifeline

- Breck Lebegue MD MPH, WA Physicians for Social Responsibility
 - *Health Consequences of Transport Policy Choices*
- Anna Zivarts, Disability Mobility Initiative
 - *When Driving is Not An Option*
- Martin Charlo, Confederated Salish & Kootenai Tribes
 - *Early Effects of Rail on the Tribes in Montana, and present lack of access to health care*
- HollyAnna Littlebull, Yakama Nation
 - *Treaty Rights to Rail: The Health Effects of Lack of Access to Transport*
- Gleb Sych, Pacific NW University School of Osteopathic Medicine
 - *Lack of Transport to Medical Care—a survey of central WA health providers*

Health Consequences of Transport Policy Choices

Breck Lebegue MD MPH
www.wpsr.org/transportation
GNWPRS October 8-9, 2024



WASHINGTON PHYSICIANS
FOR SOCIAL RESPONSIBILITY

Overview

If we do what we did, we'll get more of what we got

Environment determines our health

Transport choices affect our health

“You can't get there from here” by rail, to work or clinic

Medical evacuation after disaster

Expanded rail in WA can support healthy communities



Negative Impacts of Freight do not Outweigh Economic Benefits

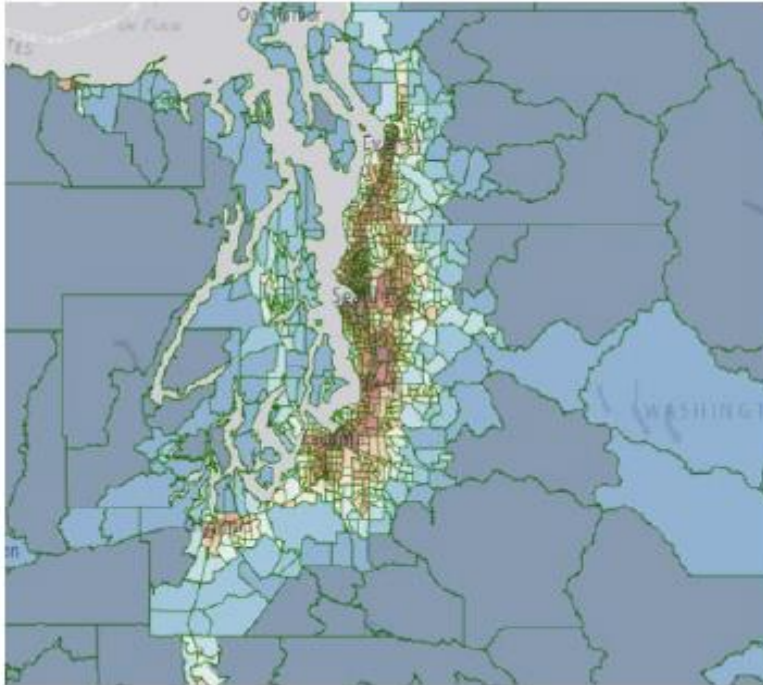
REC

- Entire system is powered by diesel - creates significant air pollution
- Transportation is a leading contributor to Global Climate Change
- Significant traffic congestion, damage to infrastructure
- Unsustainable economic development
- Industry quickly automating - what will impact be to employment?
- Environmental racism - facilities concentrated in Black and Brown neighborhoods
- We need a Just Transition - extractive economy to regenerative



Vehicle pollution from Seattle to Tacoma (WA Dept of Health)

- PM 2.5 on the I 5 corridor



- NOX on the I 5 corridor

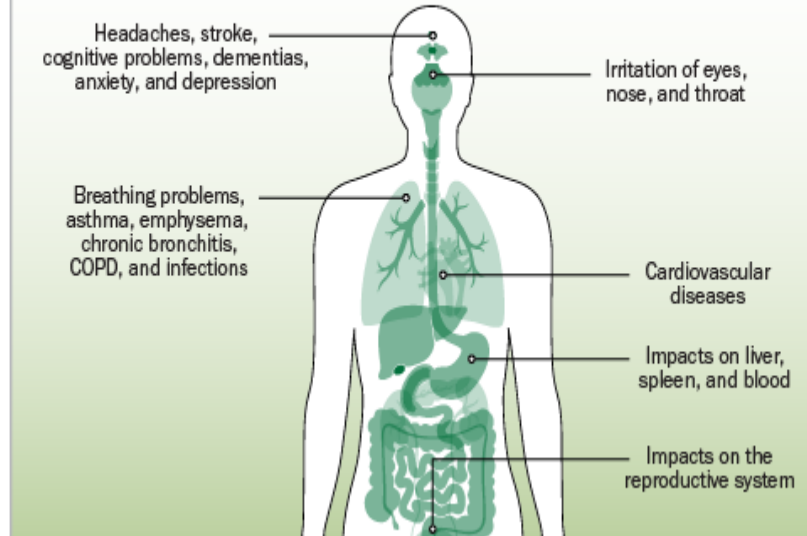


PM 2.5 Health Effects

PARTICLES AND THEIR RELATIVE SIZES

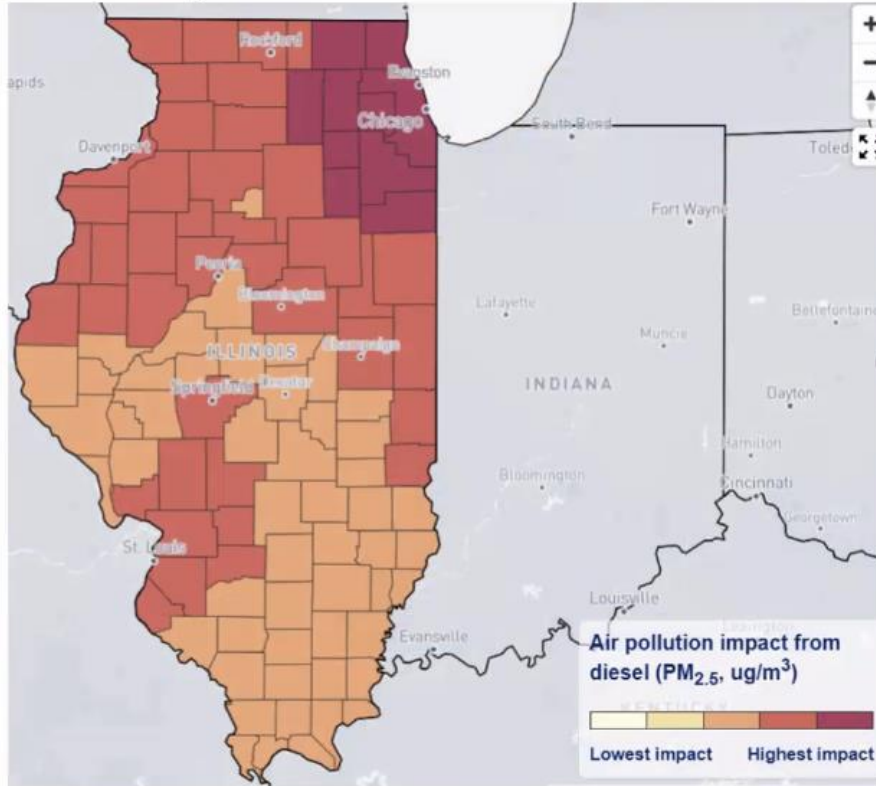
Single Particle	Average Diameter (in microns)
Human hair	50 to 70
Salt	60
PM10 (includes dust, pollen, and mold)	<10
Respiratory droplet (can carry smaller particles)	5 to 10
PM2.5 (includes combustion particles, organic compounds)	2.5
Bacterium	1 to 2
Smoke	0.4 to 0.7
Coronavirus	0.1 to 0.5

HEALTH PROBLEMS LINKED TO AIR POLLUTION



Why does diesel pollution matter?

Projected diesel health impacts in Illinois



State Statistics

Annual Projected Impacts in 2023: Health

Deaths	416	# of deaths
Heart Attacks	199	# of heart attacks
Acute Bronchitis	264	# of cases
Upper Respiratory Symptoms	4,788	# of cases
Lower Respiratory Symptoms	3,357	# of cases
Emergency Room Visits, Asthma	129	# of visits
Asthma Exacerbation	5,003	# of cases
Lifetime Cancer Risk Per Million	276	# of cases per million people

Why not take a cruise for some fresh sea breezes?



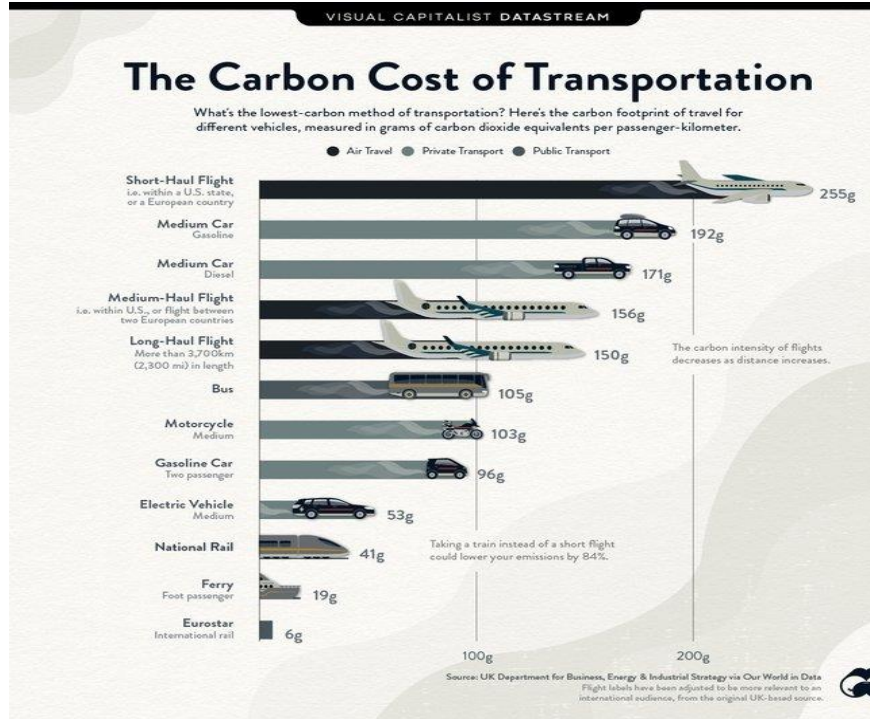
- (cue 'Jaws' music....)

2 hours later: wildfire smoke PM 2.5 from WA & BC fires



Fly or drive?

Trains are better



CA.GOV

CALIFORNIA AIR RESOURCES BOARD



PM2.5 reduced through California passenger locomotive operator compliance to the Regulation in all of 2030

PM2.5 reduced by removing 90,782 cars from California roads in all of 2030

WPSR Climate & Health Report

Comprehensive Assessment of Climate & Health in WA

<https://www.wpsr.org/waclimatehealth2022>

- ❑ High Risk: kids, pregnant, elderly, chronically ill, BIPOC, poor
- ❑ Key strategies to protect health:
 - ❑ Transition *away from fossil fuels* to renewable energy sources
 - ❑ Maximize energy efficiency, Minimize waste → *Trains are ideal*
 - ❑ Rapid mode-shift from roads to electric rail, for *our health*
- ❑ Walk or bike to rail & transit: less pollution, more exercise
- ❑ EV cars, buses, trucks/vans—especially for last-mile deliveries



Oil-fired *dinosaurus* to Sun-powered *Aptera*



New WA State Medical Association policy a/o Sep 30!

“WSMA supports rail & non-single-occupancy-vehicle transportation that **reduces pollution** and greenhouse gas emissions, **mitigates climate changes**, **improves mobility**, and **promotes healthier, sustainable communities**”
(New policy)



Medical Evacuation Trains after war or disaster (100 yrs ago)

SCIENCE
MUSEUM
GROUP



1

SCIENCE
MUSEUM
GROUP



3

Hiawatha can connect central WA to health care



- Medical ‘specialty desert’ mid-WA
- Train Pasco→Spokane/back: **3 d**
- **Fix: get docs or patients to health care & back in 1 day**
- **Doctors go to Central WA clinic?**
 - **Commute to work on a train**
- **Patients to Big City clinics**
 - Spokane or Seattle
- Pasco to Spokane:
 - 135 mi (2 hrs by car)
- Yakima to Seattle by *Hiawatha*:
 - 150 miles (2.5 hrs by car)

What do you call 1000 Teslas on a Texas highway?





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