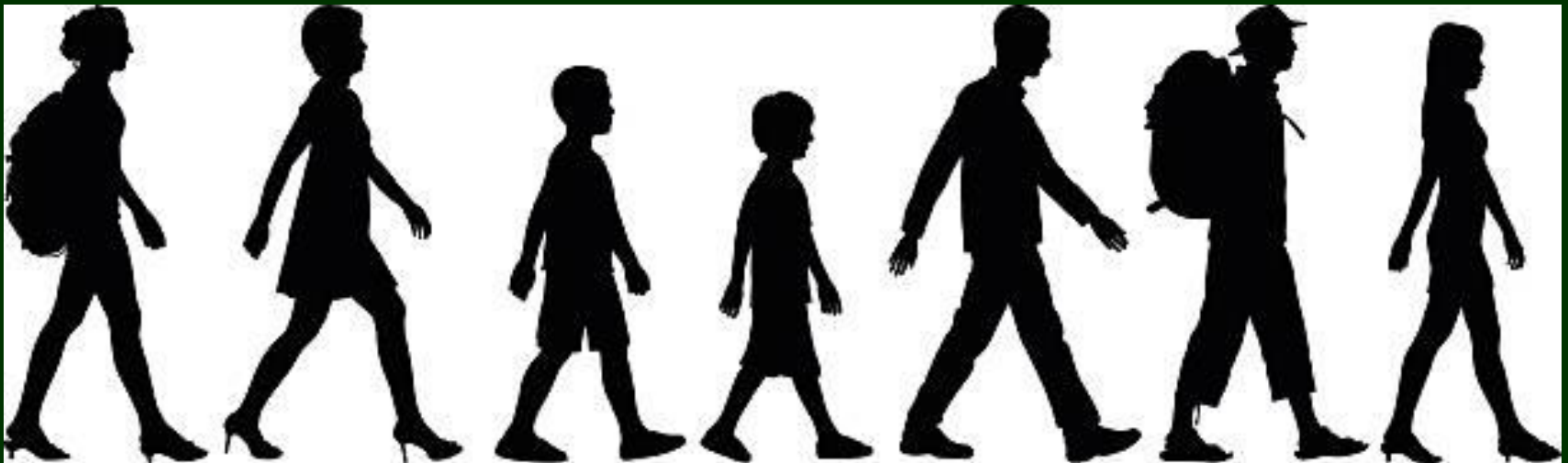


# Chuck's Eco-Plan

to Re-configure the Use of a Car,  
and Achieve Equity among Travel Modes



Program on Earth Day April 22, 2023  
at the College of Complexes



There is a way to  
fix this

So it  
doesn't  
happen



By Charles Paidock  
Co-Director  
Citizens Taking Action  
advocating for transit and trains

Exec Director  
New York and Chicago RR  
High Speed Project 220 mph

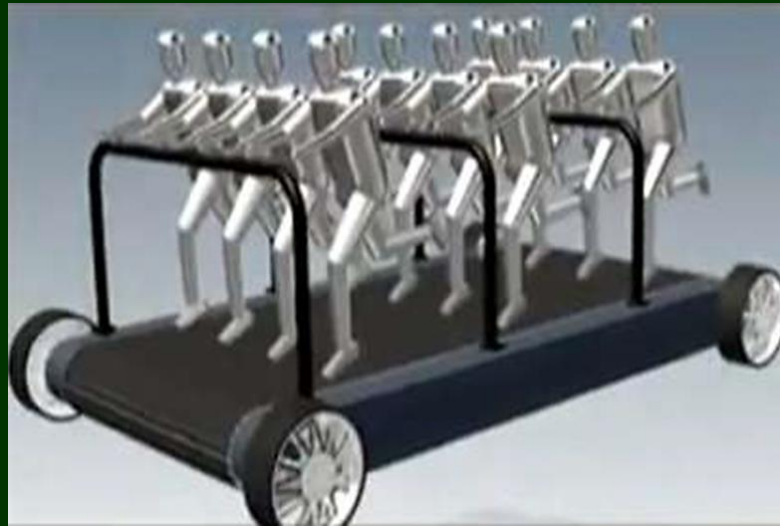
Secretary  
Chicago Greens  
Illinois Green Party



# The Future of Transportation From the Past to the Present

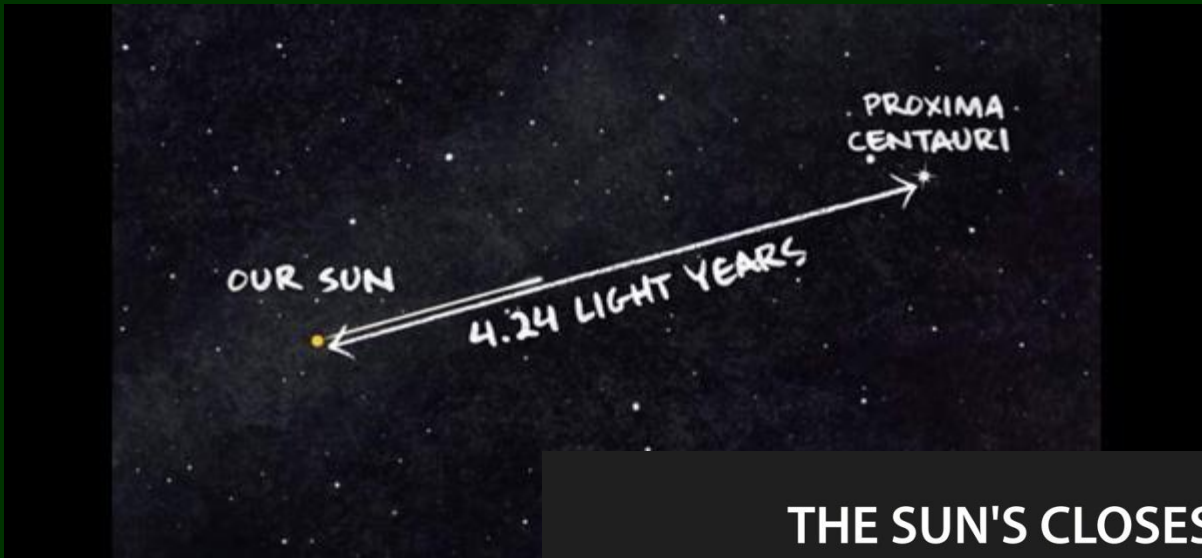


Previous  
Lecture



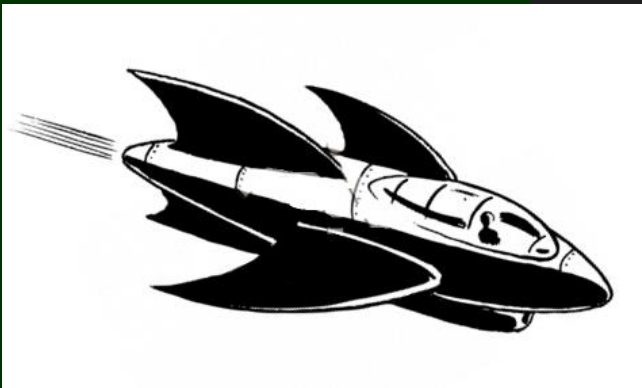
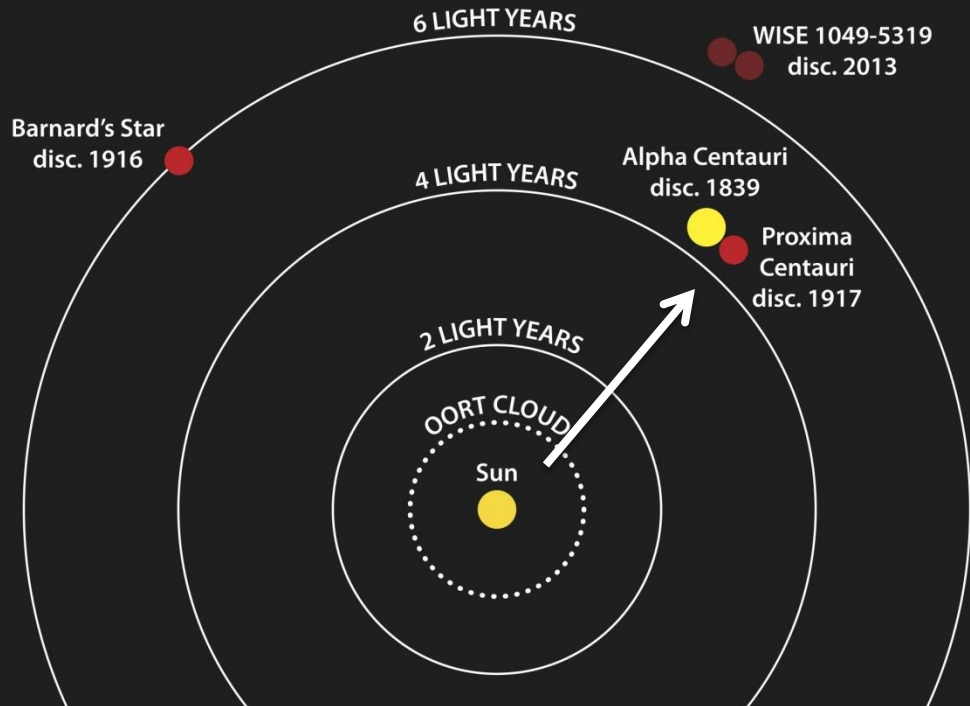
Previous  
Lecture

compiled by Charles Paidock, Secretary  
Citizens Taking Action for Advancement of  
Transit and Trains



Miles Driven  
Each Year by  
Humans

## THE SUN'S CLOSEST NEIGHBORS



**During  
Covid  
Lockdown**



**“transport recovery” programs  
a chance to change course and repair the damage  
from a century of cars**

**Cities around the world are seeing dwindling  
numbers of fossil-fuel powered cars on their streets,  
and many are planning to keep it that way**

**During  
Covid  
Lockdown**



**Air pollution has dropped to unprecedented levels across the world as major cities and countries impose lockdown measures to curb the spread of the coronavirus.**



One half car | per adult



Chicago has more than 4,000 miles of streets  
and 1,900 miles of alleys

contains seven major Interstate highways

Number of vehicles per person aged 16 and over: 0.54

Aggregate number of vehicles: 1,180,685

Percentage of workers who drive to work: 55.4%

Mean commute time (hours per week): 5.9



# Statement of Purpose

Transportation is the greatest source of greenhouse gases that will result in a climate change of the planet estimated for 2030.

One should always address a problem at its source. Owning and operating a vehicle is not a right by law, rather it is a privilege which can be restricted. Travel, or personal mobility, it should be noted, is not in any fashion restricted by these provisions.

With multiple transportation modes available, the freedom to go where you want, when you want, is in no way measurably confined or limited.

Collective actions to stop climate change take priority  
over any argument for convenience of an individual  
who can afford a particular method of travel.

The country must avoid assigning priorities to alleged  
solutions which are outmoded or misguided. No costly  
investment in new infrastructure or technology of any  
type is necessary to effect this plan.

Individual choice or ownership of a vehicle is not  
infringed upon, and any type is acceptable if used in  
compliance with national fleet norms.

Chicago



Department of  
Motor Vehicles



Specific Actions to Establish a  
US Transportation Network

Status of any vehicle can be stored in real-time  
on any cell phone.

License for each vehicle must be obtained to stipulate if authorized to be used on weekdays, weekends, during peak or off-peak periods

Monday through Friday occupational use only, with exceptions for essential workers, first or last mile from transit station, first, second, or third shift, sales or “site specific”

Use of auto restricted to locality, city, state, or region

Authorization must be obtained to drive on any federal, US express interstate

Authorization must be obtained for any inter-regional, cross-country travel, to ascertain or comply with number of vehicles standards in any area, and if there are vacancies

Special travel provisions on national holiday weekends

Current allowable usage loaded onto card issued for each vehicle

Daily or weekly passes can be purchased for any use outside of assigned status, either on-line or at vending machines

Penalties for misuse range from fines to confiscation and state sale of vehicle

Passes can be restricted for reckless drivers prone to speed, disregard stop signs or lights, or get into accidents and endanger the community

Exceptions to provisions can be either authorized or purchased for community events or family gatherings, civic duties such as voting, jury duty, etc.

Exceptions can be issued for emergency matters or medical related matters, e.g., a hardship, poor or disabled, job seeker

No mileage restrictions imposed with any authorized pass

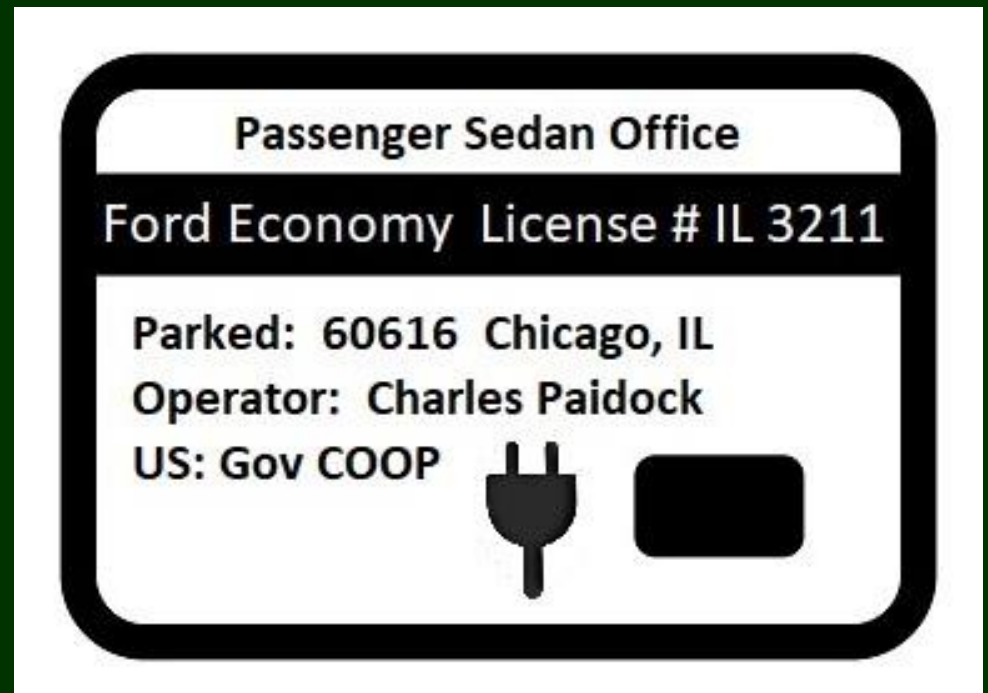
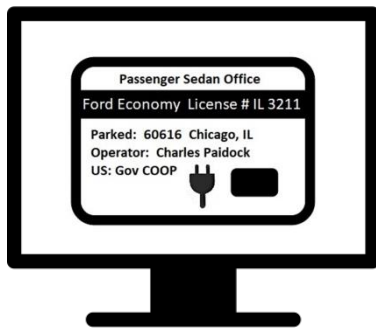
No restrictions imposed upon primary care givers, e.g., for seniors

Temporary use restrictions under any circumstance could be implemented due to air quality issues, energy shortages, civil disturbance, snowstorms, etc.



Network Loading  
today, cell tower reports  
vs ten year US Census data

Sample of a “Travel Authorization”





“You Choose”  
is an inherent feature  
of the program

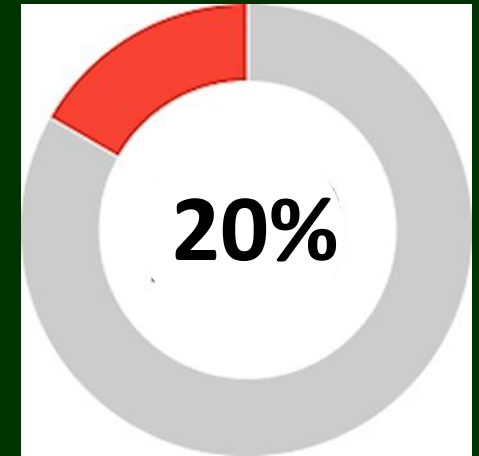
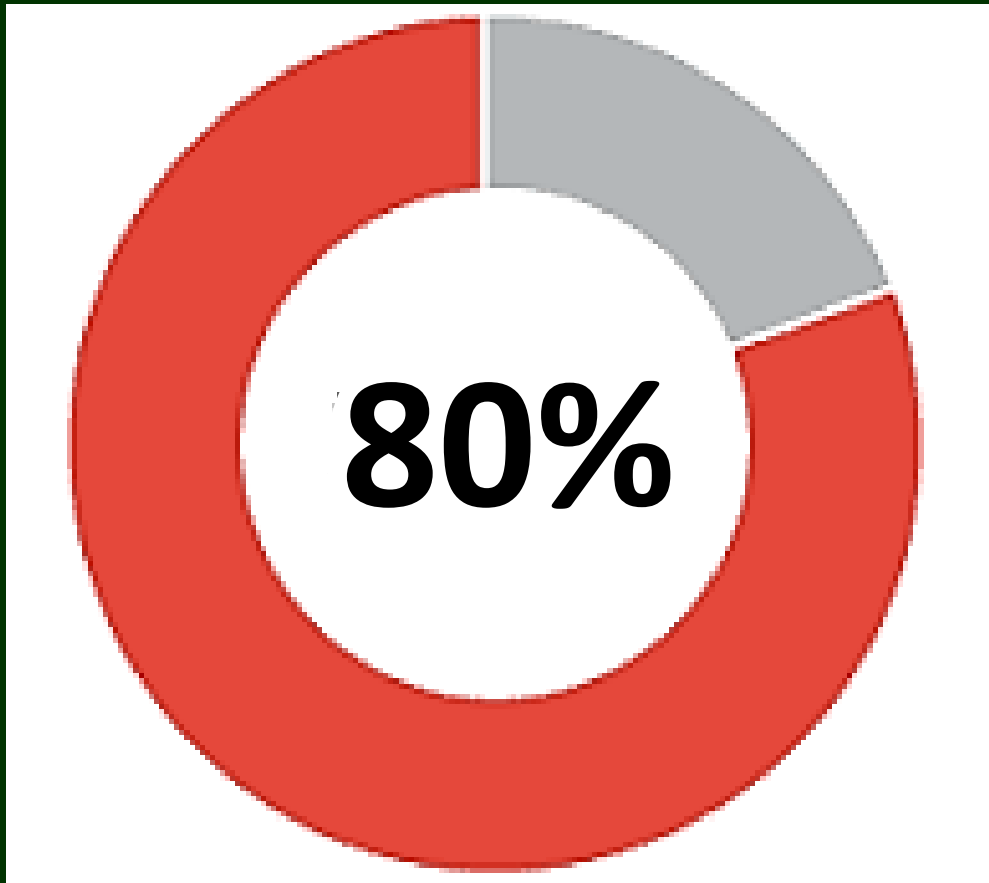
In Chuck’s Plan  
there is  
No Regulation

The use of all modes of  
travel should be the  
same

Multiple options are  
available for when you  
want, or may need, to  
use your car

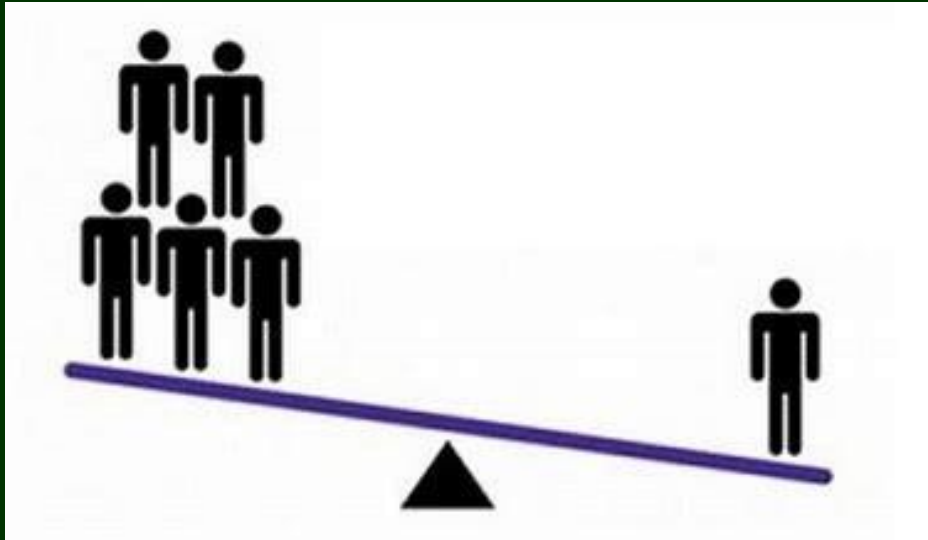


# Government Appropriation for Transportation

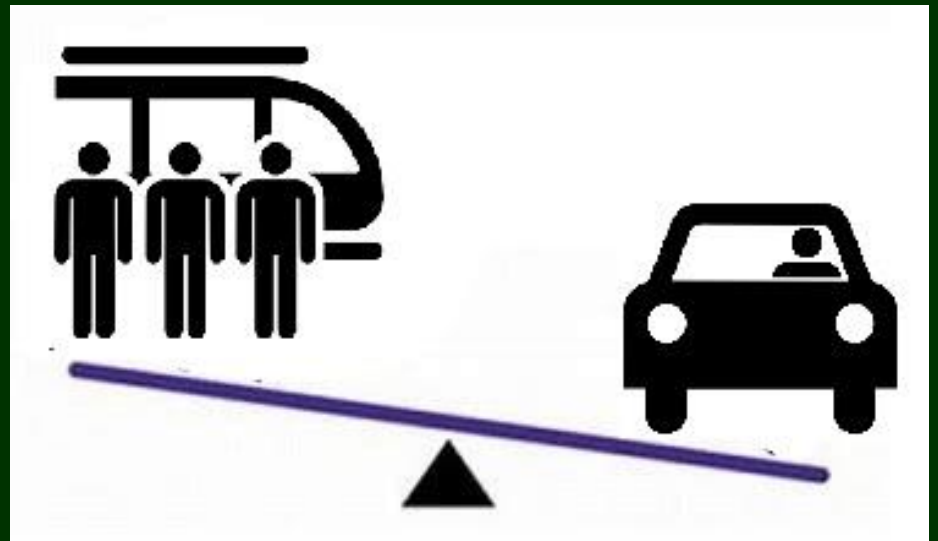


Public Transit

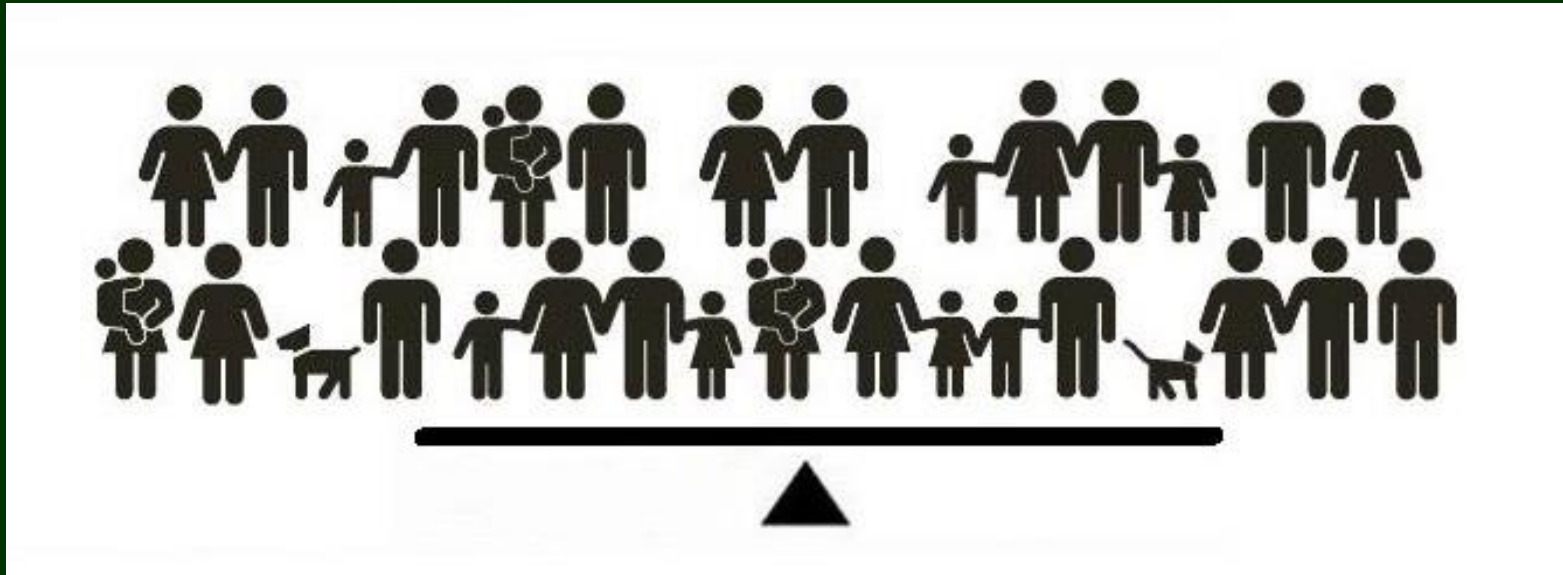
Highways



current  
US transportation  
policy



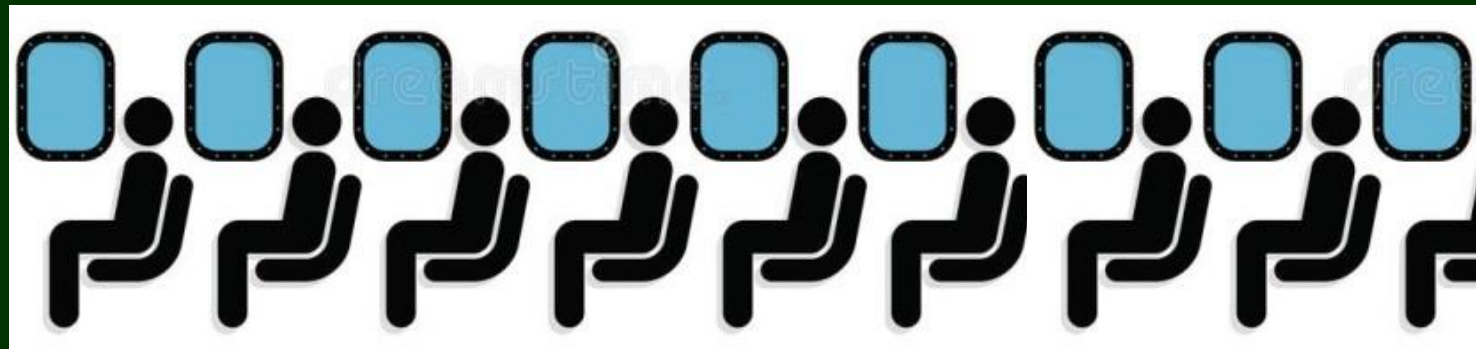
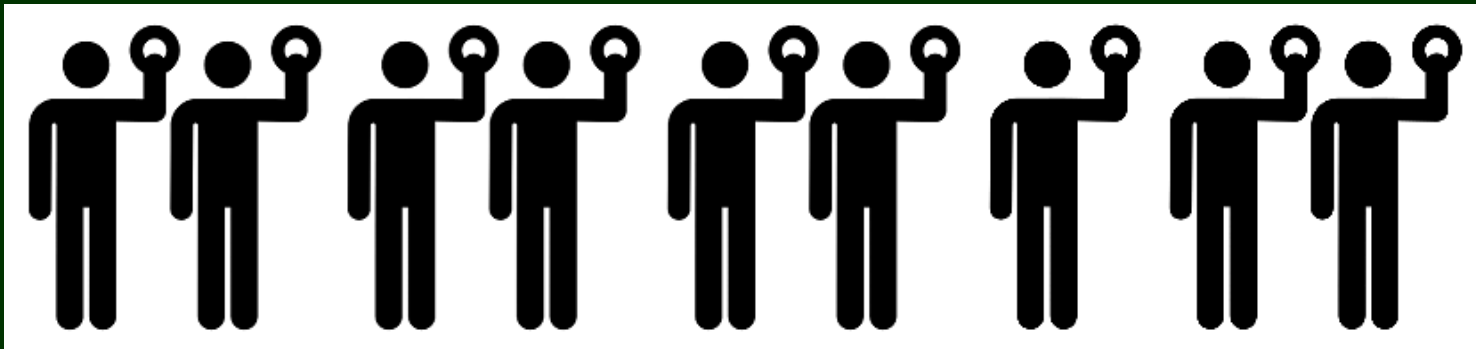
# US transportation policy under Chuck's Eco-Plan



All “Passengers” or “Commuters”

Are the Same

no disparate treatment or privilege



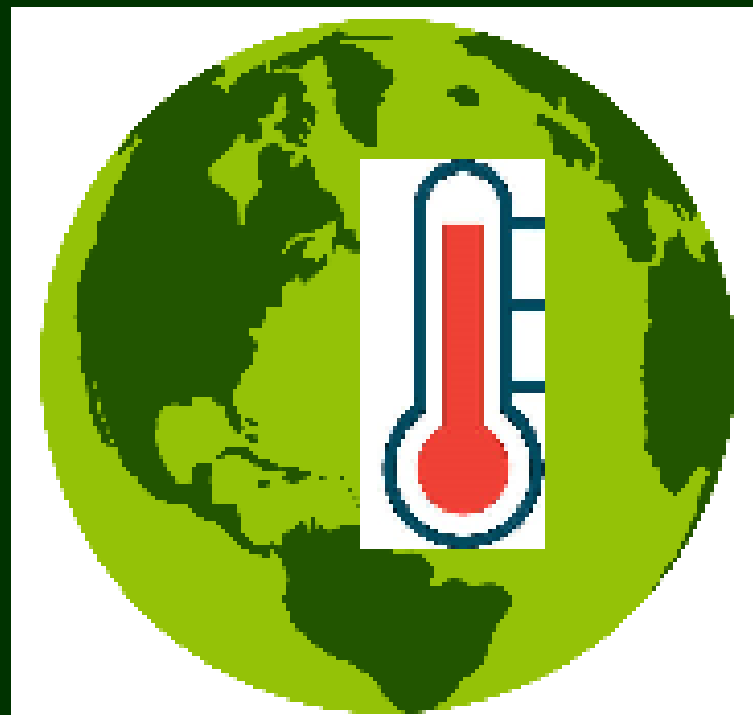
brings to an end social stratification in  
travel

# Commuting Costs should be provided for by your Employer



For any  
occupation  
related travel

# 2030



# First Step towards Nationalizing Transportation



## “The Case for Nationalizing the Railroads”

In These Times Kari Lydersen FEBRUARY 16, 2023

<https://inthesetimes.com/article/nationalize-the-railroads-workers-on-strike-biden-wages>

Auto traffic is a critical element of this transition



With the support of every good American this can be done



Chicago Greyhound Bus Terminal may be closed due to the property's anticipated sale, possibly for residential use.

The terminal handles 55 buses daily, serving 400,000+ annual passengers who are disproportionately low-income, unemployed, or disabled in addition to those lacking access to private vehicles

Corporate travel providers are problematic

Cars are entirely a private transit mode at present



**105 miles**

**High Speed Train**

**100 miles**

**Rapid Transit**

**56 miles**

**Commuter Rail**

**34 miles**

**Bus**

**32 miles Passger Train**

**24 miles Car**

**12 Air**

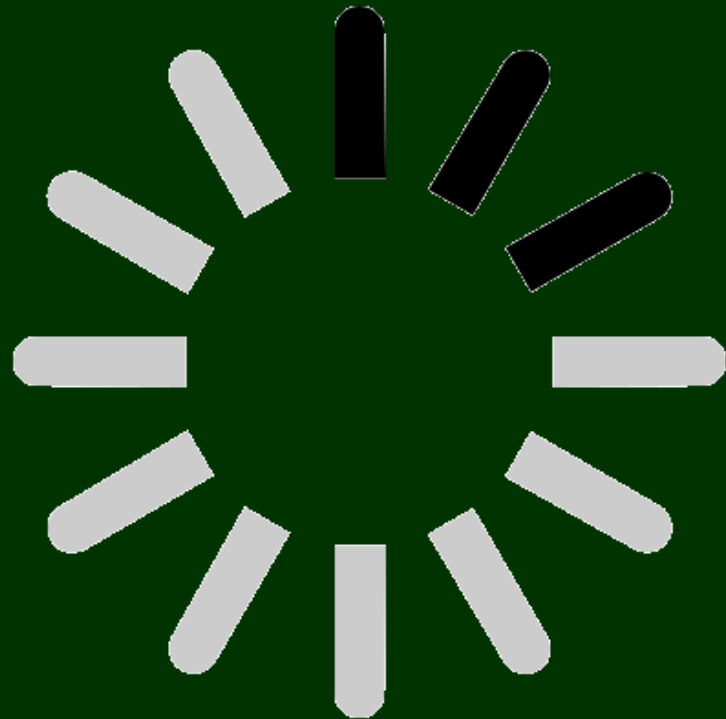
**Comparison  
of How Far  
You Can  
Travel  
per Unit of  
Energy Used  
(1kwh = 0.086 kep)**

**Congestion** / Chicago-area drivers had the most hours wasted while sitting in congestion last year, with the average driver losing 155 hours to traffic / **More Roads has never worked**

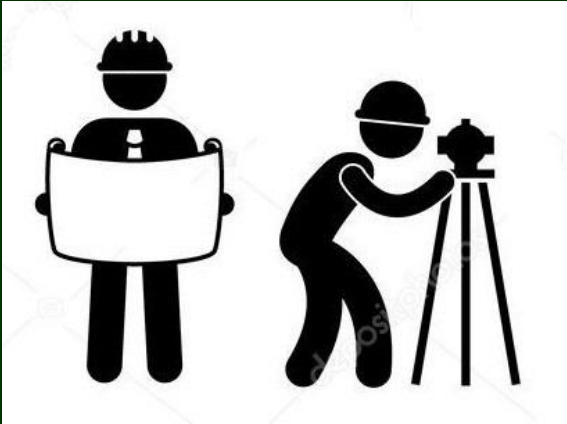


# Slower speeds and longer trip times are becoming the new normal

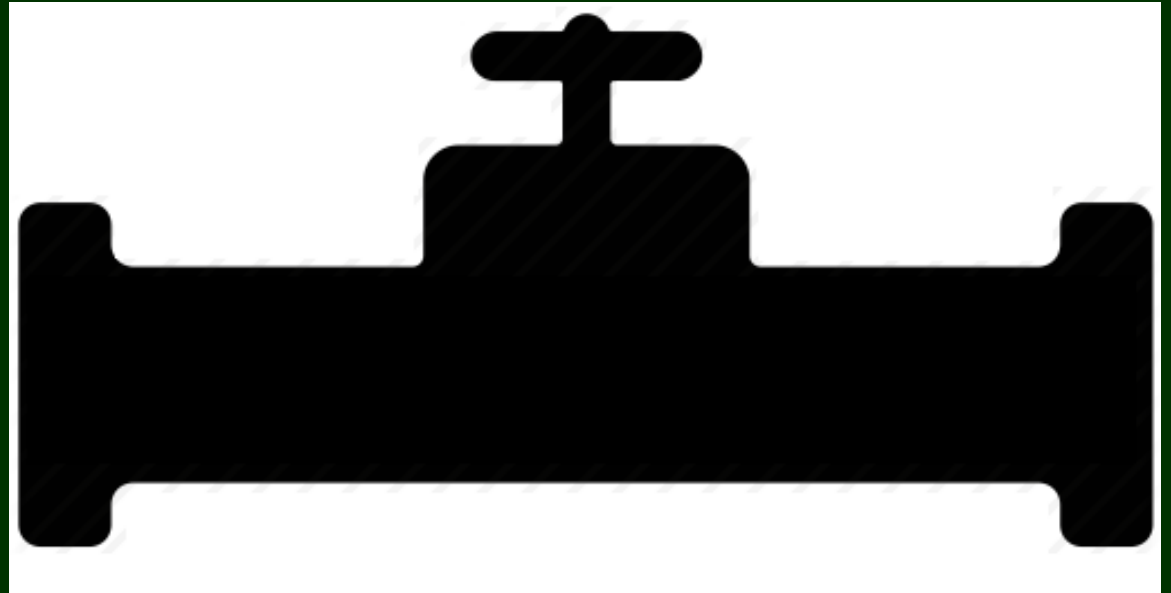
infrastructure adjustments such as local or express lanes,  
traffic light timing, and variable speed limits



# Traffic Flow



An average of 44 people per month are shot and killed or wounded during a road rage.



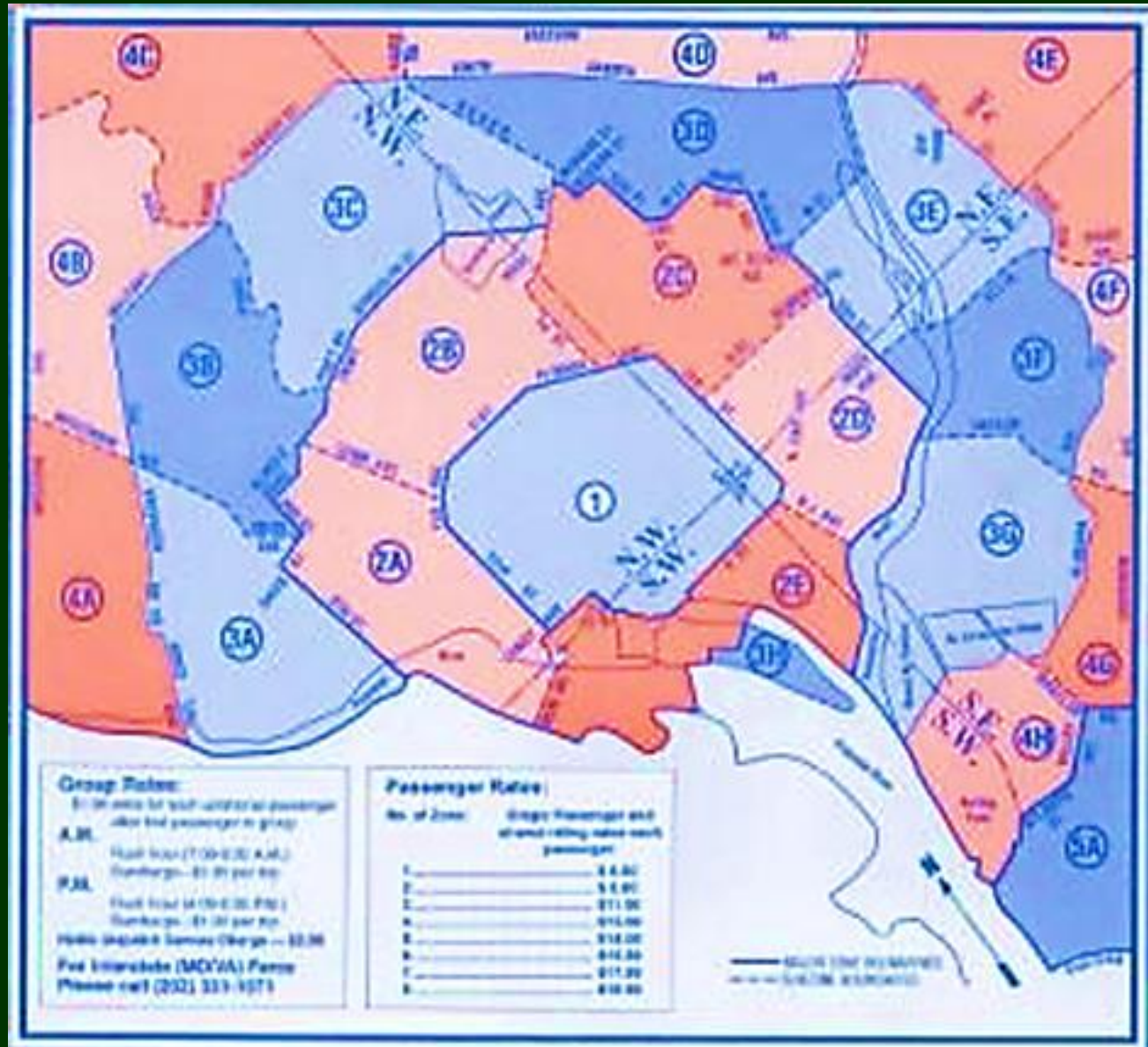
Headway



City Divided  
into  
Zones  
For  
Determining  
Fare  
Wash DC

Zone 1,2,3,4  
Radiating  
Out

Metra  
Chicago



One-third 1/3 of US roads are in need of repair





**\$5 Trillion National Infrastructure Bank (NIB)  
25 Million Jobs in America**



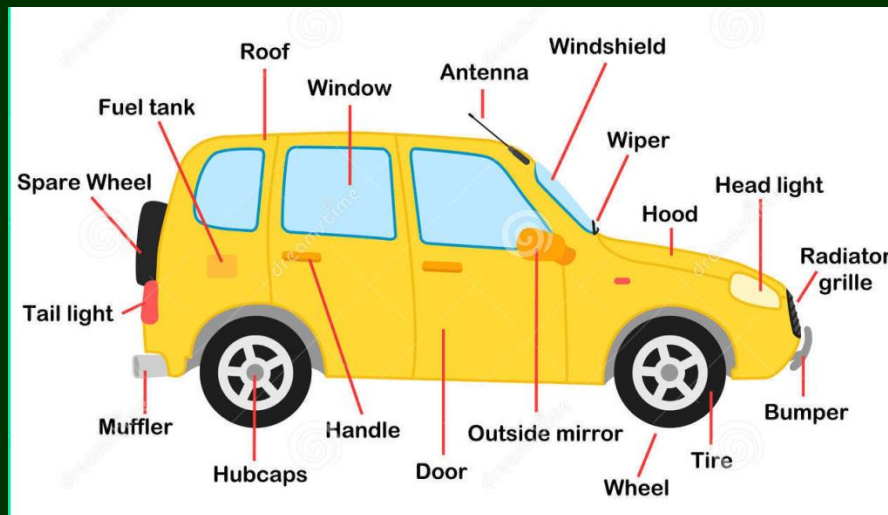
## Condition of the Fleet / Exclusive Mode of Transportation

the average new car price is \$48,094 / average US car is 12.2 years old / average life expectancy of a new vehicle is around 8 years or 150,000 miles / Illinois New Vehicle Buyer Protection Act



The Chassis  
Engine  
Transmission  
Battery  
Alternator  
Radiator  
Axle  
Suspension  
Steering System  
Shock Absorbers  
Brakes  
Catalytic Converter  
Muffler  
AC Compressor  
Serpentine belt

# How Much Energy is used to Construct a new car?



Tailpipe  
Fuel Tank  
Windscreen  
Windshield wipers  
Speedometer  
Headlights  
Taillights/Turn signal  
Hood/Engine  
Trunk  
Fuel gauge  
Temperature gauge  
Car trip meter  
Rev counter  
Wheel/Tire  
Seat and Seat belt

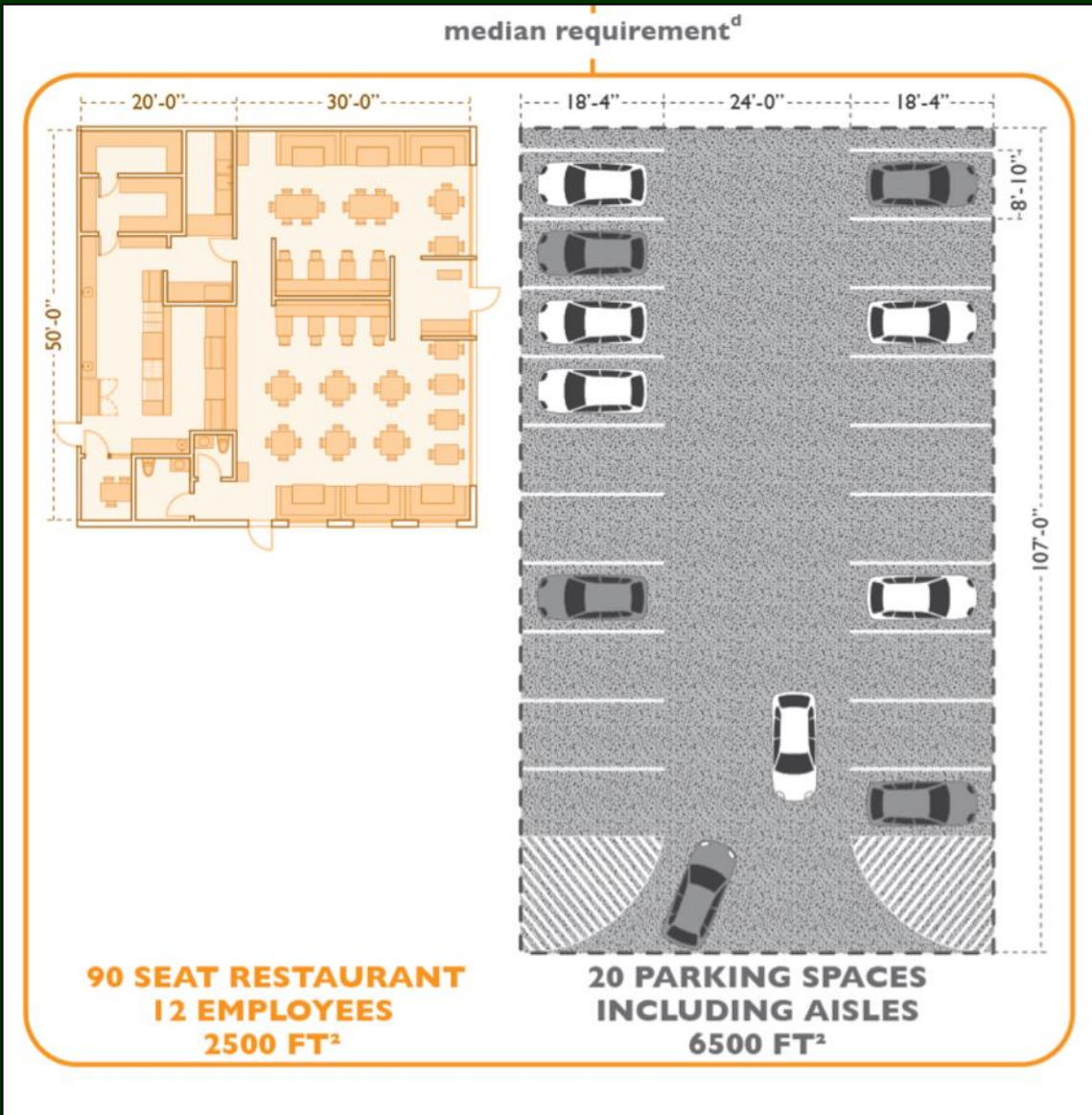
8.8 million cars are built  
each year in the us



Urban Sprawl

# of Vehicles per Household or nuclear and extended family



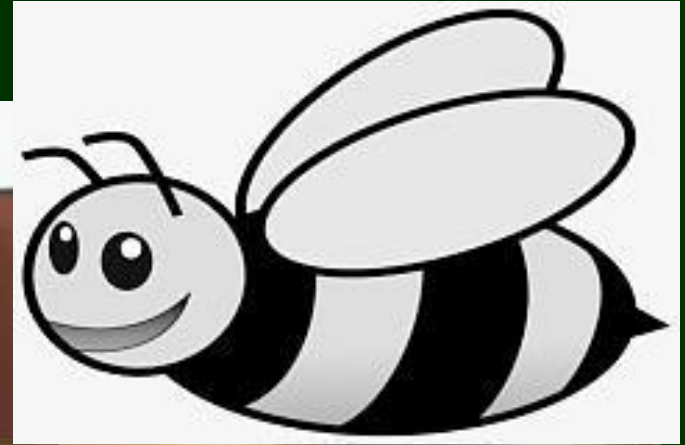


The search for a parking space is currently the cause of a third 1/3 of urban traffic

Parallel encourages double + waiting

2 parking spaces per dwelling unit

No plants or insects







There are 7  
different types of  
parking spaces  
(assigned + un  
covered + un,  
tandem,  
street,  
commercial)



### 7 Kinds of Spaces Required for Each Car

Residential

Office, Industrial and Commercial

Health Care Facilities, Funeral

Religious and Educational

(campus, library, museum)

Recreation and Entertainment

Food and Beverage

Retail Services





# Permit Parking Extension Plan Discussion

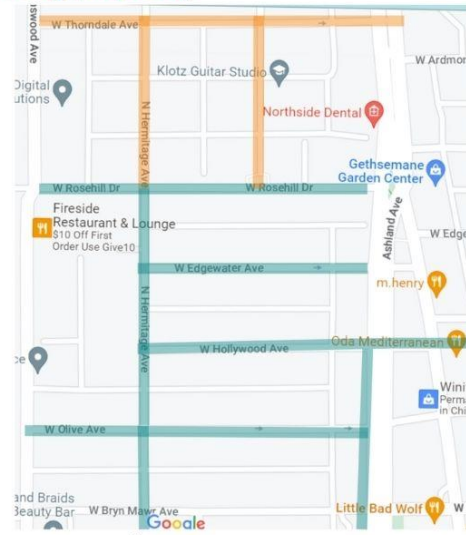
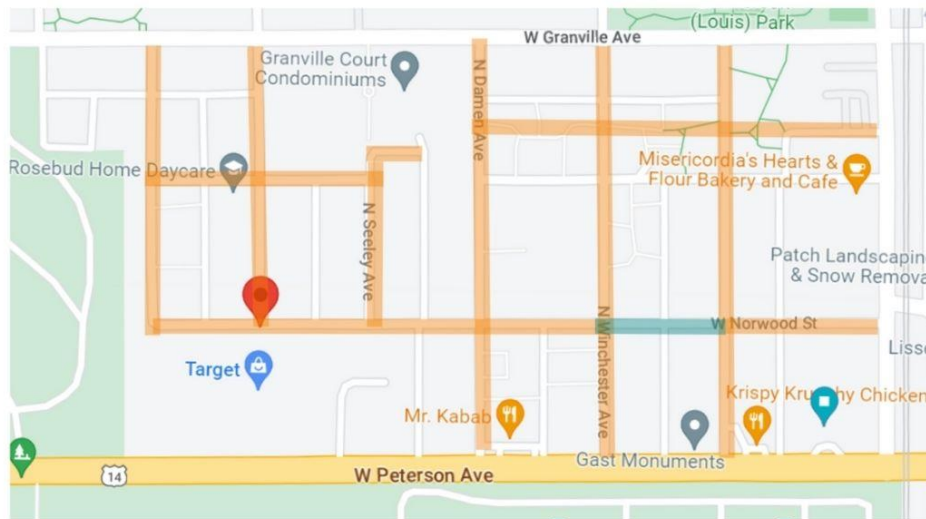


# PERMIT PARKING

## Extension Plan Meeting

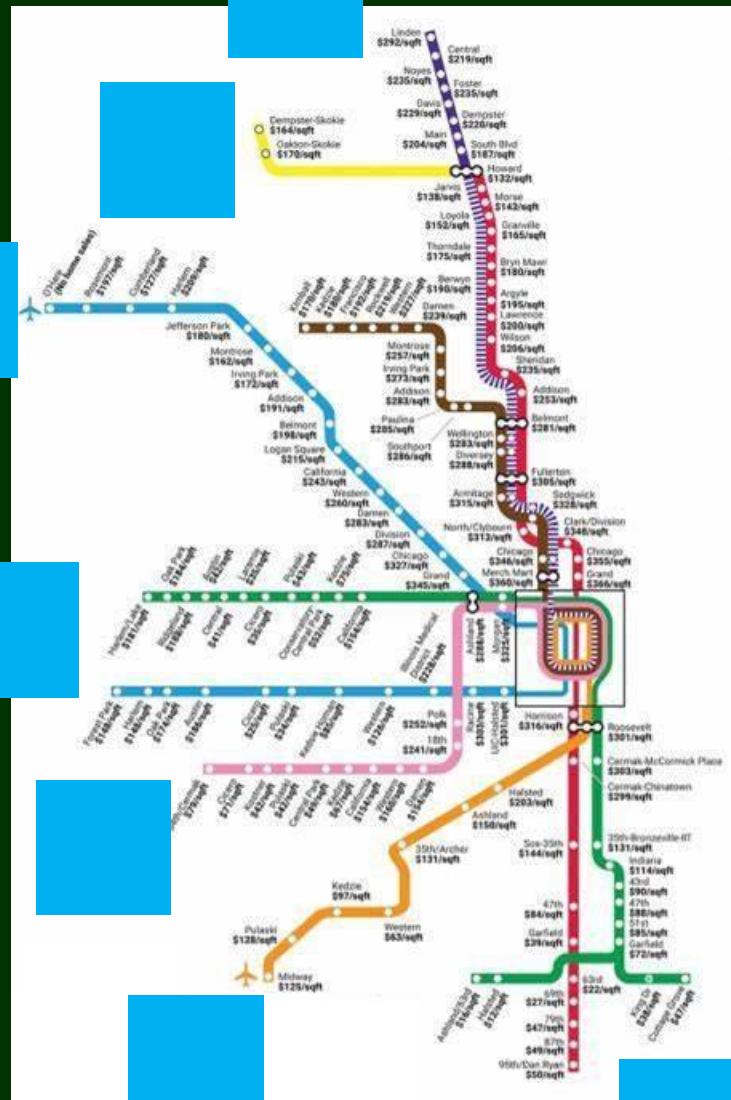


(The Green signifies what is currently Permit Parking, Orange what is being proposed)



## WED/APR 19/5-6:30PM

Due to the Metra Station that will be coming to Peterson/Ridge, and after hearing from neighbors about potential impacts to residential parking, Alderperson Vasquez's office will be looking to extend permit parking in the area - we want YOUR feedback!





Las Vegas  
you can park for free if you  
want to walk a long way, but  
any decent parking will cost  
you (and prices will be  
higher on special occasions  
and busier days)



# Urban Vehicles



To carry **50,000** people  
per hour per direction,  
a city needs...

a 175m wide road used only by **cars**



a 35m wide road used  
only by **buses**



a 9m wide track  
for **metros**



One way to reduce flooding and filter rainfall vs. an asphalt nation, concrete = 15F hotter at night



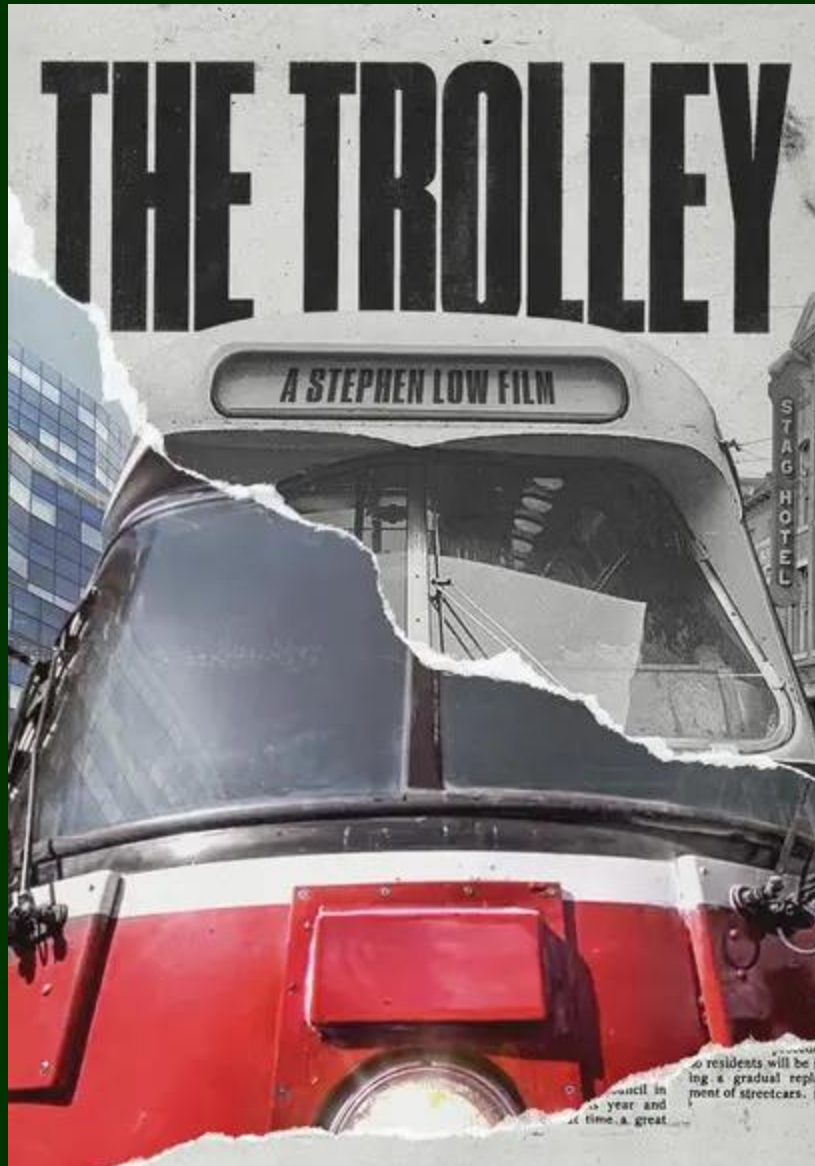
# Light Rail





**PPC  
streetcar design**





The Trolley

46 min

Documentary

Witness two centuries of explosive change—from the trolley's humble birth to near obliteration in the automobile age to its 21st century renaissance.

# Interurbans







**Car-Free Streets**  
a growing movement in cities  
throughout the world

# 30 Car Drivers vs. 30 Passengers Getting Coffee





average car  
occupancy is 1.5  
persons per  
vehicle



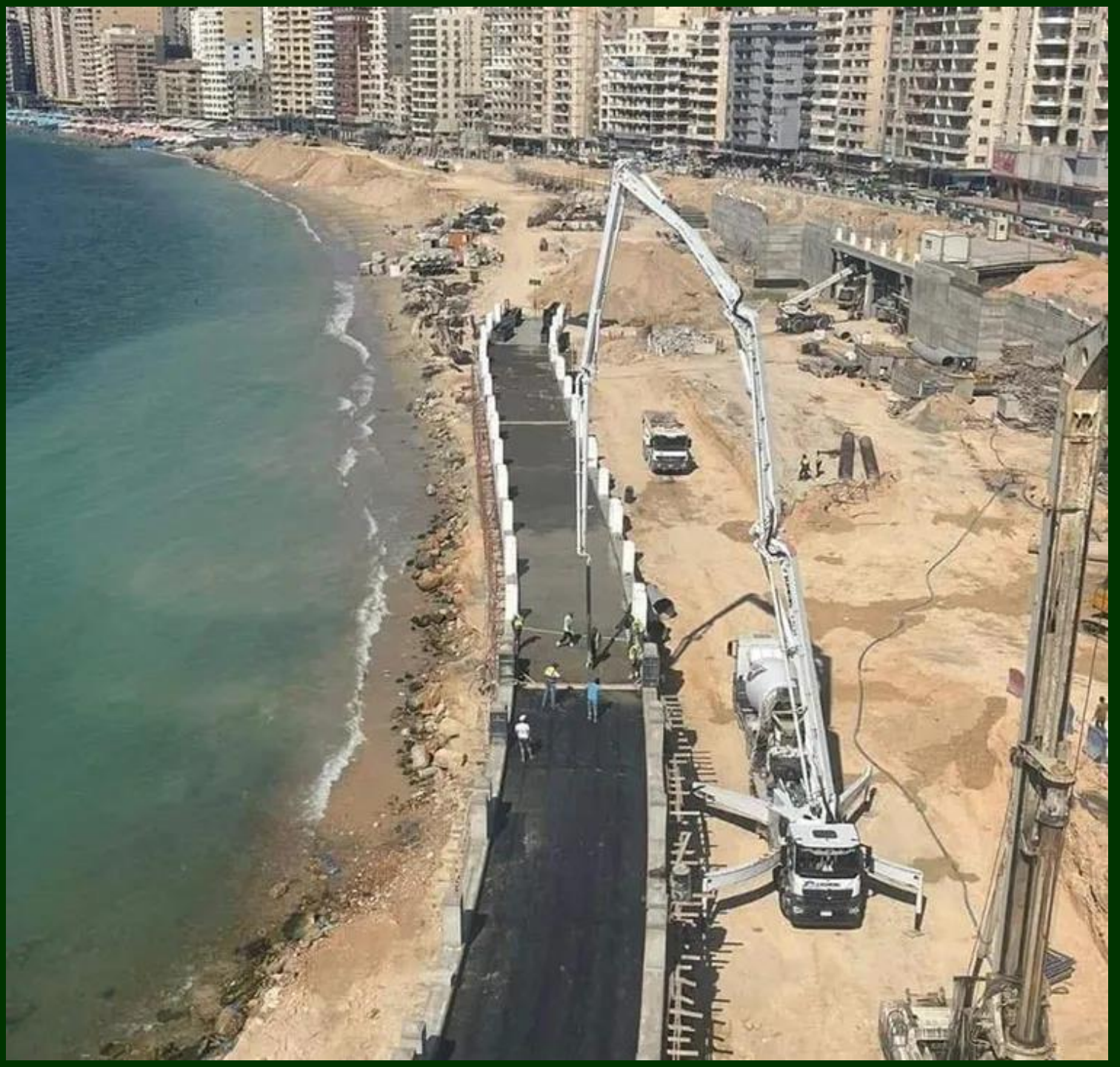
Single  
Occupant /  
Operator  
Problem



50  
Lane  
Traffic  
Jam –  
China



Beach is removed in favor of building a coastal highway Alexandria, Egypt





With 26 lanes in certain parts, the Katy Freeway, Houston, TX, is the widest highway in the world





Fleet  
Management



# Cell Tower Data Provides Mobility Patterns at Any Given Time Network Loading / Estimation



# Some Bus Systems Record Flow



Sensors record when and where passengers get on (front door) and get off (rear door) of a bus

“The availability of vast amounts of data from and about cities offers great potential to address urban challenges”

JOIN US 04.19.2023 IN-PERSON EVENT JOIN US 04.19.2023 IN-PERSON EVENT JOIN US 04.19.2023 IN-PERSON EVENT

**UIC** UNIVERSITY OF ILLINOIS CHICAGO  
College of Urban Planning and Public Affairs

**2023 URBAN FORUM**

# Can Data Deliver?

➤ Harnessing Data-Driven Solutions for Urban Challenges

“integrated” Transportation / cars regarded as stand alone mode  
69% of the total annual vehicle miles traveled in the U.S.  
occur in urban areas

“JAM” refers to extreme traffic density when traffic flow stops  
completely, usually in the range of 185–250 vehicles per mile per  
lane

“Autonomous” vehicles

Passenger info on transit



ctabus tracker.com bus tracker

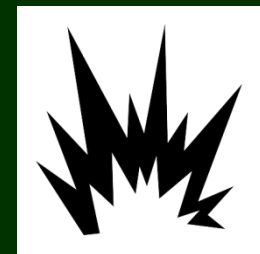
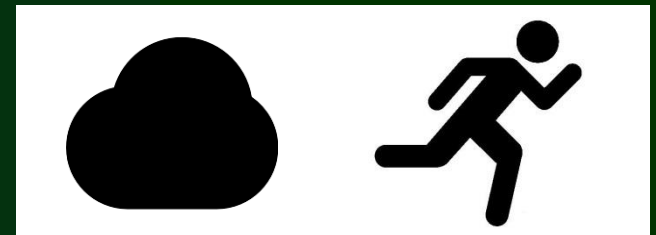
Adams & S. Wacker (North Bound) 4:33 PM 391F

Route / Destination	Estimated Arrival / Bus #
1 To Harrison/Deaplains	4 MINUTES 1202
126 To Austin	7 MINUTES 1227
129 To Ogden & Union Stations	9 MINUTES 6016
7 To Central	DELAYED 1808
156 To Deaplains/Harrison	11 MINUTES 4058

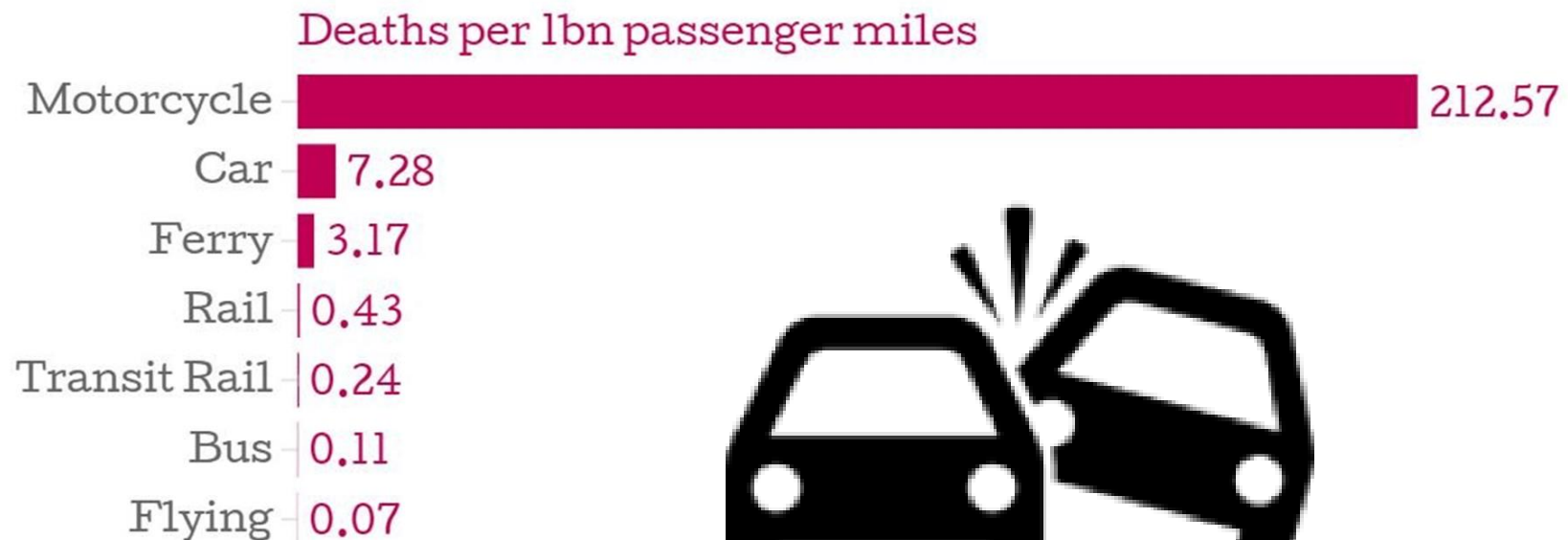
powered by Clever Devices



# Unforeseen Conditions



# Safety Auto 7 PPM vs Public Transit Less Than > 1

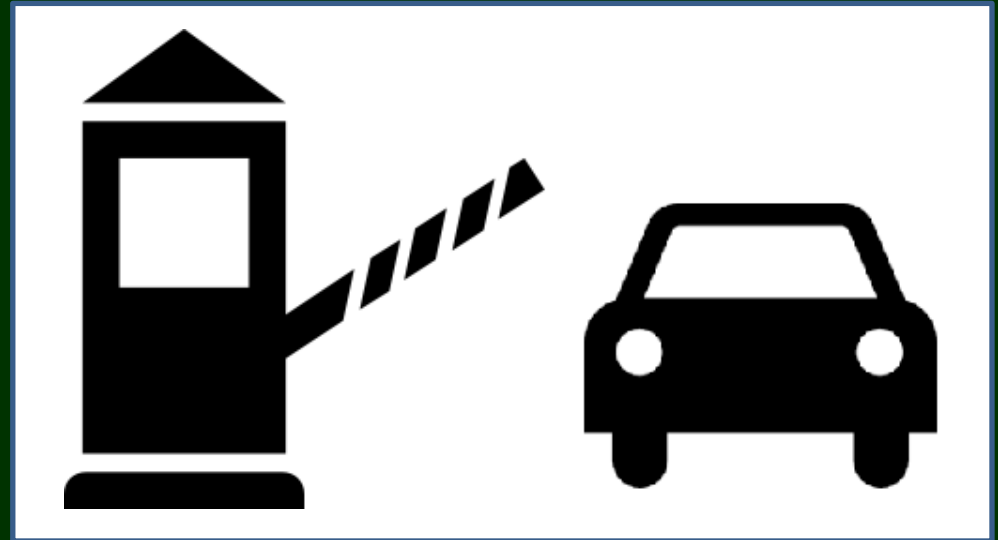
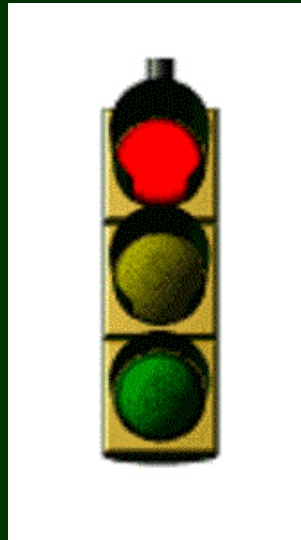
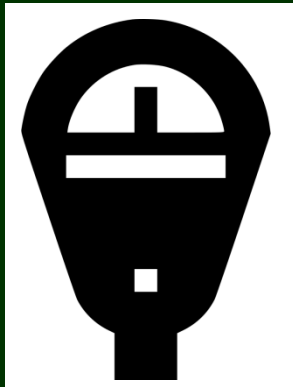


Figures: 2000 - 2009, US

Data: Northwestern University



# End Inadequate Approaches to Traffic Management





**CARS**



**ELECTRIC CARS**

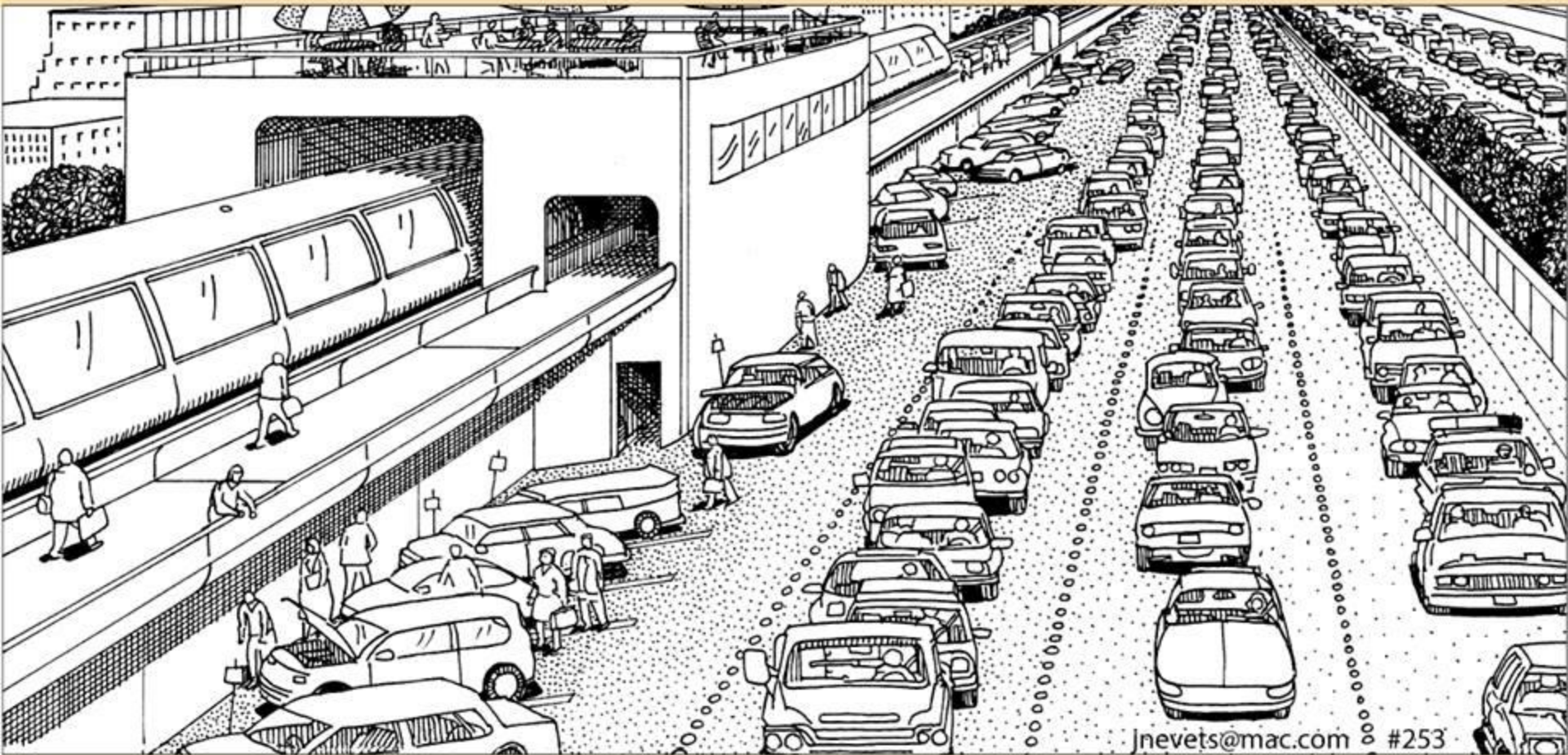


**AUTONOMOUS CARS**



**UBER/LYFT CARS**

# PATENT DEPENDING © Steven M. Johnson



**Automobile Abandonment Zones** are offered to accommodate growing numbers of drivers who lose the will to proceed further in bumper-to-bumper traffic. A driver leaves keys with an Abandonment Officer, and returns later after calming down.

Cost or Charge for Driving Comparable  
to Transit Fare / per Revenue Mile /  
65.5 cents per mile cost for a car



The average cost of transportation for a household is  
\$9,826 per year, or \$819 per month  
12% of the average household income  
car payments cost around \$4,523 per year  
car insurance costs an average of \$1,575 per year  
gasoline accounts for 16% of transportation costs  
\$131 per month



Average spending on food per month: \$610  
The typical U.S. household spends 9% of its income on food —  
\$7,316 per year.

# 100 Cities around the world offer free public transit / Kansas City, Mo





Cost of a Car per Hours Actually Used  
time spent using your car  
10 hours and 50 minutes per week

vehicle not in use for 157 out of 168 hours –  
94%





A car currently costs on average \$25+ a day to own and operate



Under Chuck's Plan this money could be better spent



# AWS Alternate Work Schedules

arrival / departure 7-9:00 AM

5-4-9, 4-10, hoteling, Monday + Friday

Flexitime



Flexiplace

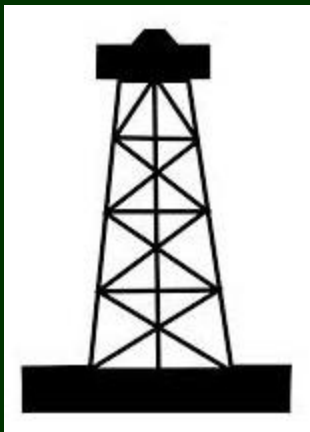




Tax Suppliers,  
Not Consumers

Localized revenue

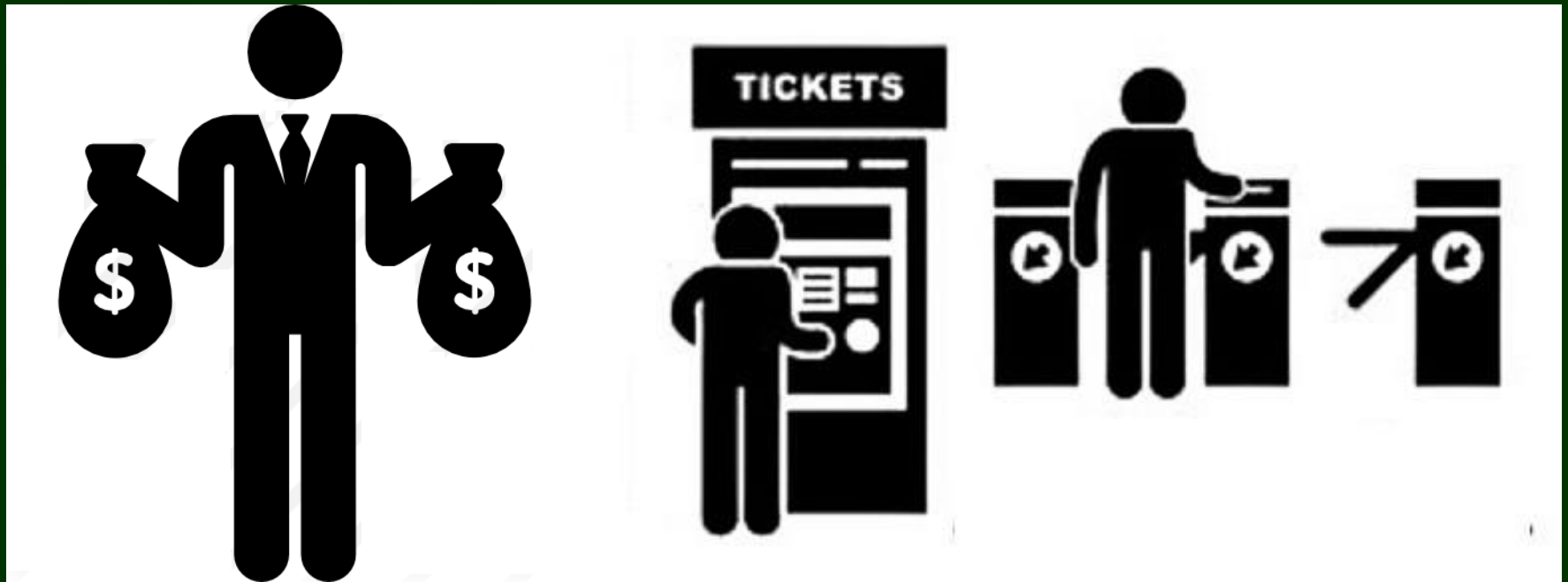
Eliminate the Gas  
Tax Altogether as  
a Source of  
Revenue



US 18.4 cents  
per gallon, IL 78 cents



Will Generate  
Revenue to  
Enable Free  
Public Transit





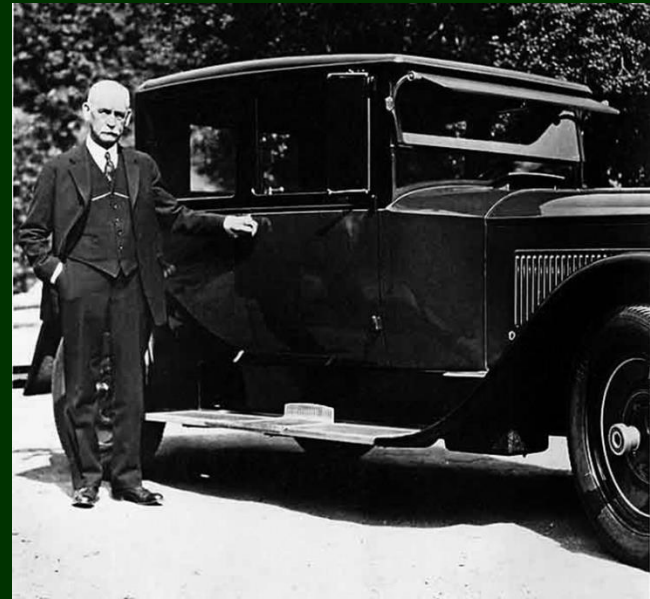
Occasional

Absolute  
“On-  
Demand” or  
Cap

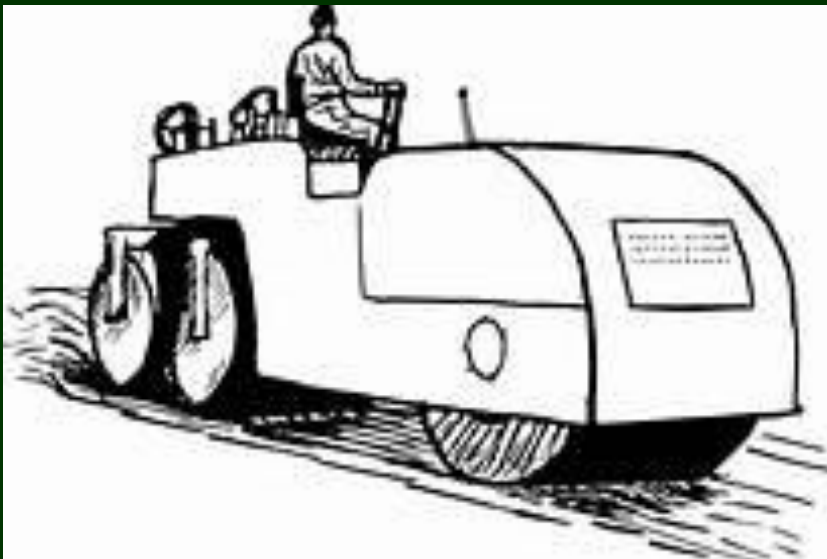
Locating the  
“cheaters”

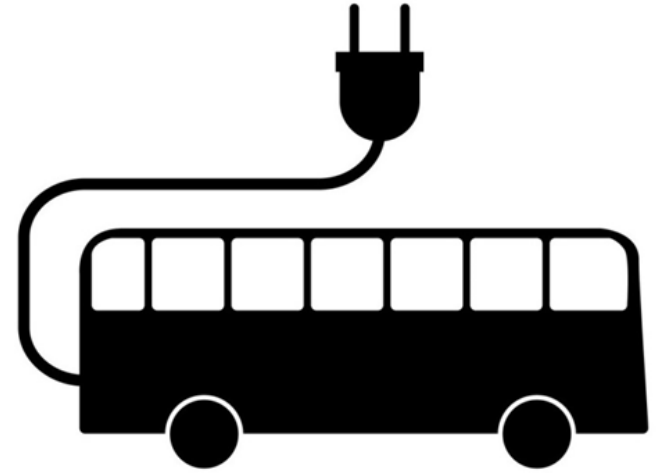
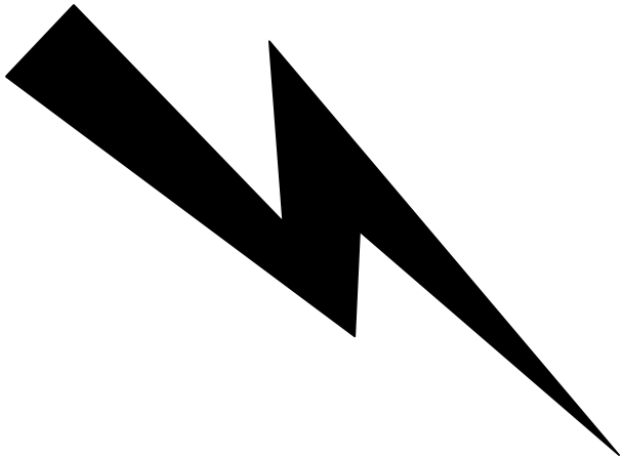


# Transportation Equity



Jurisdiction restricted to  
Dept of Transportation





No infrastructure  
Costs / Required

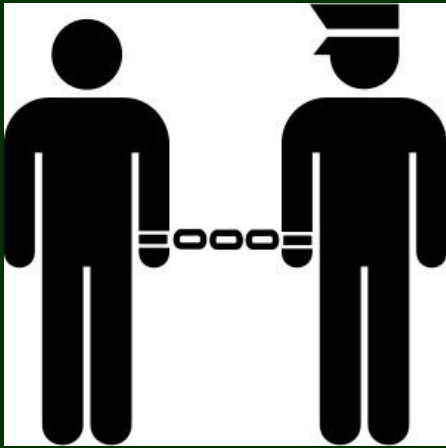




With Chuck's Plan  
there are no transportation restrictions or costs  
for senior travel, or for a visitation to a senior



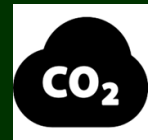
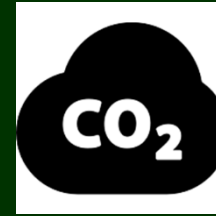
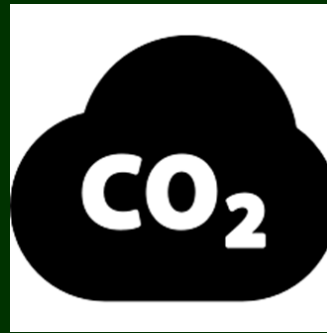
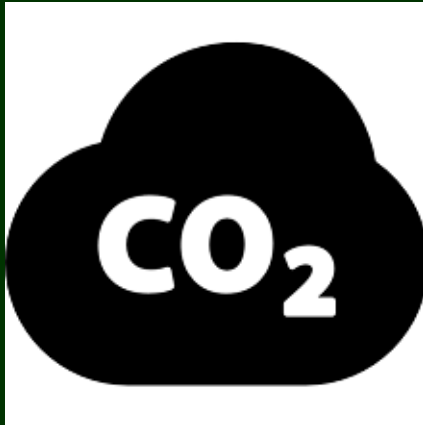
# Transit Jobs



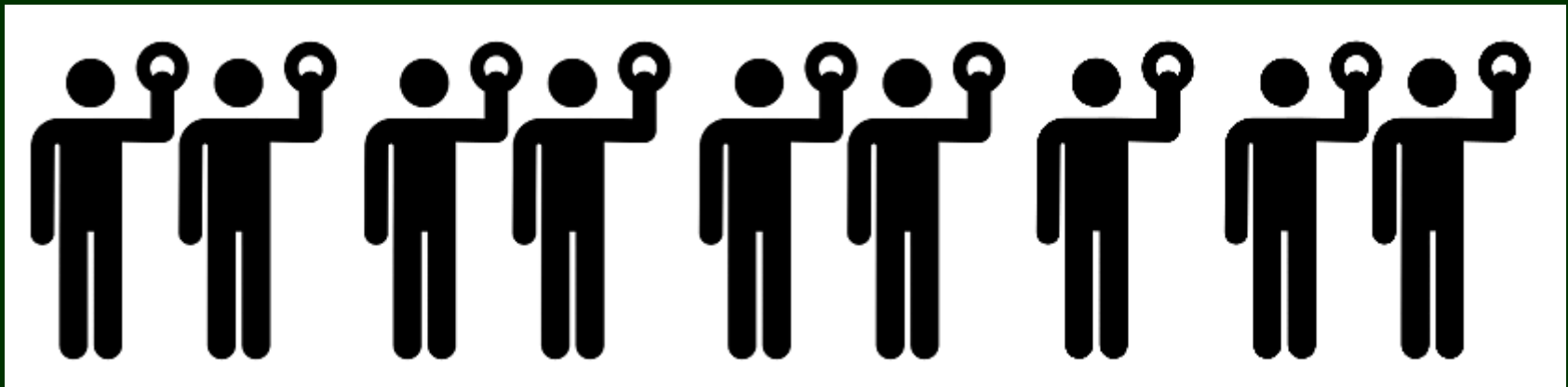
Re-entry program



# Production of Greenhouse Gases will be Reduced Significantly



Increased Revenue used to Improve / Expand Public Transit



**PUBLIC TRANSIT WASTES MONEY. IT ALWAYS HAS TO BE SUBSIDIZED!**



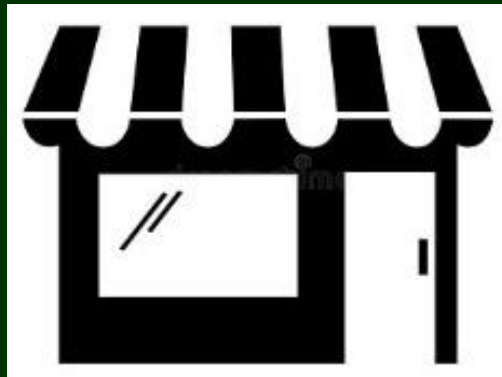
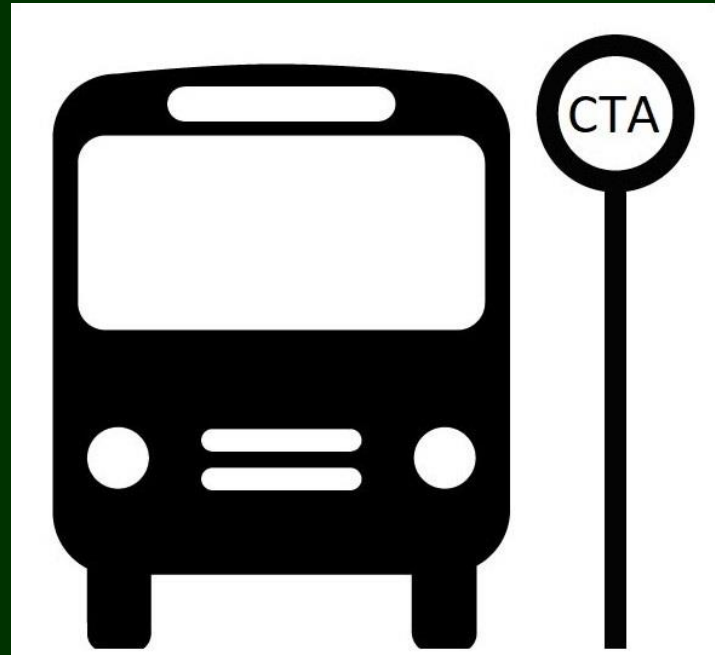
# #1 Requirement of the “performance measures”

Dependable Public Transit 24/7

30 minute intervals headways off peak

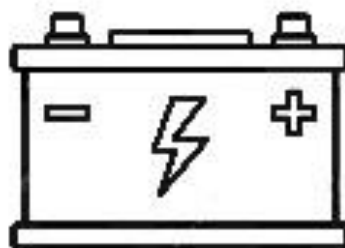


**TRANSIT  
ORIENTED**



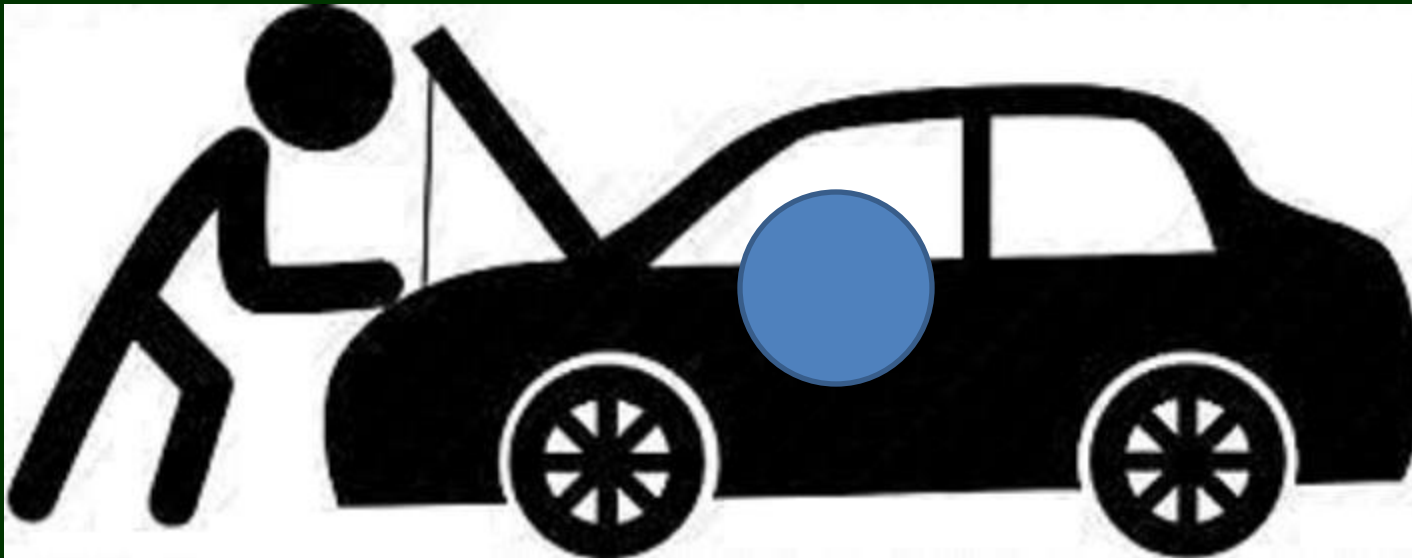
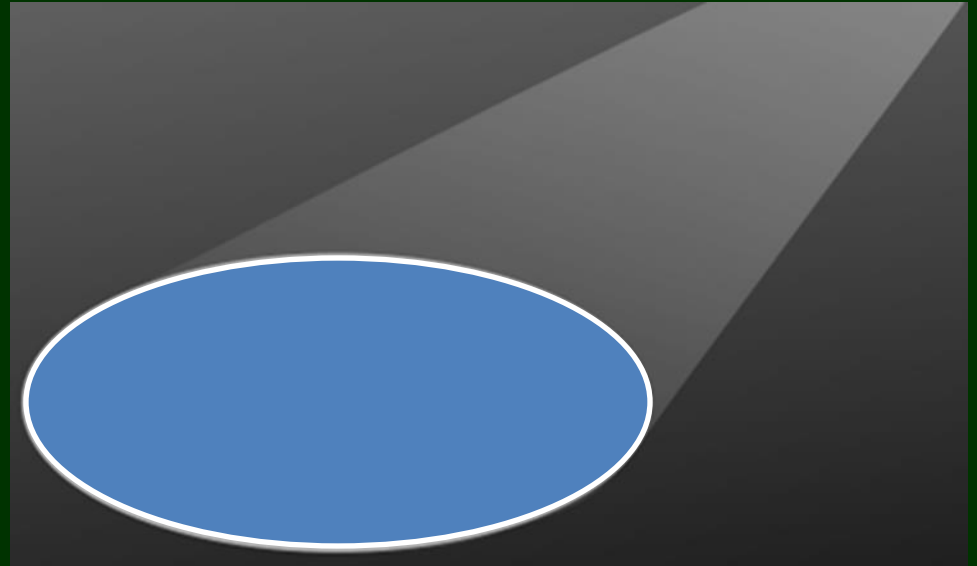


**A Big Think from the  
College of Complexes**



**The future of cars is  
electric,  
but our future is not cars**

Alien attack  
motorists reported  
incidents describing  
blue balls of light  
shining on their cars  
coming from a rocket-  
shaped UFO

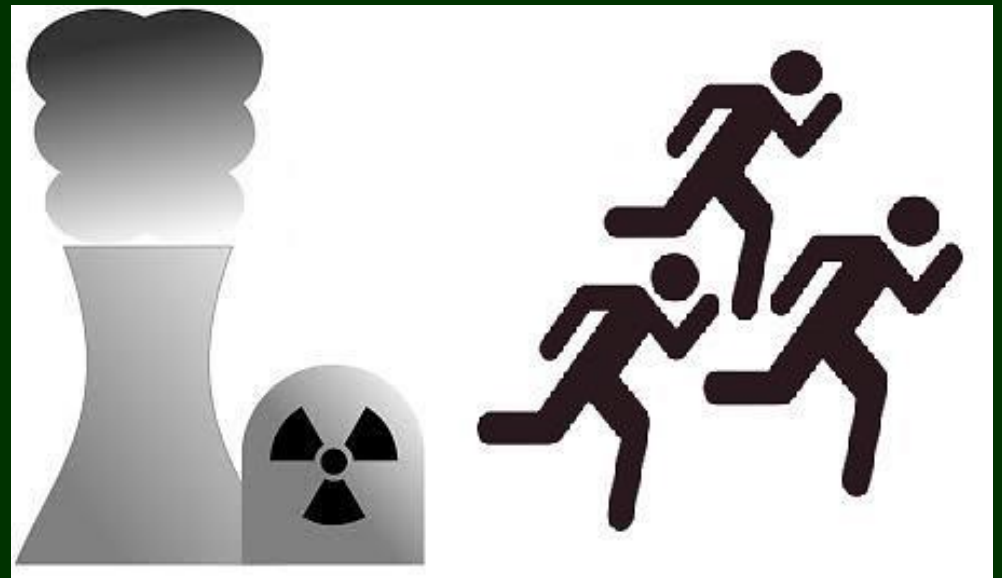


causing  
the  
engines  
to stop



**Attn Residents**  
The new,  
experimental  
thorium reactor  
will be turned  
on for the first  
time tomorrow

**Traffic Management  
is vital for evacuation  
in the event of a  
disaster**



# Chuck's Plan will begin the transformation your town city into an Eco-Village

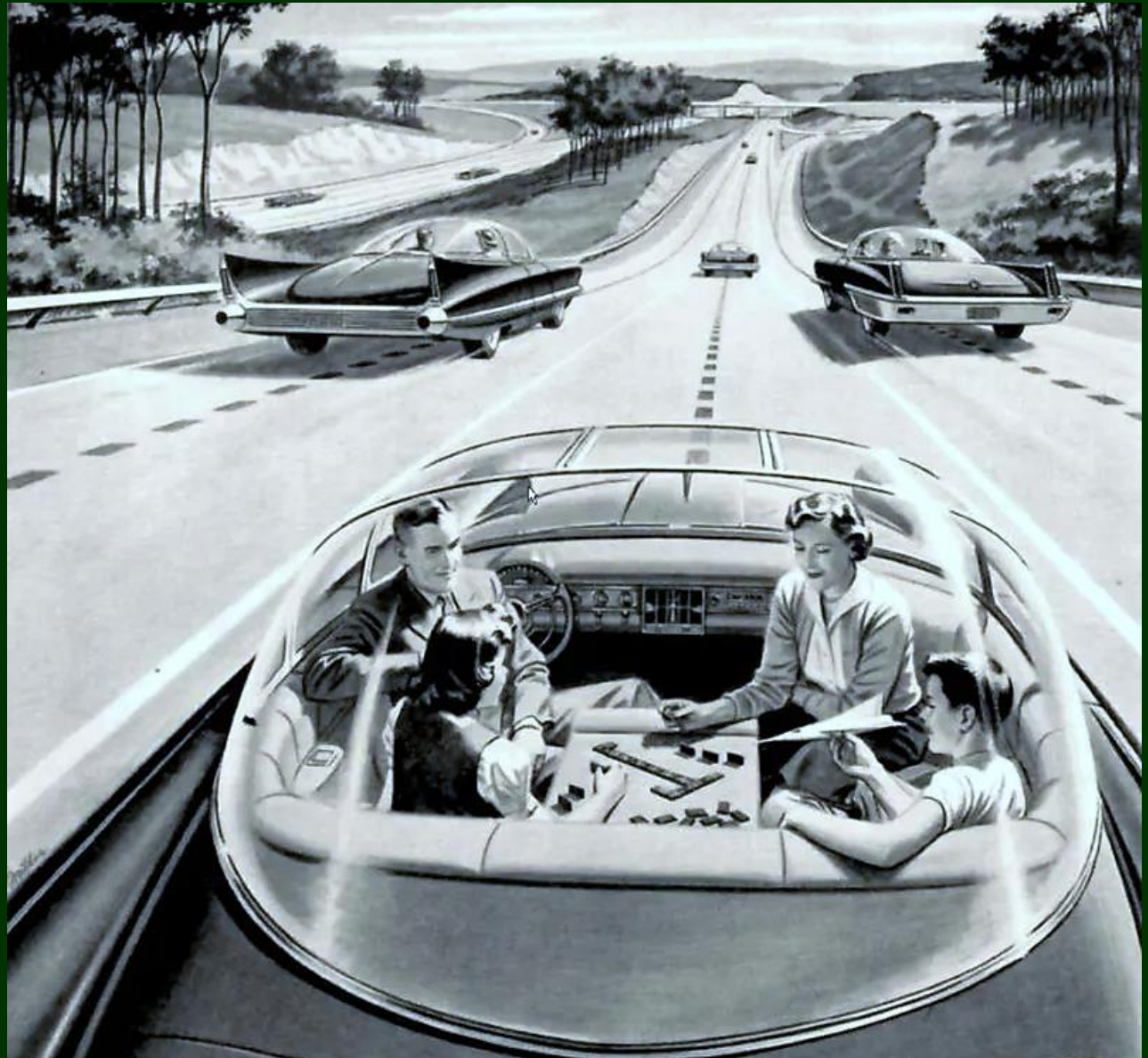
Welcome to EcoVille, IL



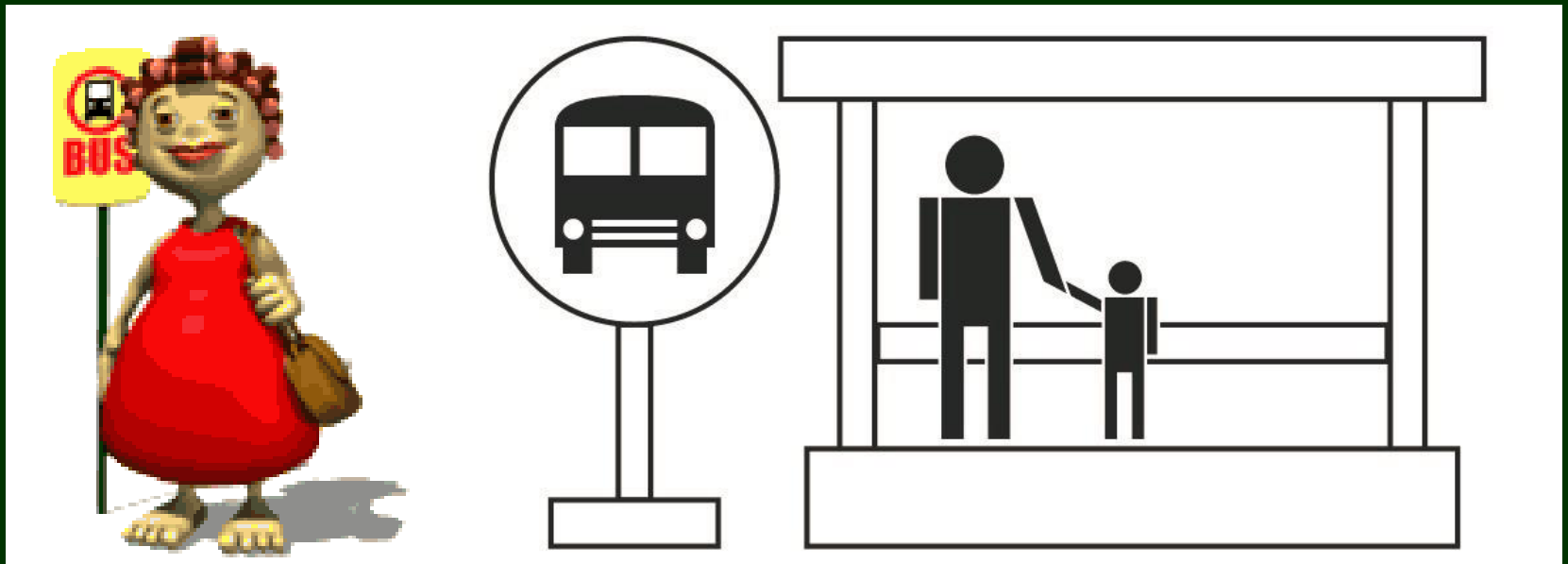
# Electric Self-Driving Minibus



“Autorama”  
Never  
Materialized

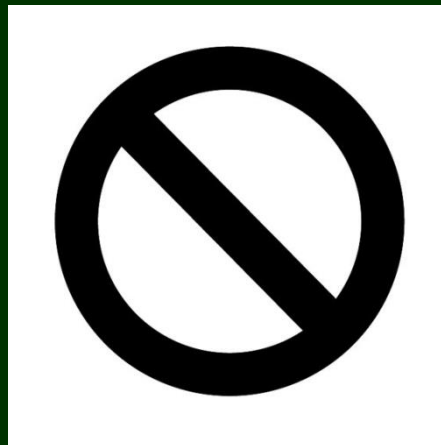


# # of Stations / Bus Stops? Routes, Schedules, Revenue Hours or Miles





# Bicycles



# Recommended Reading CTA Budget / 3 colleges



## Where does your CTA fare go?

Here's how your \$2.25 gets split to meet part of the CTA's \$1.3 billion estimated operating expenses:

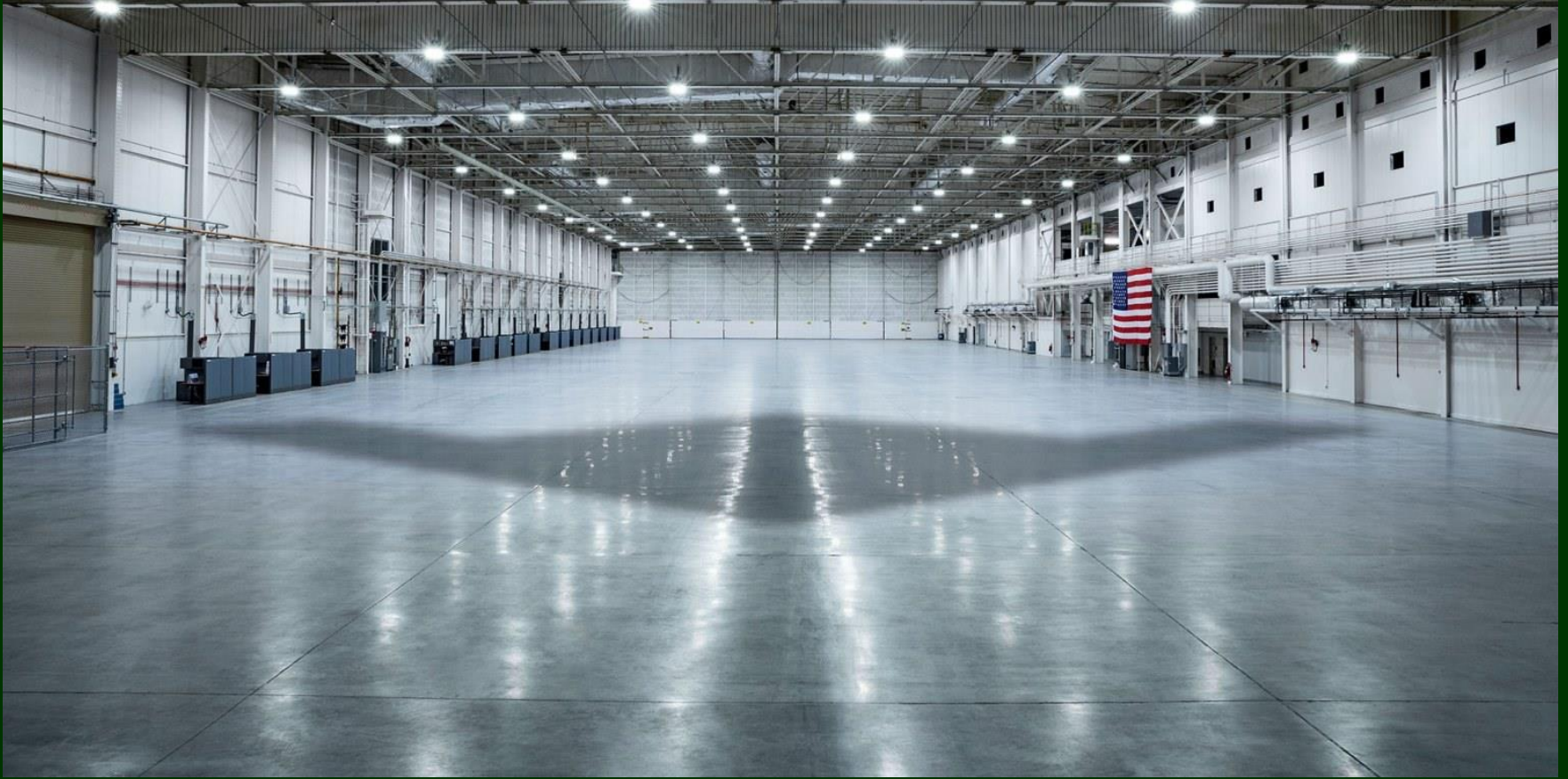
- Provision for Injuries & Damages \$0.03 (1.15%)
- Electricity \$0.05 (2.31%)
- Security Services \$0.06 (2.75%)
- Fuel \$0.10 (4.45%)
- Maintenance \$0.12 (5.20%)
- Other Services \$0.34 (15.14%)
- Labor \$1.55 (69.00%)





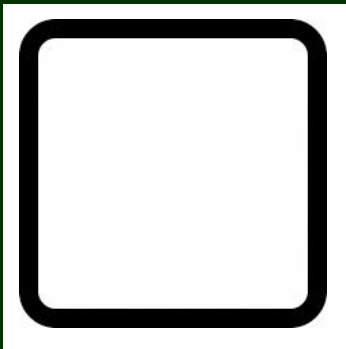
**Press Release from the  
Chicago Greens  
Eco-Group Seeks Passage in  
this Congress  
of an “Earth Bill”  
to Counter Climate Change**

# Current Gov't Funded Research on Transportation

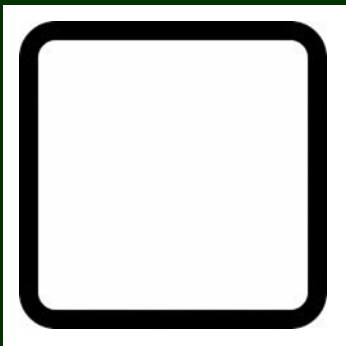


US Gov't (ATS – above top secret classification)

Having viewed the presentation,  
please indicate Your Choice:



I like Chuck's Plan, count me in



I am a little busy right now, and  
don't care what happens to the  
planet

Thank You for Coming!

