GC3 Mitigation Strategies Working Group
Transportation Sector Team

Presentation for/Discussion with Transportation Breakout Session

Public Forum Reviewing the [DRAFT Mitigation Report](#)

September 23rd, 2020

Public comment on the draft 2020 report is due by Oct 21st, 2020

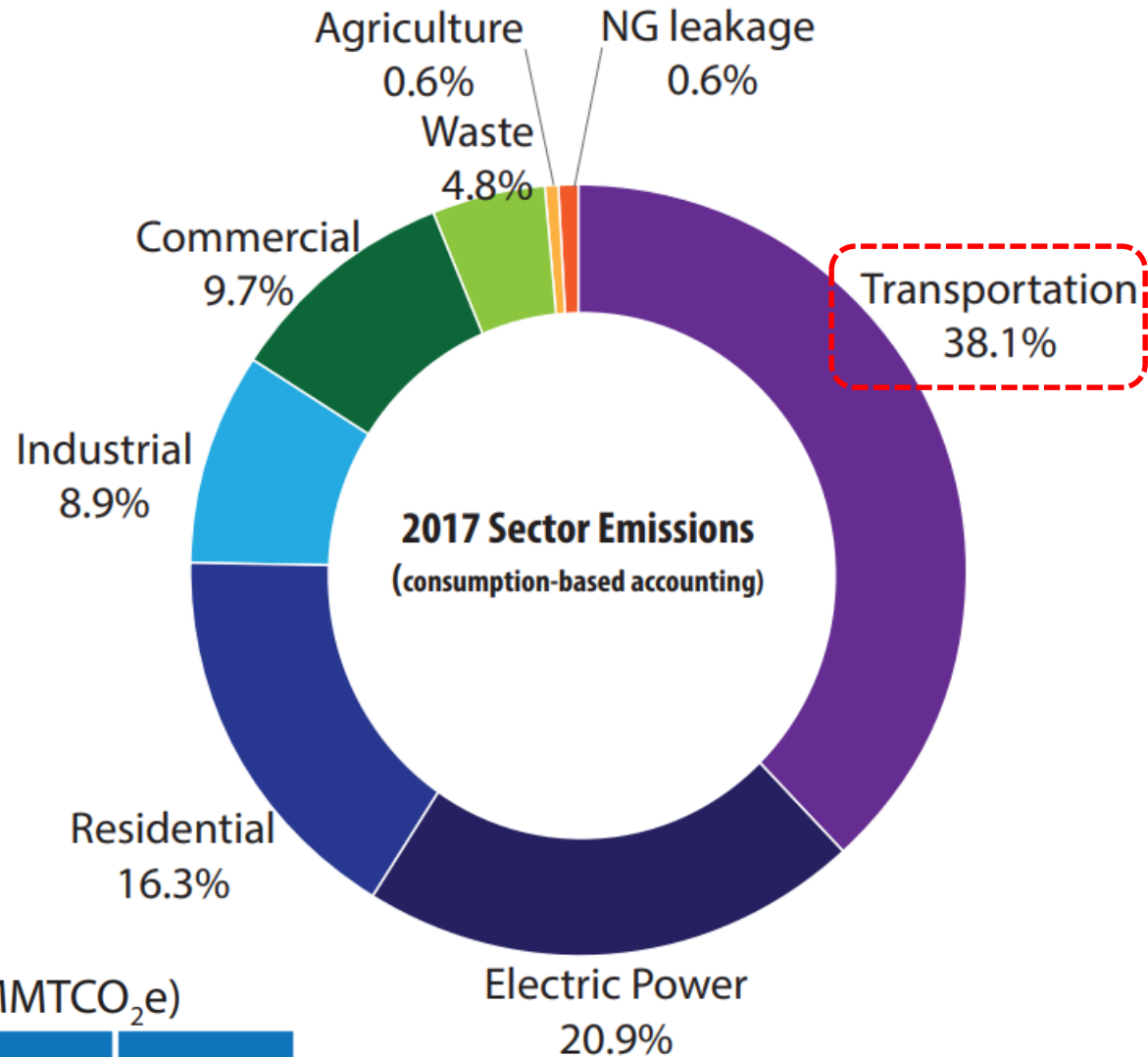**Email Public Comment to:** deep.climatechange@ct.gov

Working Group Team Member: Anthony Cherolis, [Transport Hartford](#) at the Center for Latino Progress

2017 Connecticut Greenhouse Gas Emissions Inventory

Emissions Inventory captures **emissions within the state**

This method does not capture **life cycle emissions** of a product or fuel.

Example – An SUV built in Detroit purchased and driven by a Connecticut resident only has tailpipe emissions counted in Connecticut. The inventory does not assess the raw material and manufacturing emissions.


2017 Sector Emissions (consumption-based accounting)

- Agriculture 0.6%
- NG leakage 0.6%
- Waste 4.8%
- Commercial 9.7%
- Industrial 8.9%
- Residential 16.3%
- Electric Power 20.9%
- Transportation 38.1%

Connecticut Emissions by Sector (MMTCO$_2$e)

	1990	2001	2016	2017
Transportation	15.6	17.8	15.4	15.5

Equity & Environmental Justice

- Communities bearing greatest public health impact from emissions must be prioritized for benefits from a clean transportation system

- Low- and moderate-income (LMI) households spend a greater share of income on transportation. Many cannot afford vehicle ownership.

- An equitable approach to emissions reduction must look beyond electric cars

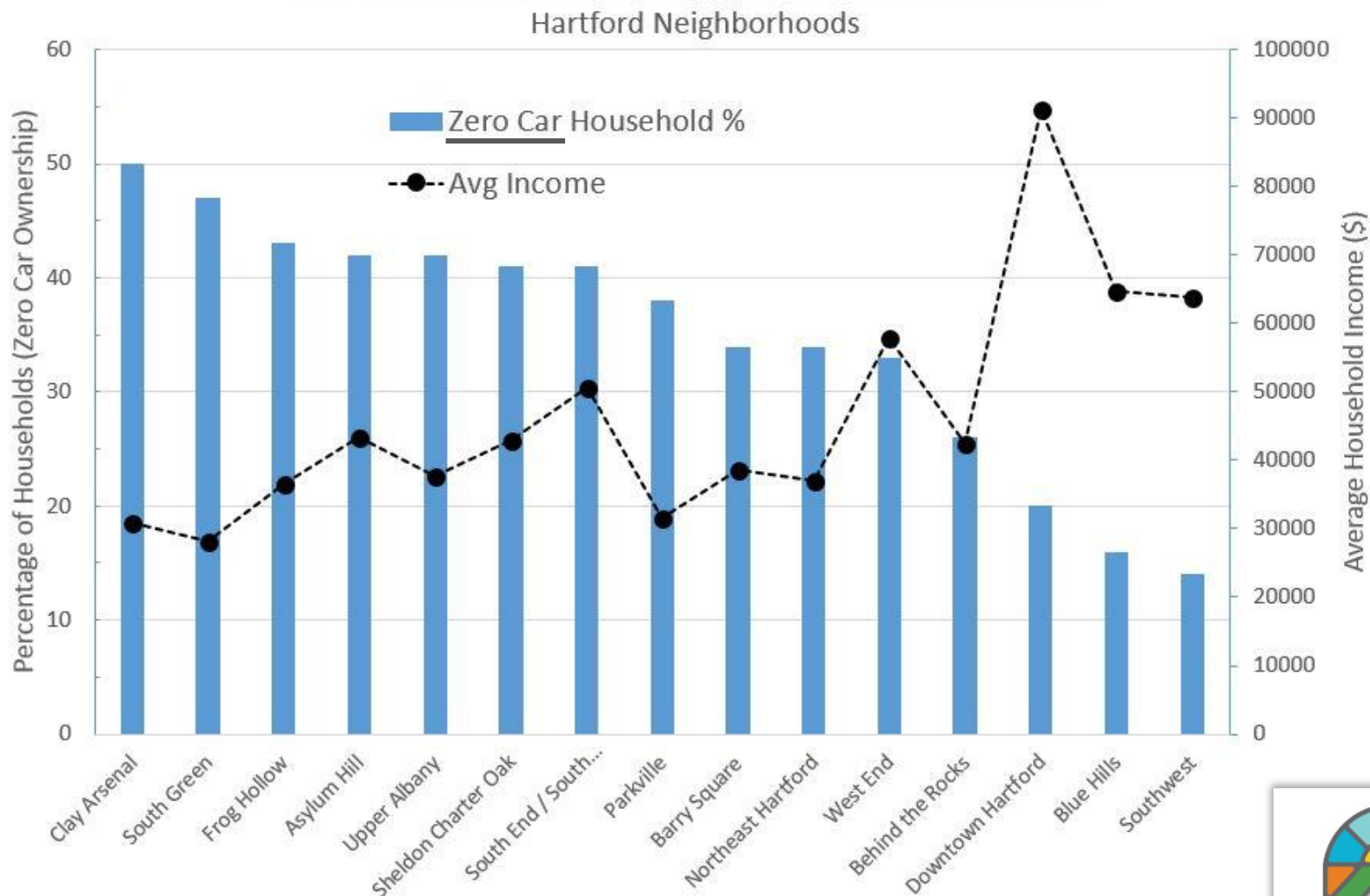# *A car-centric transportation system and land use sprawl is inequitable*
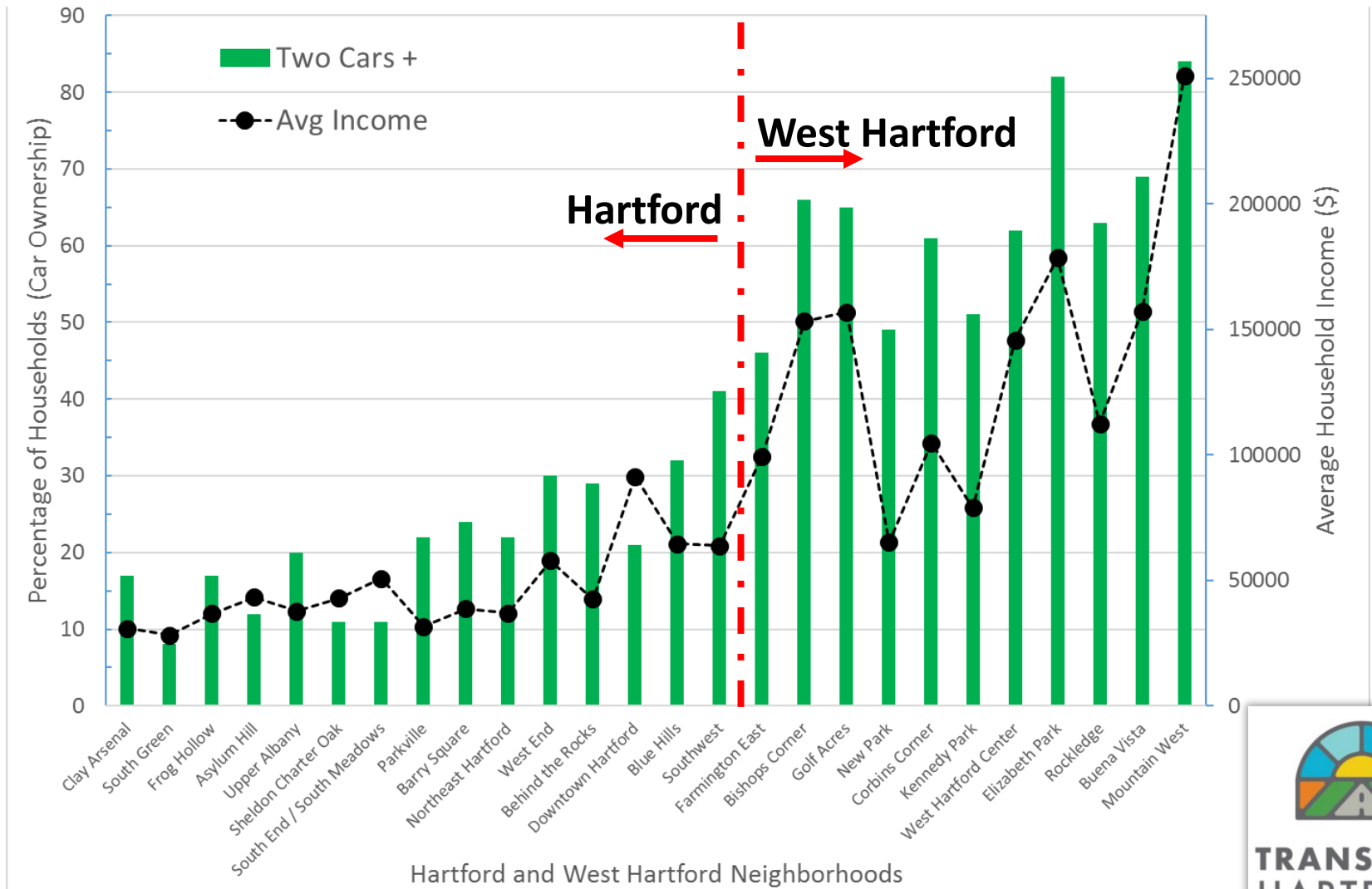
Source: US Census Community Survey Data (2016)

Which investments are egalitarian?

Hartford Car Ownership Data and Avg Household Income
Hartford Neighborhoods

Legend: Zero Car Household % · Avg Income

X-axis (Hartford Neighborhoods): Clay Arsenal, South Green, Frog Hollow, Asylum Hill, Upper Albany, Sheldon Charter Oak, South End / South..., Parkville, Barry Square, Northeast Hartford, West End, Behind the Rocks, Downtown Hartford, Blue Hills, Southwest

Left Y-axis: Percentage of Households (Zero Car Ownership)
Right Y-axis: Average Household Income ($)

Hartford Neighborhoods
Source: US Census Community Survey Data (2016)

Four CT cities have high zero car ownership rates – Hartford, New Haven, Bridgeport, and Waterbury

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Equity & Environmental Justice (cont)

- **Prioritize investments in active transportation (walking and biking) and transit**

- **Address safety concerns for pedestrians, bicyclists, and other vulnerable users**

- Expanding access to zero emission vehicles in LMI communities will require intentional policies (car share, ride share, e-bikes)

Pedestrian Dies After Being Hit By Car in Wethersfield

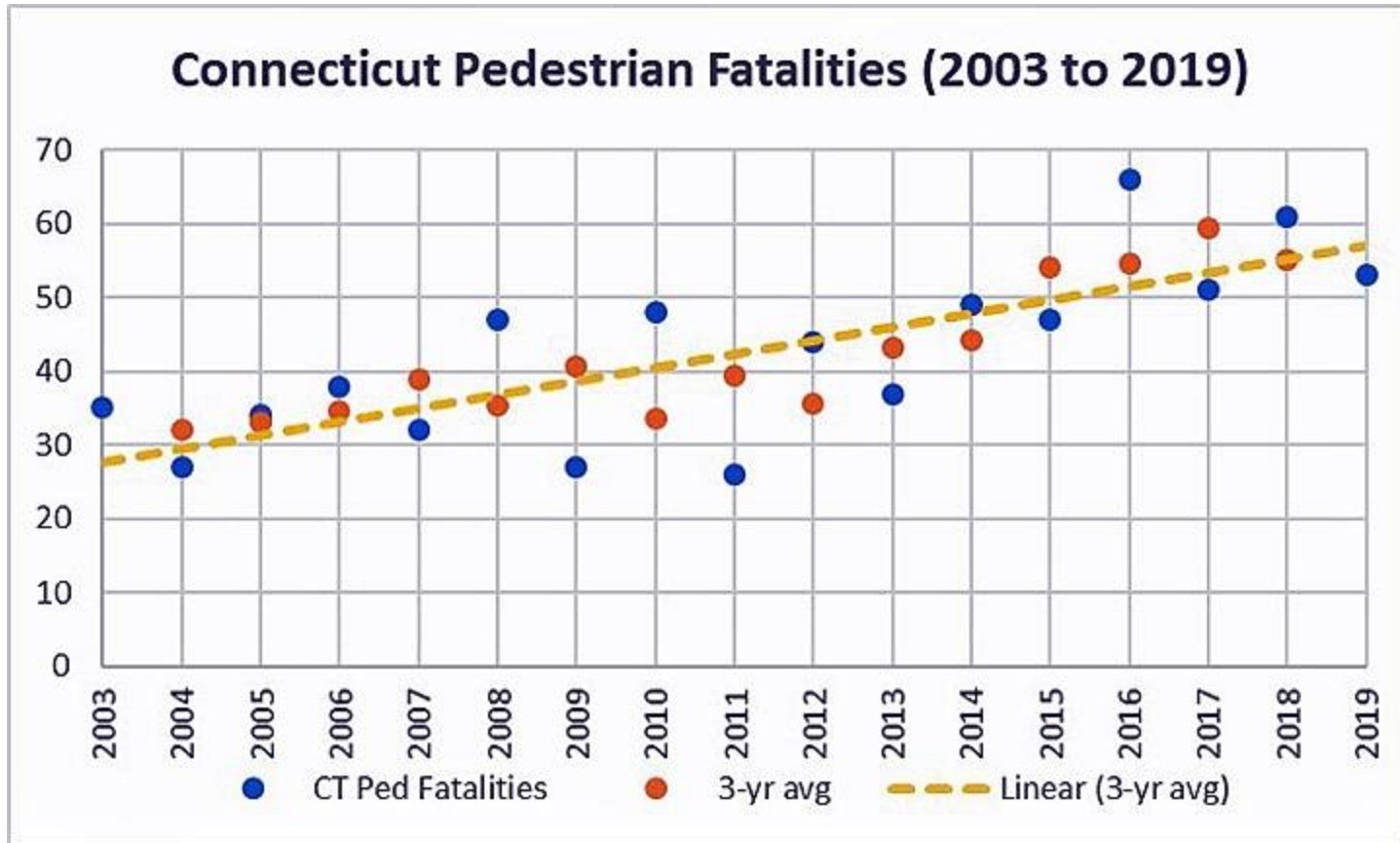Published September 16, 2020 • Updated on September 17, 2020 at 10:20 am

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NBC Connecticut

Silas Deane Hwy, six lanes to cross on foot

A person has died after being hit by a car in Wethersfield Wednesday night, according to police. (link to article)

Pedestrian crash fatality data from the UConn Crash Data Repository

Connecticut Pedestrian Fatalities (2003 to 2019)

[Related article](#)

Four "Themes" from 2018

1. Increasing fuel economy standards

2. Increase zero emission vehicles as a percentage of fleet (>20% by 2030)

3. Eliminate annual growth of vehicle miles traveled (VMT) by 2030

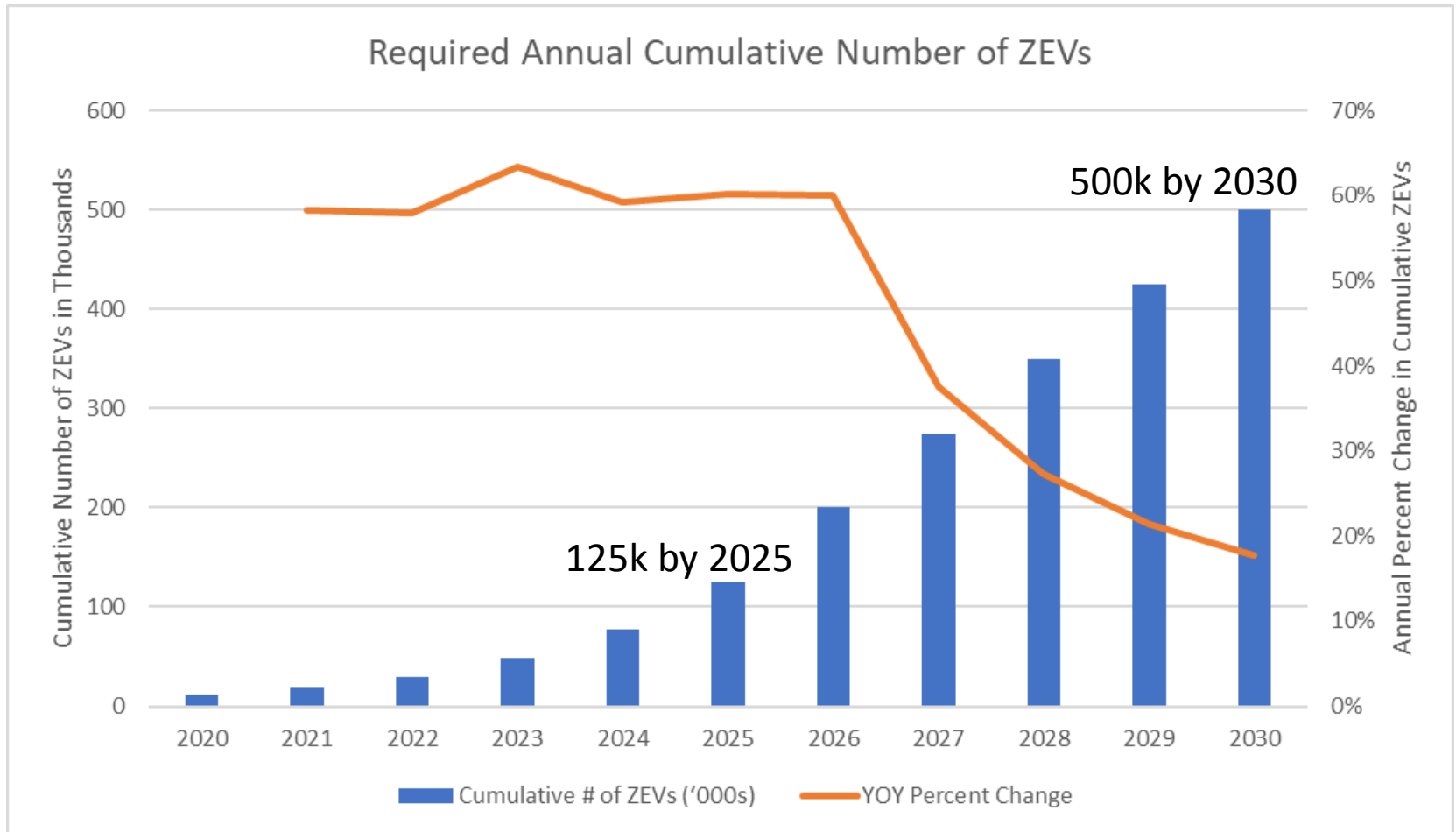4. Sustainable funding for electrification and transit infrastructure

Link to the 2018 GC3 report for reference

(1) Increasing Fuel Economy Standards

Status - Progress on light-duty vehicles hindered by concerted federal action to roll back policies; CT has joined other states in formal opposition to the changes

New 2020 Recommendation:

- Establish emissions standards for medium- and heavy-duty vehicles, including school buses.

(2) Increase ZEV penetration rate

Required Annual Cumulative Number of ZEVs

500k by 2030

125k by 2025

Legend: Cumulative # of ZEVs ('000s) — YOY Percent Change

Based on the light duty vehicle ZEV target in the 2018 GC3 Report, pg 45

The CT CHEAPR EV rebate program has $15 million (from $5 ghg fee on registrations) over next 5 years, but would need $87 to $107 million to reach the 2025 EV penetration goal

(2) Increase ZEV penetration rate: Equity Considerations

- **Starting 1ˢᵗ Quarter 2021 –** Increased EV rebate level for LMI households and an LMI rebate on the purchase of a used EV

- **New incentives proposed:** private fleets, e-motorcycles, e-bikes, e-scooters

- **Lead by Example program:** Increasing the ZEVs in the state fleet should prioritize fleet vehicles that operate in LMI and EJ communities

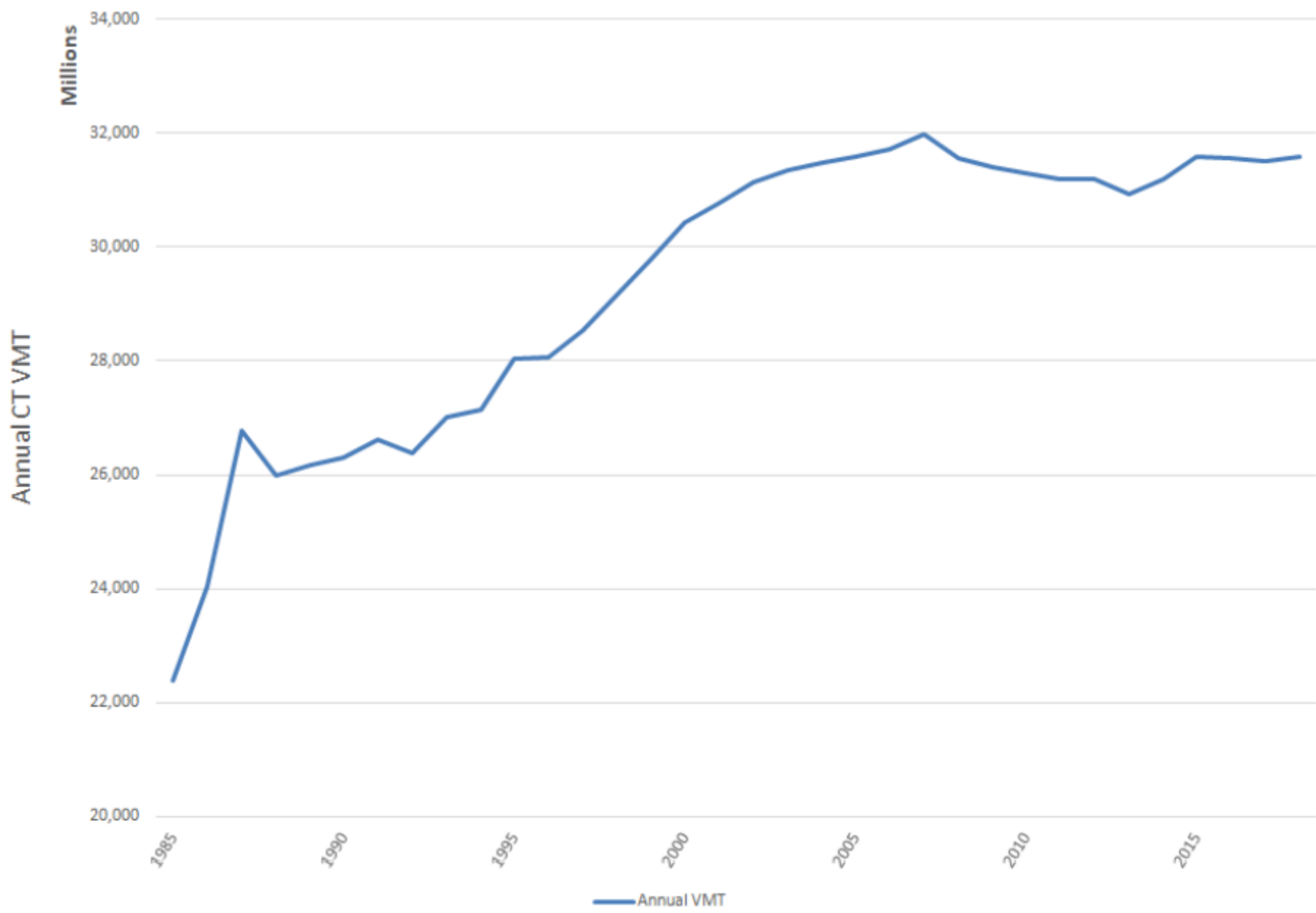# (2) Increase the Percentage of ZEVs: Equity Considerations

Establish statewide goals for zero-emission medium- and heavy-duty trucks and for school transportation

- **Existing target:** 30% of transit buses ZEV by 2030

New 2020 Recommendations

- New MOU on trucks (30% sales by 2030; 100% by 2050)
- ZEV school buses (50% by 2030)

Annual Vehicle Miles Traveled in CT 1985 - 2018

(3) Eliminate VMT Growth by 2030

Status / Progress

- Transit Oriented Development and Land Use Policy Reform
- Investments in frequent and convenient transit and commuter rail

New 2020 Recommendations

- Set a statewide goal to <u>REDUCE Vehicle Miles Traveled</u> at least 5% by 2030
- Transit Benefit, Parking Cash-Out and Telecommuting for State and Municipal Employees
- Expand [U-Pass](#) to private colleges and universities, and beyond that to employers and institutions
- COVID-19 recovery plans to revitalize transit and transit ridership

(4) Funding for Electrification, Transit, and Active Transportation Infrastructure

- Multi-state cap-and-invest program: **Transportation and Climate Initiative**

New 2020 Recommendation

- 100% of greenhouse gas reduction consumer fees should go to emissions reduction

- Remove the legislative prohibition on exploring a mileage-based user fee

Reduce the number of vehicles on the road

New 2020 Recommendation (with equity benefit)

- Explore car-share options for municipal and state fleets that are rentable evenings, weekends, and holidays by residents
- Expand ZEV rebate programs beyond resource intensive and expensive EV cars

Equity Impact – Four cities in Connecticut have a high percentage of zero-car households – Hartford, New Haven, Bridgeport, and Waterbury. Expanded car-share provides additional mobility options for those households, reducing the need for individual car ownership.

Reduce Emissions from Freight and Shipping

New 2020 Recommendations

- Previously mentioned medium and heavy-duty zero emission vehicle MOU

- Reduce shipping tonnage from the waste sector (increase local composting and reduce packaging waste)

- Seek opportunities to shift freight from trucks to rail and ports

Have more ideas and comments to share?

Email to:
deep.climatechange@ct.gov
(deadline is Oct 21st)

Join a bustling discussion page:
Transport Hartford – Talking Transportation