



# EARTH DAY: It's Time to Make Better Transportation Decisions

Earth Day is a time when we consider how decisions we make this year, and next, will impact the future happiness and health of the people we love, and all people on the planet. One crucial part of this is how we move ourselves and goods from place to place. **Earth Day is more than a time for reflection – it is a call to action.**

Transportation is currently the biggest cause of global warming and air pollution that damages our hearts and lungs, has contributed to increased flooding, wildfires, drought, and extreme heat across the country and planet, and promises much more severe impacts unless we act now. Each and all of us have the power to make a better future by coming together to insist that our local, state, and federal governments invest our tax dollars in different ways.

## There are two intertwined changes that we must demand:



1. We shift away from highway expansion and instead invest our tax dollars into healthy, sustainable, and economically prosperous choices in moving around: **buses, trains, bikes, walking, and rolling**



2. We rapidly transition away from gas and diesel-burning cars, buses, and trucks to **electric vehicles**

The **Union of Concerned Scientists** recently [ran some numbers](#) using a [digital calculator](#) created by the Rocky Mountain Institute. Their calculations show us what could be accomplished if states were to combine electrification levels brought on by the Inflation Reduction Act<sup>1</sup> with an ambitious reduction (20%) in vehicle travel:<sup>2</sup>

1. Electrification scenario based UCS' Net Zero scenarios in their [Accelerating Clean Energy Ambition report](#) that reach around 100% zero-emission vehicle adoption by 2050 in line with US commitments for net zero greenhouse gas emissions by 2050.
2. 20% reduction in total vehicle miles traveled (VMT) from 2021 levels by 2050 is in line with scenarios of the maximum achievable VMT reductions by the Institute for Transportation and Development Policy and Grubler et al., 2018, as well as existing trajectories for goals and plans by California, Washington, Maine, Delaware, Connecticut, Colorado, and many other states when projected using RMI's Smarter MODES calculator. This is equivalent to around a 31.5% per capita reduction by 2050. VMT: is a measure of total vehicular travel that accounts for the number of vehicle trips and the length of those trips



# EARTH DAY: It's Time to Make Better Transportation Decisions



**BETTER CLIMATE:** We could reduce dangerous air pollution by **3,165 million metric tons of global warming pollution over and above what we could by focusing only on electrification**, and we could also dramatically reduce the pollution resulting from increased demand for electric vehicle charging. RMI's calculator estimates put this at 5,433 terawatt hours of energy, an amount equal to over 103 years of NYC's energy use. These numbers demonstrated why we must demand that transportation planners invest in transportation choices that reduce car travel as well as 100% vehicle electrification.



**REDUCED LIVING EXPENSES:** Average families could save **\$3,024** a year in car expenses (fuel, repairs/maintenance, and depreciation), and if new train, bus, biking, and walking options gave families the freedom to forego a car, then they could save **\$12,000** a year on average!



**HEALTHIER FAMILIES:** Smarter decisions would also rescue lives. RMI's calculator estimates that if we made these changes by 2050 that the reduced traffic accidents, combined with healthier lifestyles and cleaner air, could save over **83,000** lives each year.

Combined, these changes will make our lives better in so many ways that it raises real questions about who we are up against and why we have not already made these changes! It is not a mystery; there are groups and wealthy individuals who oppose these changes because they profit more without them. Across the country, we are up against powerful interests. In some states, it's single-minded suppliers of road construction; in others, it's big developers who want to build far away from public transportation, and of course, it is the oil and gas behemoths who want to stop electrification. We need to make our voices louder and our numbers larger to push for change.

**This Earth Day, we come together to demand a better future from our elected representatives.**

**BENEFITS OF 20% TOTAL VMT REDUCTION ACROSS THE COUNTRY BY 2050  
(31.5% REDUCTION PER CAPITA) WITH 100% EV ADOPTION BY 2050\***

State	Cumulative Reduced GHG emissions through 2050 (Million Metric Tons)	Equivalent number of natural gas plants' annual emissions	Average Yearly Household Savings Through 2050	Average lives saved per year through 2050	Cumulative avoided electricity demand through 2050 (TWh)
Alabama	152	383	\$7,995	3,213	210
Alaska	8	19	\$3,859	165	11
Arizona	50	126	\$1,951	1,353	86
Arkansas	47	119	\$4,548	1,190	78
California	267	670	\$3,709	9,811	614
Colorado	20	50	\$1,111	632	45
Connecticut	24	60	\$2,426	580	41
Delaware	17	43	\$4,052	353	23
District of Columbia	1	4	\$578	42	3
Florida	209	524	\$2,192	4,801	311
Georgia	210	529	\$4,578	4,405	287
Hawaii	12	31	\$2,868	222	14
Idaho	19	48	\$2,704	507	33
Illinois	93	233	\$2,731	2,531	167
Indiana	153	385	\$5,574	3,199	211
Iowa	33	82	\$3,175	901	60
Kansas	35	88	\$4,077	977	64
Kentucky	56	141	\$2,986	1,114	72
Louisiana	66	166	\$4,457	1,615	105
Maine	11	29	\$3,023	346	24
Maryland	75	188	\$4,207	1,940	134
Massachusetts	32	81	\$1,793	969	69
Michigan	106	266	\$2,600	2,084	142
Minnesota	46	116	\$2,589	1,316	89
Mississippi	19	47	\$1,817	421	27
Missouri	106	267	\$5,299	2,840	187
Montana	18	44	\$4,351	460	31

\*Using RMI's Smarter MODES Calculator: <https://rmi.org/insight/smarter-modes-calculator-smarter-mobility-options-for-decarbonization-equity-and-safety/> Email: [kshen@ucsusa.org](mailto:kshen@ucsusa.org)



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**BENEFITS OF 20% TOTAL VMT REDUCTION ACROSS THE COUNTRY BY 2050  
(31.5% REDUCTION PER CAPITA) WITH 100% EV ADOPTION BY 2050\***

State	Cumulative Reduced GHG emissions through 2050 (Million Metric Tons)	Equivalent number of natural gas plants' annual emissions	Average Yearly Household Savings Through 2050	Average lives saved per year through 2050	Cumulative avoided electricity demand through 2050 (TWh)
Nebraska	19	48	\$2,925	523	34
Nevada	49	124	\$4,574	1,414	92
New Hampshire	17	43	\$3,470	397	26
New Jersey	81	205	\$3,003	1,952	137
New Mexico	25	62	\$5,192	815	52
New York	146	368	\$4,284	5,979	432
North Carolina	135	340	\$4,438	4,524	296
North Dakota	8	20	\$2,653	218	14
Ohio	174	437	\$3,568	3,614	238
Oklahoma	10	26	\$833	274	18
Oregon	24	59	\$2,137	873	57
Pennsylvania	54	136	\$1,036	1,070	70
Rhode Island	1	3	\$565	43	3
South Carolina	74	186	\$3,236	1,619	106
South Dakota	7	18	\$2,218	196	13
Tennessee	154	387	\$4,734	3,047	200
Texas	227	571	\$2,600	7,221	466
Utah	40	101	\$3,411	1,049	68
Vermont	4	11	\$2,669	136	9
Virginia	49	112	\$2,193	1,553	101
Washington	25	64	\$1,426	1,087	73
West Virginia	12	29	\$1,898	237	15
Wisconsin	112	282	\$5,313	2,642	177
Wyoming	8	19	\$4,686	200	13
<b>United States Total</b>	<b>3,165</b>	<b>7,953</b>	<b>\$3,024</b>	<b>83,804</b>	<b>5,433</b>

\*Using RMI's Smarter MODES Calculator: <https://rmi.org/insight/smarter-modes-calculator-smarter-mobility-options-for-decarbonization-equity-and-safety/> Email: [kshen@ucsusa.org](mailto:kshen@ucsusa.org)



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# EARTH DAY: It's Time to Make Better Transportation Decisions

**APPENDICES: CLICK TO LOCATE YOUR STATE'S CLIMATE IMPACT**

**ALL 50 STATES**

**ALABAMA**

**ALASKA**

**ARIZONA**

**ARKANSAS**

**CALIFORNIA**

**COLORADO**

**CONNECTICUT**

**WASHINGTON D.C.**

**DELEWARE**

**FLORIDA**

**GEORGIA**

**HAWAII**

**IDAHO**

**ILLINOIS**

**INDIANA**

**IOWA**

**KANSAS**

**KENTUCKY**

**LOUISIANA**

**MAINE**

**MARYLAND**

**MASSACHUSETTS**

**MICHIGAN**

**MINNESOTA**

**MISSISSIPPI**

**MISSOURI**

**MONTANA**

**NEBRASKA**

**NEVADA**

**NEW HAMPSHIRE**

**NEW JERSEY**

**NEW MEXICO**

**NEW YORK**

**NORTH CAROLINA**

**NORTH DAKOTA**

**OHIO**

**OKLAHOMA**

**OREGON**

**PENNSYLVANIA**

**RHODE ISLAND**

**SOUTH CAROLINA**

**SOUTH DAKOTA**

**TENNESSEE**

**TEXAS**

**UTAH**

**VERMONT**

**VIRGINIA**

**WASHINTON**

**WEST VIRGINIA**

**WISCONSIN**

**WYOMING**

**National Campaign  
Transit Justice**

A project of Alliance for a Just Society

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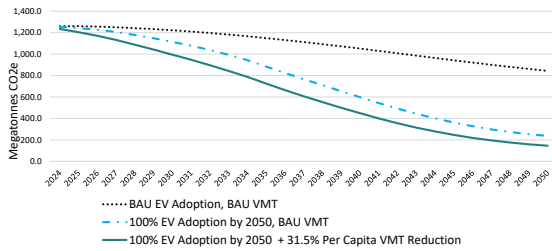
**Union of  
Concerned  
Scientists**

# Benefits of 31.5% Per Capita VMT reduction by 2050 in 50 State Combined, given 100% EV Adoption by 2050

## EXECUTIVE SUMMARY

### CLIMATE IMPACT

Transportation Emissions Reduction Pathways



By 2050, EV adoption + VMT Reduction would reduce GHG emissions by up to 3,165 megatonnes MORE than 100% EV Adoption by 2050 alone

That's the same as preventing the annual emissions of 7,953 natural gas-fired plants!

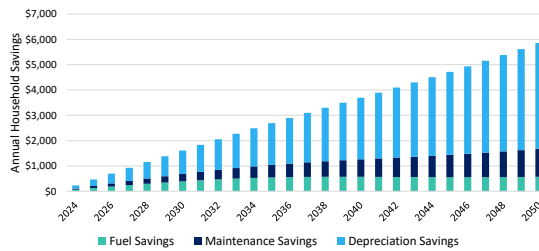
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### HOUSEHOLD SAVINGS

On average, 31.5% Per Capita VMT reduction would save each household \$3,024 a year from reduced automobile fuel, maintenance, and depreciation costs.

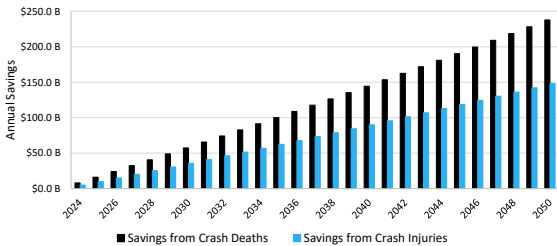
If expanded transportation options allow a family to downsize from two cars to one, household savings increase to \$12,000 a year per vehicle.

Annual Direct Household Savings from VMT Reduction



### ROAD SAFETY

Savings from Avoided Crash Injuries and Deaths



On average, 31.5% Per Capita VMT reduction would prevent 10,129 crash fatalities and 151,933 crash injuries per year.

By 2050, that adds up to \$5,237 billion in savings from avoided medical expenses, damages, and productivity losses.

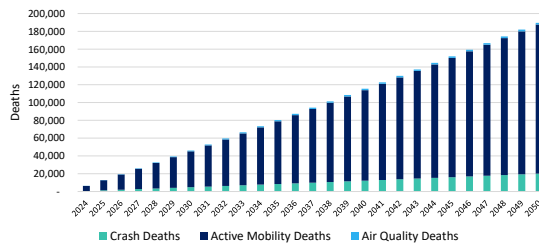
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### PUBLIC HEALTH

On average, 31.5% Per Capita VMT reduction would improve crash outcomes and alleviate mortality risks from air pollution and inactivity health outcomes, saving over 83,804 lives per year.

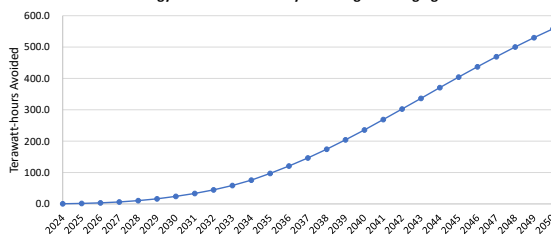
By 2050 and using the US DOT Statistical Value of Life, this would represent \$38,720 billion of avoided life loss.

Avoided Deaths from VMT Reduction



### ENERGY DEMAND

Energy Demand Avoided by Reducing EV Charging



By 2050, 31.5% Per Capita VMT reduction would lower energy demand by 5,433 TWh due to reduced electric vehicle charging. This would alleviate strain on the electrical grid to provide reliable service.

That's enough to completely meet New York City's current annual energy demand for 103.5 years!

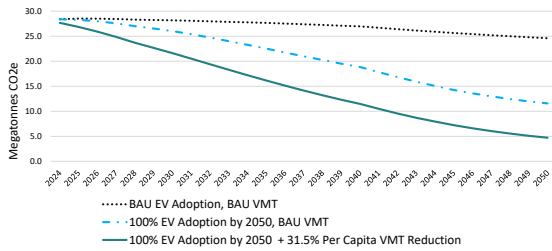
In the selected EV scenario, 100% EV Adoption by 2050, EVs will be 34% of vehicles by 2035 and will be 98% of vehicles by 2050, requiring new generation from the grid.

# Benefits of 31.5% Per Capita VMT reduction by 2050 in Alabama, given 100% EV Adoption by 2050

## EXECUTIVE SUMMARY

### CLIMATE IMPACT

Transportation Emissions Reduction Pathways



By 2050, EV adoption + VMT Reduction would reduce GHG emissions by up to 152 megatonnes MORE than 100% EV Adoption by 2050 alone

That's the same as preventing the annual emissions of 383 natural gas-fired plants!

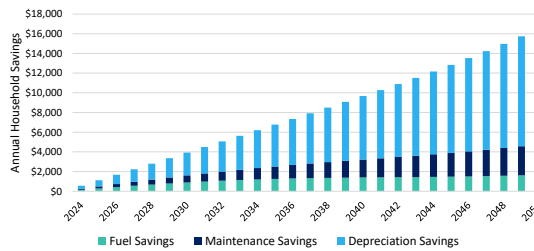
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### HOUSEHOLD SAVINGS

On average, 31.5% Per Capita VMT reduction would save each household \$7,995 a year from reduced automobile fuel, maintenance, and depreciation costs.

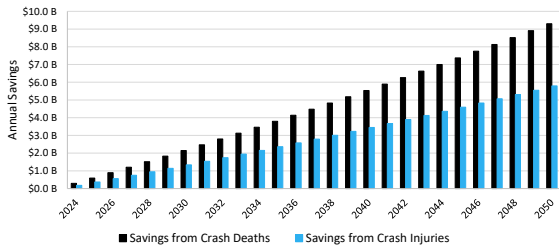
If expanded transportation options allow a family to downsize from two cars to one, household savings increase to \$12,000 a year per vehicle.

Annual Direct Household Savings from VMT Reduction



### ROAD SAFETY

Savings from Avoided Crash Injuries and Deaths



On average, 31.5% Per Capita VMT reduction would prevent 389 crash fatalities and 5,841 crash injuries per year.

By 2050, that adds up to \$201 billion in savings from avoided medical expenses, damages, and productivity losses.

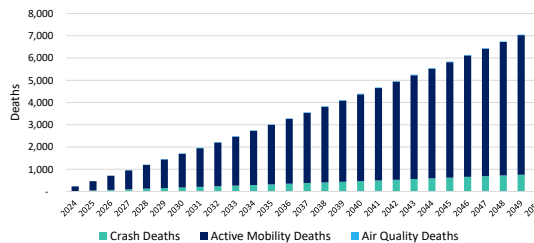
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### PUBLIC HEALTH

On average, 31.5% Per Capita VMT reduction would improve crash outcomes and alleviate mortality risks from air pollution and inactivity health outcomes, saving over 3,213 lives per year.

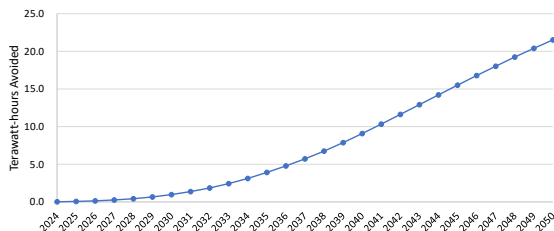
By 2050 and using the US DOT Statistical Value of Life, this would represent \$1,478 billion of avoided life loss.

Avoided Deaths from VMT Reduction



### ENERGY DEMAND

Energy Demand Avoided by Reducing EV Charging



By 2050, 31.5% Per Capita VMT reduction would lower energy demand by 210 TWh due to reduced electric vehicle charging. This would alleviate strain on the electrical grid to provide reliable service.

That's enough to completely meet New York City's current annual energy demand for 4 years!

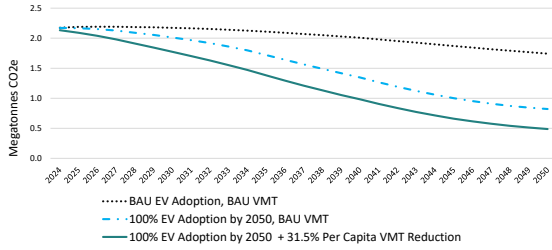
In the selected EV scenario, 100% EV Adoption by 2050, EVs will be 37% of vehicles by 2035 and will be 98% of vehicles by 2050, requiring new generation from the grid.

# Benefits of 31.5% Per Capita VMT reduction by 2050 in Alaska, given 100% EV Adoption by 2050

## EXECUTIVE SUMMARY

### CLIMATE IMPACT

Transportation Emissions Reduction Pathways



By 2050, EV adoption + VMT Reduction would reduce GHG emissions by up to 8 megatonnes MORE than 100% EV Adoption by 2050 alone

That's the same as preventing the annual emissions of 19 natural gas-fired plants!

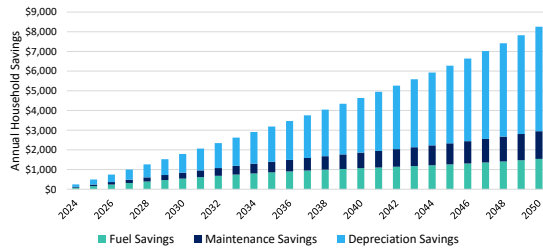
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### HOUSEHOLD SAVINGS

On average, 31.5% Per Capita VMT reduction would save each household \$3,859 a year from reduced automobile fuel, maintenance, and depreciation costs.

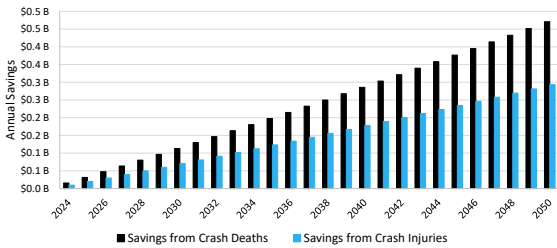
If expanded transportation options allow a family to downsize from two cars to one, household savings increase to \$12,000 a year per vehicle.

Annual Direct Household Savings from VMT Reduction



### ROAD SAFETY

Savings from Avoided Crash Injuries and Deaths



On average, 31.5% Per Capita VMT reduction would prevent 20 crash fatalities and 300 crash injuries per year.

By 2050, that adds up to \$10 billion in savings from avoided medical expenses, damages, and productivity losses.

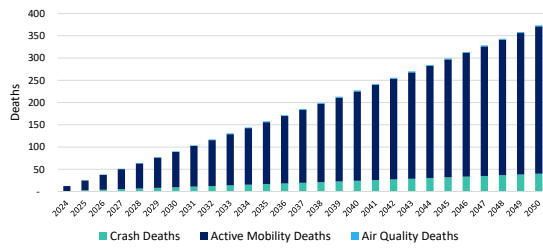
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### PUBLIC HEALTH

On average, 31.5% Per Capita VMT reduction would improve crash outcomes and alleviate mortality risks from air pollution and inactivity health outcomes, saving over 165 lives per year.

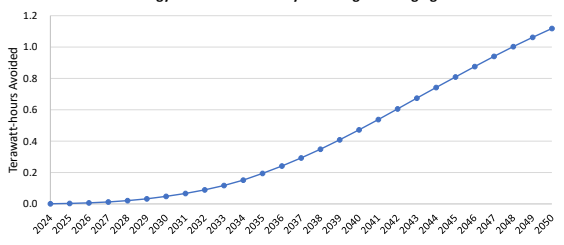
By 2050 and using the US DOT Statistical Value of Life, this would represent \$76 billion of avoided life loss.

Avoided Deaths from VMT Reduction



### ENERGY DEMAND

Energy Demand Avoided by Reducing EV Charging



By 2050, 31.5% Per Capita VMT reduction would lower energy demand by 11 TWh due to reduced electric vehicle charging. This would alleviate strain on the electrical grid to provide reliable service.

That's enough to completely meet New York City's current annual energy demand for 0.2 years!

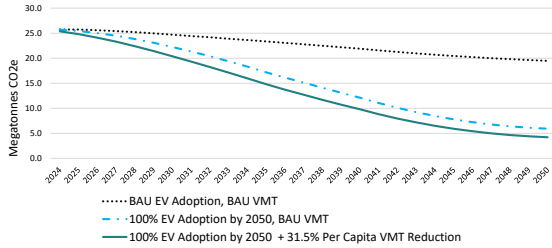
In the selected EV scenario, 100% EV Adoption by 2050, EVs will be 34% of vehicles by 2035 and will be 98% of vehicles by 2050, requiring new generation from the grid.

# Benefits of 31.5% Per Capita VMT reduction by 2050 in Arizona, given 100% EV Adoption by 2050

## EXECUTIVE SUMMARY

### CLIMATE IMPACT

Transportation Emissions Reduction Pathways



By 2050, EV adoption + VMT Reduction would reduce GHG emissions by up to 50 megatonnes MORE than 100% EV Adoption by 2050 alone

That's the same as preventing the annual emissions of 126 natural gas-fired plants!

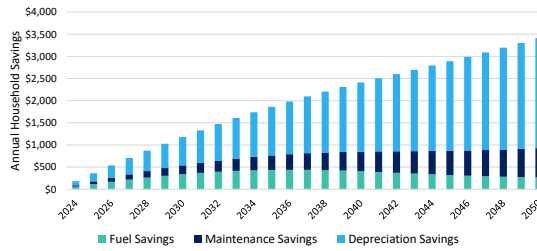
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### HOUSEHOLD SAVINGS

On average, 31.5% Per Capita VMT reduction would save each household \$1,951 a year from reduced automobile fuel, maintenance, and depreciation costs.

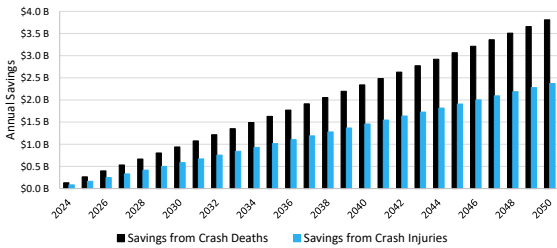
If expanded transportation options allow a family to downsize from two cars to one, household savings increase to \$12,000 a year per vehicle.

Annual Direct Household Savings from VMT Reduction



### ROAD SAFETY

Savings from Avoided Crash Injuries and Deaths



On average, 31.5% Per Capita VMT reduction would prevent 164 crash fatalities and 2,457 crash injuries per year.

By 2050, that adds up to \$85 billion in savings from avoided medical expenses, damages, and productivity losses.

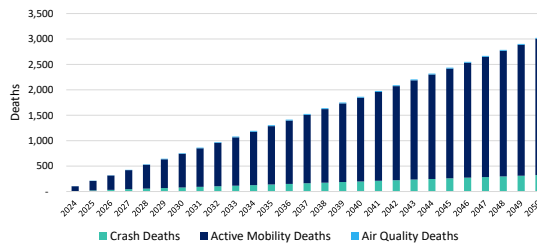
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### PUBLIC HEALTH

On average, 31.5% Per Capita VMT reduction would improve crash outcomes and alleviate mortality risks from air pollution and inactivity health outcomes, saving over 1,353 lives per year.

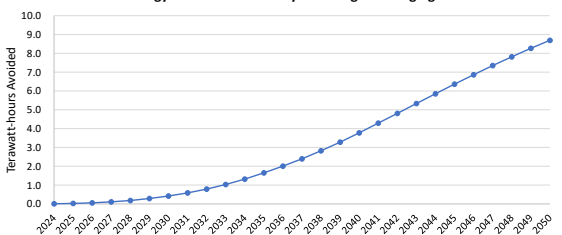
By 2050 and using the US DOT Statistical Value of Life, this would represent \$623 billion of avoided life loss.

Avoided Deaths from VMT Reduction



### ENERGY DEMAND

Energy Demand Avoided by Reducing EV Charging



By 2050, 31.5% Per Capita VMT reduction would lower energy demand by 86 TWh due to reduced electric vehicle charging. This would alleviate strain on the electrical grid to provide reliable service.

That's enough to completely meet New York City's current annual energy demand for 1.6 years!

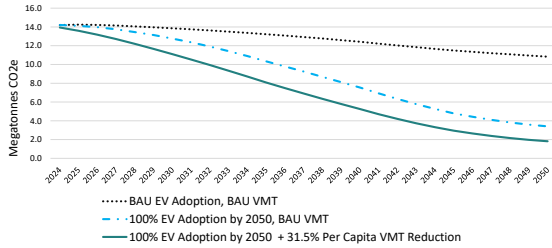
In the selected EV scenario, 100% EV Adoption by 2050, EVs will be 37% of vehicles by 2035 and will be 98% of vehicles by 2050, requiring new generation from the grid.

# Benefits of 31.5% Per Capita VMT reduction by 2050 in Arkansas, given 100% EV Adoption by 2050

## EXECUTIVE SUMMARY

### CLIMATE IMPACT

Transportation Emissions Reduction Pathways



By 2050, EV adoption + VMT Reduction would reduce GHG emissions by up to 47 megatonnes MORE than 100% EV Adoption by 2050 alone

That's the same as preventing the annual emissions of 119 natural gas-fired plants!

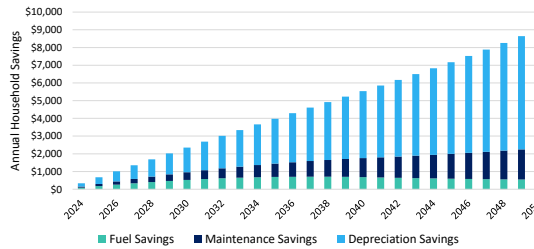
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### HOUSEHOLD SAVINGS

On average, 31.5% Per Capita VMT reduction would save each household \$4,548 a year from reduced automobile fuel, maintenance, and depreciation costs.

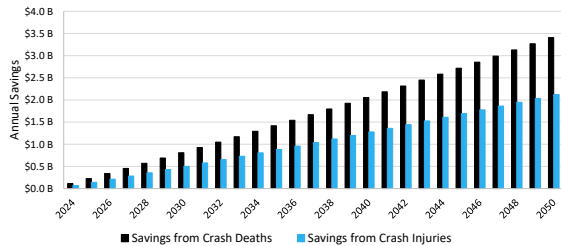
If expanded transportation options allow a family to downsize from two cars to one, household savings increase to \$12,000 a year per vehicle.

Annual Direct Household Savings from VMT Reduction



### ROAD SAFETY

Savings from Avoided Crash Injuries and Deaths



On average, 31.5% Per Capita VMT reduction would prevent 144 crash fatalities and 2,163 crash injuries per year.

By 2050, that adds up to \$75 billion in savings from avoided medical expenses, damages, and productivity losses.

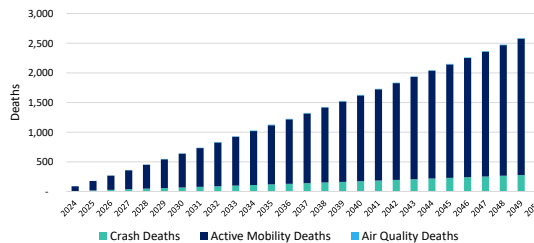
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### PUBLIC HEALTH

On average, 31.5% Per Capita VMT reduction would improve crash outcomes and alleviate mortality risks from air pollution and inactivity health outcomes, saving over 1,190 lives per year.

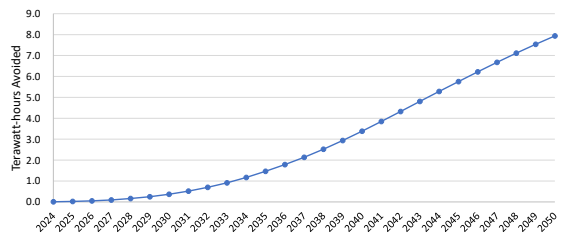
By 2050 and using the US DOT Statistical Value of Life, this would represent \$547 billion of avoided life loss.

Avoided Deaths from VMT Reduction



### ENERGY DEMAND

Energy Demand Avoided by Reducing EV Charging



By 2050, 31.5% Per Capita VMT reduction would lower energy demand by 78 TWh due to reduced electric vehicle charging. This would alleviate strain on the electrical grid to provide reliable service.

That's enough to completely meet New York City's current annual energy demand for 1.5 years!

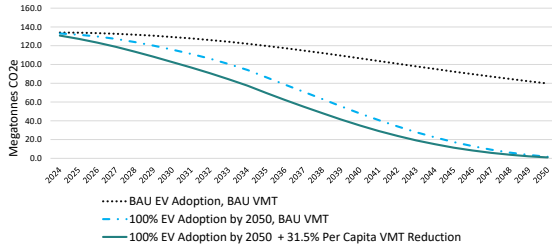
In the selected EV scenario, 100% EV Adoption by 2050, EVs will be 37% of vehicles by 2035 and will be 98% of vehicles by 2050, requiring new generation from the grid.

# Benefits of 31.5% Per Capita VMT reduction by 2050 in California, given 100% EV Adoption by 2050

## EXECUTIVE SUMMARY

### CLIMATE IMPACT

Transportation Emissions Reduction Pathways



By 2050, EV adoption + VMT Reduction would reduce GHG emissions by up to 267 megatonnes MORE than 100% EV Adoption by 2050 alone

That's the same as preventing the annual emissions of 670 natural gas-fired plants!

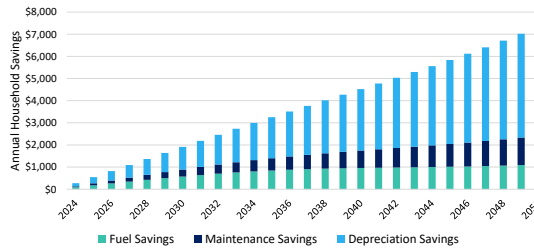
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### HOUSEHOLD SAVINGS

On average, 31.5% Per Capita VMT reduction would save each household \$3,709 a year from reduced automobile fuel, maintenance, and depreciation costs.

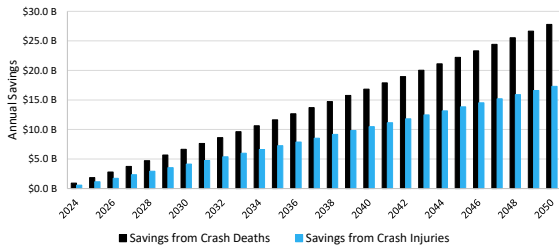
If expanded transportation options allow a family to downsize from two cars to one, household savings increase to \$12,000 a year per vehicle.

Annual Direct Household Savings from VMT Reduction



### ROAD SAFETY

Savings from Avoided Crash Injuries and Deaths



On average, 31.5% Per Capita VMT reduction would prevent 1,181 crash fatalities and 17,711 crash injuries per year.

By 2050, that adds up to \$611 billion in savings from avoided medical expenses, damages, and productivity losses.

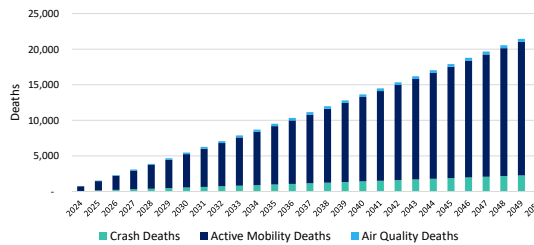
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### PUBLIC HEALTH

On average, 31.5% Per Capita VMT reduction would improve crash outcomes and alleviate mortality risks from air pollution and inactivity health outcomes, saving over 9,811 lives per year.

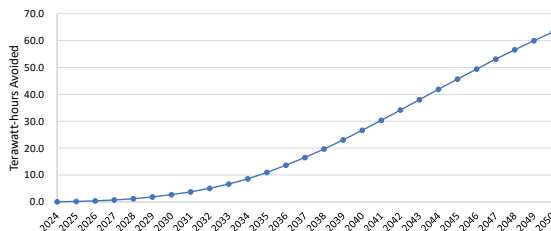
By 2050 and using the US DOT Statistical Value of Life, this would represent \$4,569 billion of avoided life loss.

Avoided Deaths from VMT Reduction



### ENERGY DEMAND

Energy Demand Avoided by Reducing EV Charging



By 2050, 31.5% Per Capita VMT reduction would lower energy demand by 614 TWh due to reduced electric vehicle charging. This would alleviate strain on the electrical grid to provide reliable service.

That's enough to completely meet New York City's current annual energy demand for 11.7 years!

In the selected EV scenario, 100% EV Adoption by 2050, EVs will be 34% of vehicles by 2035 and will be 98% of vehicles by 2050, requiring new generation from the grid.

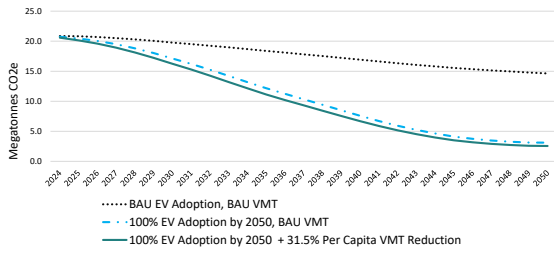


# Benefits of 31.5% Per Capita VMT reduction by 2050 in Colorado, given 100% EV Adoption by 2050

## EXECUTIVE SUMMARY

### CLIMATE IMPACT

Transportation Emissions Reduction Pathways



By 2050, EV adoption + VMT Reduction would reduce GHG emissions by up to 20 megatonnes MORE than 100% EV Adoption by 2050 alone

That's the same as preventing the annual emissions of 50 natural gas-fired plants!

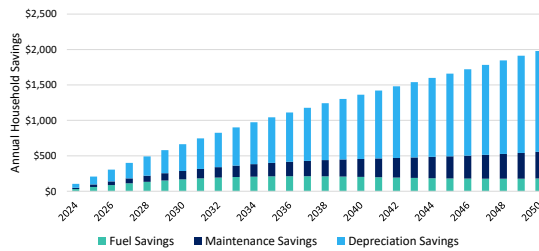
Scroll down →

### HOUSEHOLD SAVINGS

On average, 31.5% Per Capita VMT reduction would save each household \$1,111 a year from reduced automobile fuel, maintenance, and depreciation costs.

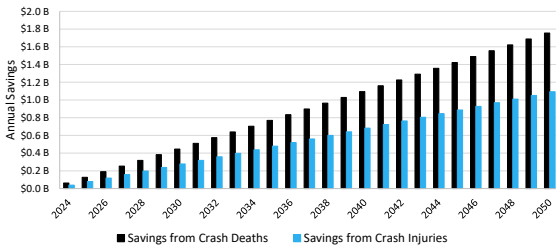
If expanded transportation options allow a family to downsize from two cars to one, household savings increase to \$12,000 a year per vehicle.

Annual Direct Household Savings from VMT Reduction



### ROAD SAFETY

Savings from Avoided Crash Injuries and Deaths



On average, 31.5% Per Capita VMT reduction would prevent 76 crash fatalities and 1,147 crash injuries per year.

By 2050, that adds up to \$40 billion in savings from avoided medical expenses, damages, and productivity losses.

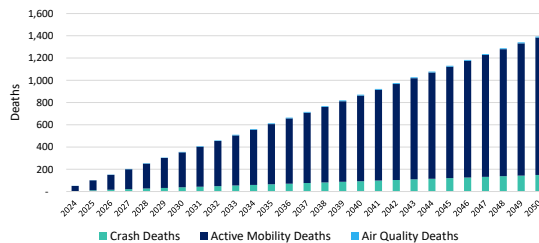
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### PUBLIC HEALTH

On average, 31.5% Per Capita VMT reduction would improve crash outcomes and alleviate mortality risks from air pollution and inactivity health outcomes, saving over 632 lives per year.

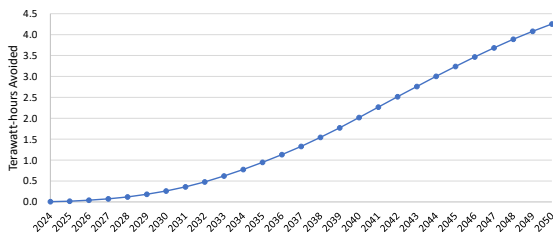
By 2050 and using the US DOT Statistical Value of Life, this would represent \$291 billion of avoided life loss.

Avoided Deaths from VMT Reduction



### ENERGY DEMAND

Energy Demand Avoided by Reducing EV Charging



By 2050, 31.5% Per Capita VMT reduction would lower energy demand by 45 TWh due to reduced electric vehicle charging. This would alleviate strain on the electrical grid to provide reliable service.

That's enough to completely meet New York City's current annual energy demand for 0.9 years!

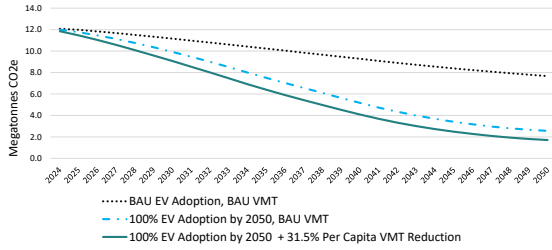
In the selected EV scenario, 100% EV Adoption by 2050, EVs will be 44% of vehicles by 2035 and will be 99% of vehicles by 2050, requiring new generation from the grid.

# Benefits of 31.5% Per Capita VMT reduction by 2050 in Connecticut, given 100% EV Adoption by 2050

## EXECUTIVE SUMMARY

### CLIMATE IMPACT

Transportation Emissions Reduction Pathways



By 2050, EV adoption + VMT Reduction would reduce GHG emissions by up to 24 megatonnes MORE than 100% EV Adoption by 2050 alone

That's the same as preventing the annual emissions of 60 natural gas-fired plants!

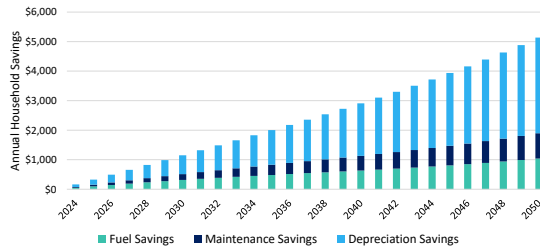
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### HOUSEHOLD SAVINGS

On average, 31.5% Per Capita VMT reduction would save each household \$2,426 a year from reduced automobile fuel, maintenance, and depreciation costs.

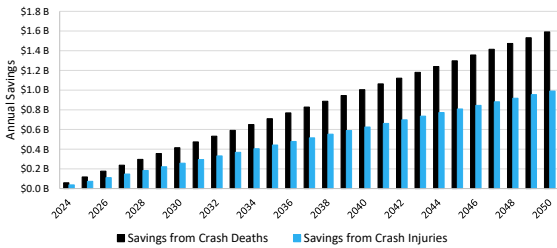
If expanded transportation options allow a family to downsize from two cars to one, household savings increase to \$12,000 a year per vehicle.

Annual Direct Household Savings from VMT Reduction



### ROAD SAFETY

Savings from Avoided Crash Injuries and Deaths



On average, 31.5% Per Capita VMT reduction would prevent 70 crash fatalities and 1,051 crash injuries per year.

By 2050, that adds up to \$36 billion in savings from avoided medical expenses, damages, and productivity losses.

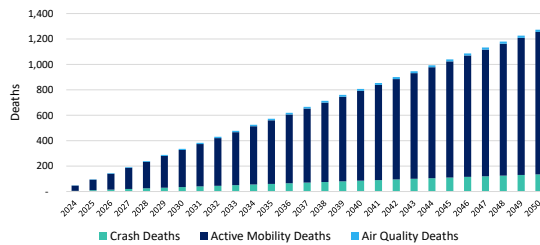
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### PUBLIC HEALTH

On average, 31.5% Per Capita VMT reduction would improve crash outcomes and alleviate mortality risks from air pollution and inactivity health outcomes, saving over 580 lives per year.

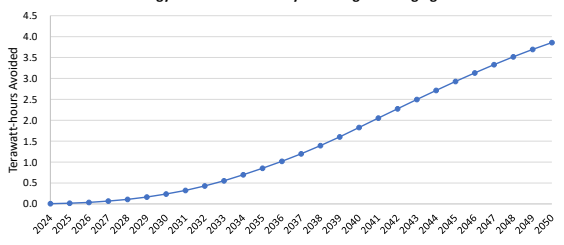
By 2050 and using the US DOT Statistical Value of Life, this would represent \$269 billion of avoided life loss.

Avoided Deaths from VMT Reduction



### ENERGY DEMAND

Energy Demand Avoided by Reducing EV Charging



By 2050, 31.5% Per Capita VMT reduction would lower energy demand by 41 TWh due to reduced electric vehicle charging. This would alleviate strain on the electrical grid to provide reliable service.

That's enough to completely meet New York City's current annual energy demand for 0.8 years!

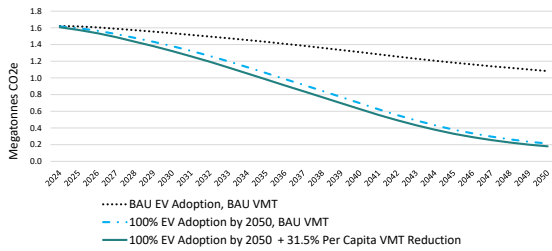
In the selected EV scenario, 100% EV Adoption by 2050, EVs will be 43% of vehicles by 2035 and will be 99% of vehicles by 2050, requiring new generation from the grid.

# Benefits of 31.5% Per Capita VMT reduction by 2050 in DC, given 100% EV Adoption by 2050

## EXECUTIVE SUMMARY

### CLIMATE IMPACT

Transportation Emissions Reduction Pathways



By 2050, EV adoption + VMT Reduction would reduce GHG emissions by up to 1 megatonnes MORE than 100% EV Adoption by 2050 alone

That's the same as preventing the annual emissions of 4 natural gas-fired plants!

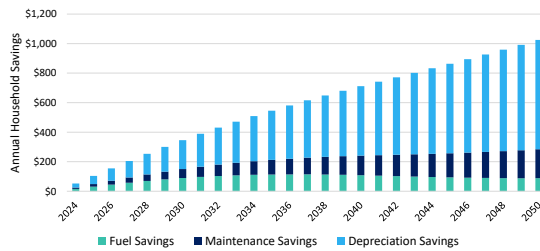
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### HOUSEHOLD SAVINGS

On average, 31.5% Per Capita VMT reduction would save each household \$578 a year from reduced automobile fuel, maintenance, and depreciation costs.

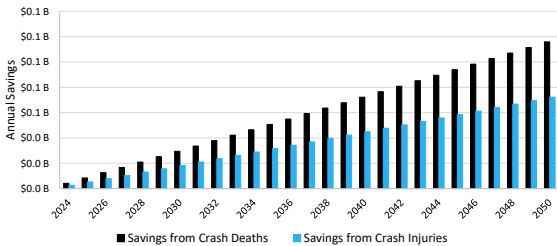
If expanded transportation options allow a family to downsize from two cars to one, household savings increase to \$12,000 a year per vehicle.

Annual Direct Household Savings from VMT Reduction



### ROAD SAFETY

Savings from Avoided Crash Injuries and Deaths



On average, 31.5% Per Capita VMT reduction would prevent 5 crash fatalities and 76 crash injuries per year.

By 2050, that adds up to \$3 billion in savings from avoided medical expenses, damages, and productivity losses.

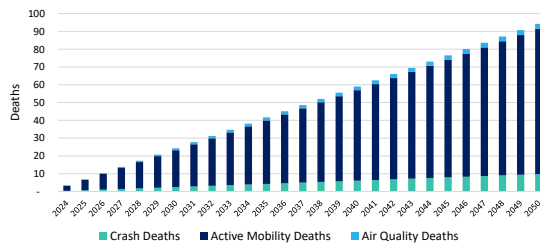
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### PUBLIC HEALTH

On average, 31.5% Per Capita VMT reduction would improve crash outcomes and alleviate mortality risks from air pollution and inactivity health outcomes, saving over 42 lives per year.

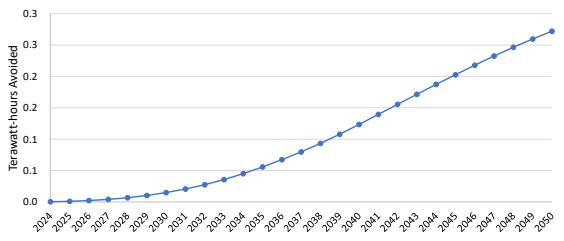
By 2050 and using the US DOT Statistical Value of Life, this would represent \$20 billion of avoided life loss.

Avoided Deaths from VMT Reduction



### ENERGY DEMAND

Energy Demand Avoided by Reducing EV Charging



By 2050, 31.5% Per Capita VMT reduction would lower energy demand by 3 TWh due to reduced electric vehicle charging. This would alleviate strain on the electrical grid to provide reliable service.

That's enough to completely meet New York City's current annual energy demand for 0.1 years!

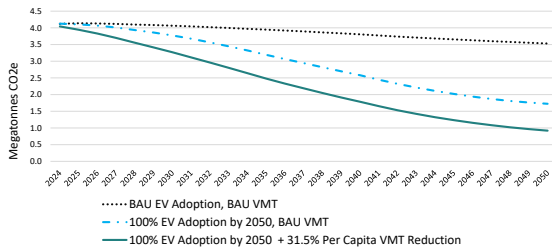
In the selected EV scenario, 100% EV Adoption by 2050, EVs will be 40% of vehicles by 2035 and will be 98% of vehicles by 2050, requiring new generation from the grid.

# Benefits of 31.5% Per Capita VMT reduction by 2050 in Delaware, given 100% EV Adoption by 2050

## EXECUTIVE SUMMARY

### CLIMATE IMPACT

Transportation Emissions Reduction Pathways



By 2050, EV adoption + VMT Reduction would reduce GHG emissions by up to 17 megatonnes MORE than 100% EV Adoption by 2050 alone

That's the same as preventing the annual emissions of 43 natural gas-fired plants!

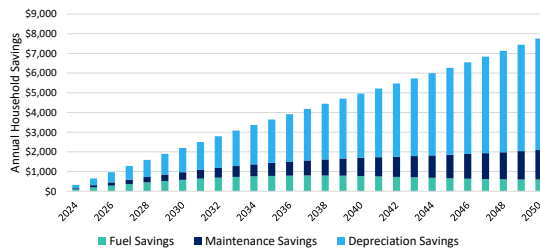
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### HOUSEHOLD SAVINGS

On average, 31.5% Per Capita VMT reduction would save each household \$4,052 a year from reduced automobile fuel, maintenance, and depreciation costs.

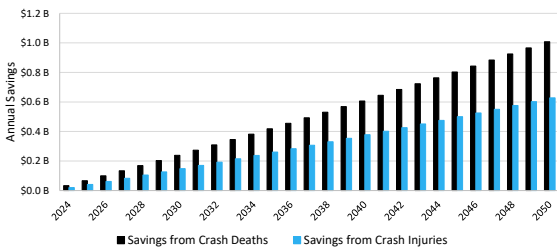
If expanded transportation options allow a family to downsize from two cars to one, household savings increase to \$12,000 a year per vehicle.

Annual Direct Household Savings from VMT Reduction



### ROAD SAFETY

Savings from Avoided Crash Injuries and Deaths



On average, 31.5% Per Capita VMT reduction would prevent 43 crash fatalities and 639 crash injuries per year.

By 2050, that adds up to \$22 billion in savings from avoided medical expenses, damages, and productivity losses.

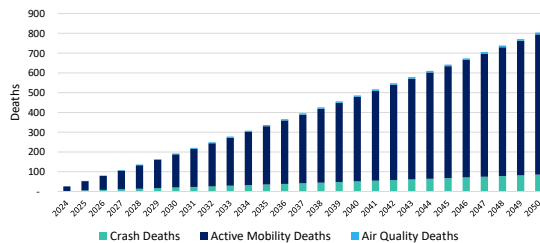
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### PUBLIC HEALTH

On average, 31.5% Per Capita VMT reduction would improve crash outcomes and alleviate mortality risks from air pollution and inactivity health outcomes, saving over 353 lives per year.

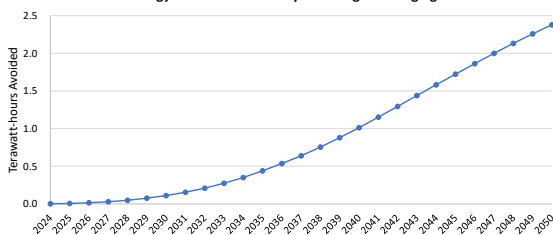
By 2050 and using the US DOT Statistical Value of Life, this would represent \$163 billion of avoided life loss.

Avoided Deaths from VMT Reduction



### ENERGY DEMAND

Energy Demand Avoided by Reducing EV Charging



By 2050, 31.5% Per Capita VMT reduction would lower energy demand by 23 TWh due to reduced electric vehicle charging. This would alleviate strain on the electrical grid to provide reliable service.

That's enough to completely meet New York City's current annual energy demand for 0.4 years!

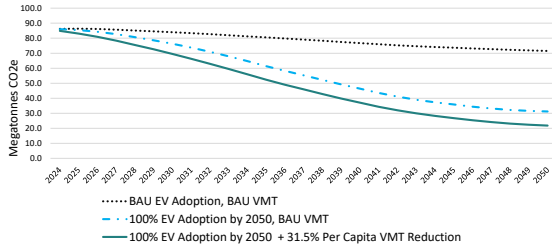
In the selected EV scenario, 100% EV Adoption by 2050, EVs will be 37% of vehicles by 2035 and will be 98% of vehicles by 2050, requiring new generation from the grid.

# Benefits of 31.5% Per Capita VMT reduction by 2050 in Florida, given 100% EV Adoption by 2050

## EXECUTIVE SUMMARY

### CLIMATE IMPACT

Transportation Emissions Reduction Pathways



By 2050, EV adoption + VMT Reduction would reduce GHG emissions by up to 209 megatonnes MORE than 100% EV Adoption by 2050 alone

That's the same as preventing the annual emissions of 524 natural gas-fired plants!

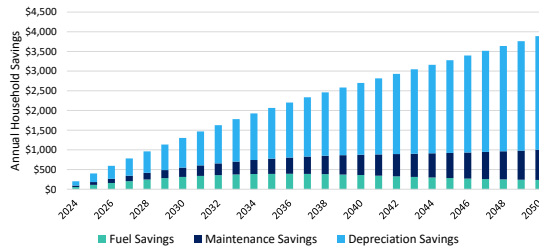
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### HOUSEHOLD SAVINGS

On average, 31.5% Per Capita VMT reduction would save each household \$2,192 a year from reduced automobile fuel, maintenance, and depreciation costs.

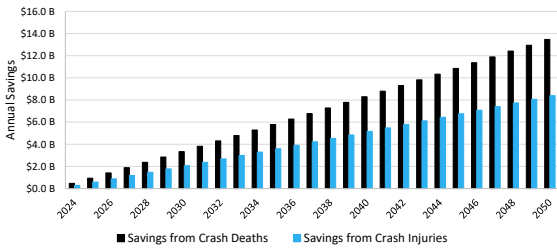
If expanded transportation options allow a family to downsize from two cars to one, household savings increase to \$12,000 a year per vehicle.

Annual Direct Household Savings from VMT Reduction



### ROAD SAFETY

Savings from Avoided Crash Injuries and Deaths



On average, 31.5% Per Capita VMT reduction would prevent 580 crash fatalities and 8,701 crash injuries per year.

By 2050, that adds up to \$300 billion in savings from avoided medical expenses, damages, and productivity losses.

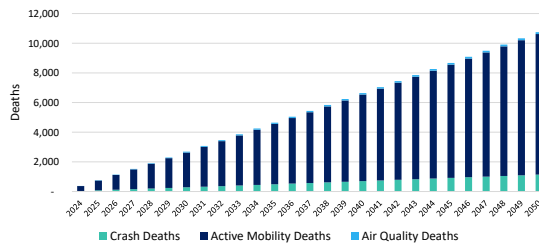
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### PUBLIC HEALTH

On average, 31.5% Per Capita VMT reduction would improve crash outcomes and alleviate mortality risks from air pollution and inactivity health outcomes, saving over 4,801 lives per year.

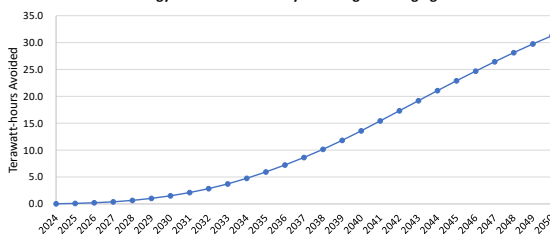
By 2050 and using the US DOT Statistical Value of Life, this would represent \$2,219 billion of avoided life loss.

Avoided Deaths from VMT Reduction



### ENERGY DEMAND

Energy Demand Avoided by Reducing EV Charging



By 2050, 31.5% Per Capita VMT reduction would lower energy demand by 311 TWh due to reduced electric vehicle charging. This would alleviate strain on the electrical grid to provide reliable service.

That's enough to completely meet New York City's current annual energy demand for 5.9 years!

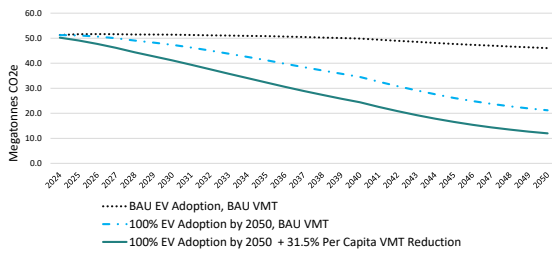
In the selected EV scenario, 100% EV Adoption by 2050, EVs will be 37% of vehicles by 2035 and will be 98% of vehicles by 2050, requiring new generation from the grid.

# Benefits of 31.5% Per Capita VMT reduction by 2050 in Georgia, given 100% EV Adoption by 2050

## EXECUTIVE SUMMARY

### CLIMATE IMPACT

Transportation Emissions Reduction Pathways



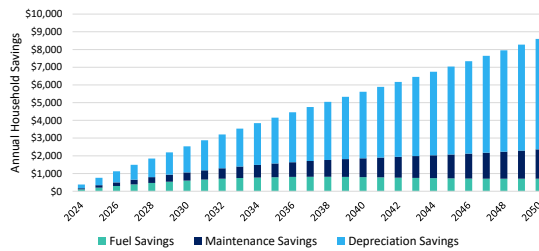
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### HOUSEHOLD SAVINGS

On average, 31.5% Per Capita VMT reduction would save each household \$4,578 a year from reduced automobile fuel, maintenance, and depreciation costs.

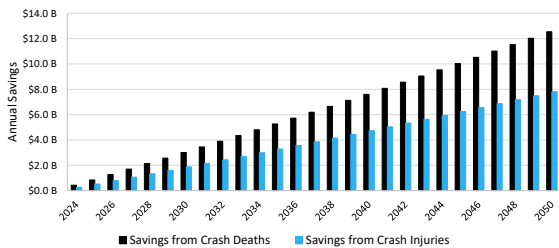
If expanded transportation options allow a family to downsize from two cars to one, household savings increase to \$12,000 a year per vehicle.

Annual Direct Household Savings from VMT Reduction



### ROAD SAFETY

Savings from Avoided Crash Injuries and Deaths



On average, 31.5% Per Capita VMT reduction would prevent 533 crash fatalities and 7,999 crash injuries per year.

By 2050, that adds up to \$276 billion in savings from avoided medical expenses, damages, and productivity losses.

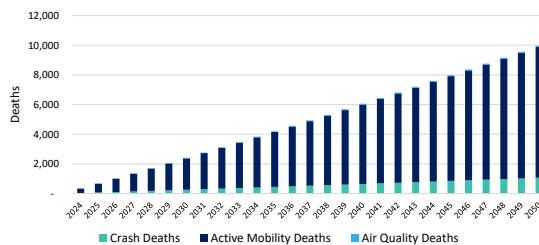
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### PUBLIC HEALTH

On average, 31.5% Per Capita VMT reduction would improve crash outcomes and alleviate mortality risks from air pollution and inactivity health outcomes, saving over 4,405 lives per year.

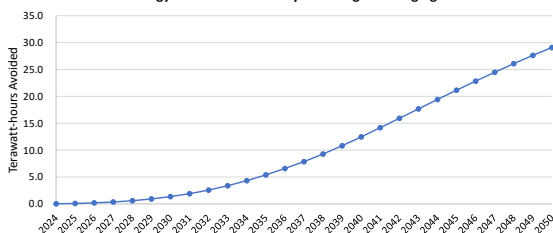
By 2050 and using the US DOT Statistical Value of Life, this would represent \$2,030 billion of avoided life loss.

Avoided Deaths from VMT Reduction



### ENERGY DEMAND

Energy Demand Avoided by Reducing EV Charging



By 2050, 31.5% Per Capita VMT reduction would lower energy demand by 287 TWh due to reduced electric vehicle charging. This would alleviate strain on the electrical grid to provide reliable service.

That's enough to completely meet New York City's current annual energy demand for 5.5 years!

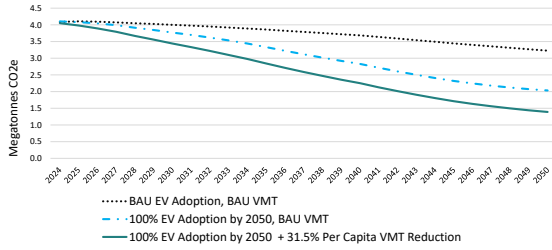
In the selected EV scenario, 100% EV Adoption by 2050, EVs will be 37% of vehicles by 2035 and will be 98% of vehicles by 2050, requiring new generation from the grid.

# Benefits of 31.5% Per Capita VMT reduction by 2050 in Hawaii, given 100% EV Adoption by 2050

## EXECUTIVE SUMMARY

### CLIMATE IMPACT

Transportation Emissions Reduction Pathways



By 2050, EV adoption + VMT Reduction would reduce GHG emissions by up to 12 megatonnes MORE than 100% EV Adoption by 2050 alone

That's the same as preventing the annual emissions of 31 natural gas-fired plants!

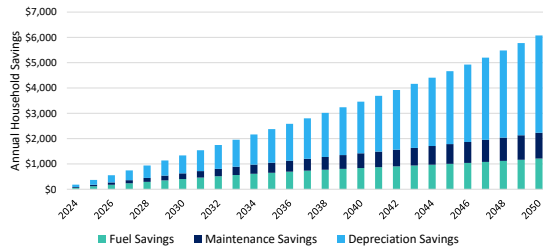
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### HOUSEHOLD SAVINGS

On average, 31.5% Per Capita VMT reduction would save each household \$2,868 a year from reduced automobile fuel, maintenance, and depreciation costs.

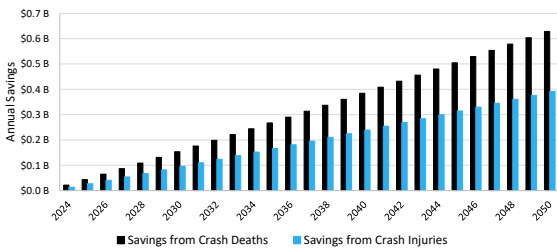
If expanded transportation options allow a family to downsize from two cars to one, household savings increase to \$12,000 a year per vehicle.

Annual Direct Household Savings from VMT Reduction



### ROAD SAFETY

Savings from Avoided Crash Injuries and Deaths



On average, 31.5% Per Capita VMT reduction would prevent 27 crash fatalities and 404 crash injuries per year.

By 2050, that adds up to \$14 billion in savings from avoided medical expenses, damages, and productivity losses.

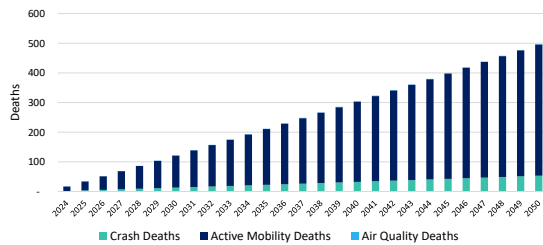
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### PUBLIC HEALTH

On average, 31.5% Per Capita VMT reduction would improve crash outcomes and alleviate mortality risks from air pollution and inactivity health outcomes, saving over 222 lives per year.

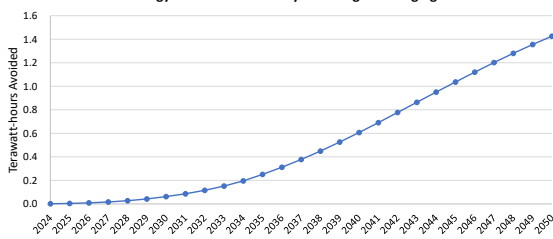
By 2050 and using the US DOT Statistical Value of Life, this would represent \$102 billion of avoided life loss.

Avoided Deaths from VMT Reduction



### ENERGY DEMAND

Energy Demand Avoided by Reducing EV Charging



By 2050, 31.5% Per Capita VMT reduction would lower energy demand by 14 TWh due to reduced electric vehicle charging. This would alleviate strain on the electrical grid to provide reliable service.

That's enough to completely meet New York City's current annual energy demand for 0.3 years!

In the selected EV scenario, 100% EV Adoption by 2050, EVs will be 34% of vehicles by 2035 and will be 98% of vehicles by 2050, requiring new generation from the grid.

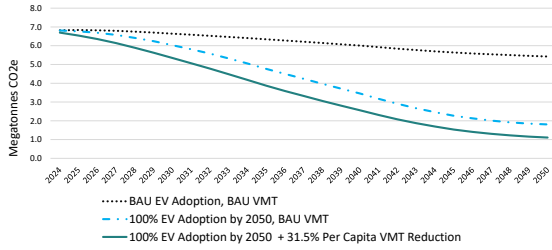


# Benefits of 31.5% Per Capita VMT reduction by 2050 in Idaho, given 100% EV Adoption by 2050

## EXECUTIVE SUMMARY

### CLIMATE IMPACT

Transportation Emissions Reduction Pathways



By 2050, EV adoption + VMT Reduction would reduce GHG emissions by up to 19 megatonnes MORE than 100% EV Adoption by 2050 alone

That's the same as preventing the annual emissions of 48 natural gas-fired plants!

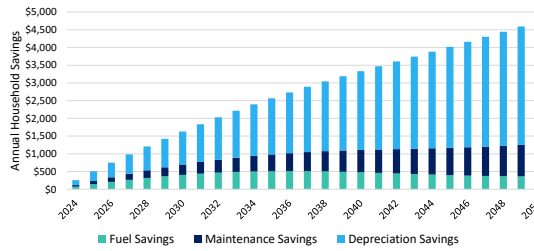
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### HOUSEHOLD SAVINGS

On average, 31.5% Per Capita VMT reduction would save each household \$2,704 a year from reduced automobile fuel, maintenance, and depreciation costs.

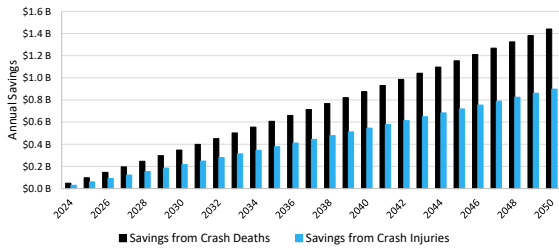
If expanded transportation options allow a family to downsize from two cars to one, household savings increase to \$12,000 a year per vehicle.

Annual Direct Household Savings from VMT Reduction



### ROAD SAFETY

Savings from Avoided Crash Injuries and Deaths



On average, 31.5% Per Capita VMT reduction would prevent 61 crash fatalities and 921 crash injuries per year.

By 2050, that adds up to \$32 billion in savings from avoided medical expenses, damages, and productivity losses.

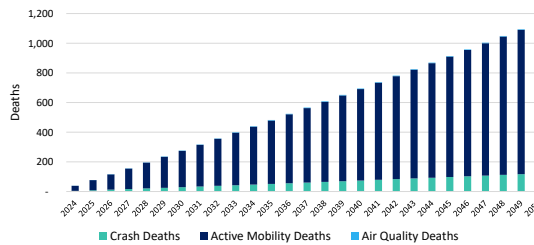
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### PUBLIC HEALTH

On average, 31.5% Per Capita VMT reduction would improve crash outcomes and alleviate mortality risks from air pollution and inactivity health outcomes, saving over 507 lives per year.

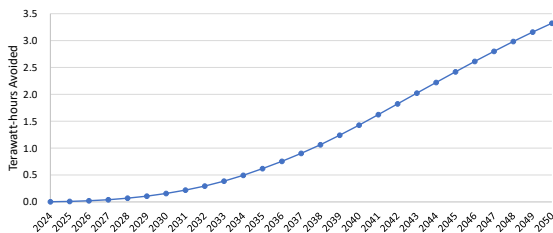
By 2050 and using the US DOT Statistical Value of Life, this would represent \$233 billion of avoided life loss.

Avoided Deaths from VMT Reduction



### ENERGY DEMAND

Energy Demand Avoided by Reducing EV Charging



By 2050, 31.5% Per Capita VMT reduction would lower energy demand by 33 TWh due to reduced electric vehicle charging. This would alleviate strain on the electrical grid to provide reliable service.

That's enough to completely meet New York City's current annual energy demand for 0.6 years!

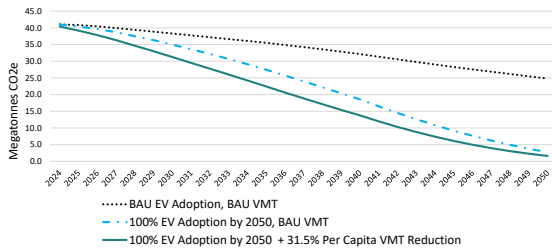
In the selected EV scenario, 100% EV Adoption by 2050, EVs will be 37% of vehicles by 2035 and will be 98% of vehicles by 2050, requiring new generation from the grid.

# Benefits of 31.5% Per Capita VMT reduction by 2050 in Illinois, given 100% EV Adoption by 2050

## EXECUTIVE SUMMARY

### CLIMATE IMPACT

Transportation Emissions Reduction Pathways



By 2050, EV adoption + VMT Reduction would reduce GHG emissions by up to 93 megatonnes MORE than 100% EV Adoption by 2050 alone

That's the same as preventing the annual emissions of 233 natural gas-fired plants!

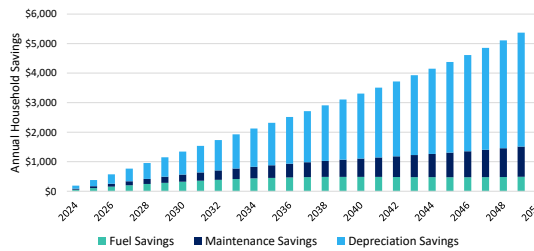
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### HOUSEHOLD SAVINGS

On average, 31.5% Per Capita VMT reduction would save each household \$2,731 a year from reduced automobile fuel, maintenance, and depreciation costs.

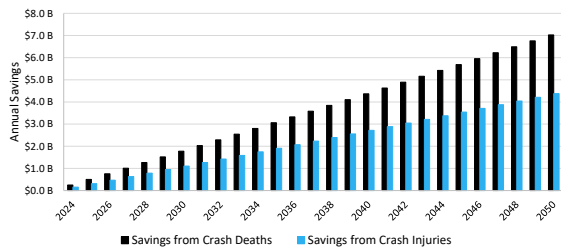
If expanded transportation options allow a family to downsize from two cars to one, household savings increase to \$12,000 a year per vehicle.

Annual Direct Household Savings from VMT Reduction



### ROAD SAFETY

Savings from Avoided Crash Injuries and Deaths



On average, 31.5% Per Capita VMT reduction would prevent 305 crash fatalities and 4,581 crash injuries per year.

By 2050, that adds up to \$158 billion in savings from avoided medical expenses, damages, and productivity losses.

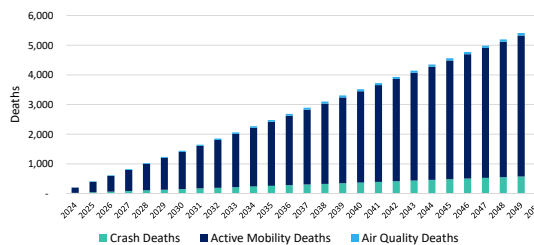
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### PUBLIC HEALTH

On average, 31.5% Per Capita VMT reduction would improve crash outcomes and alleviate mortality risks from air pollution and inactivity health outcomes, saving over 2,531 lives per year.

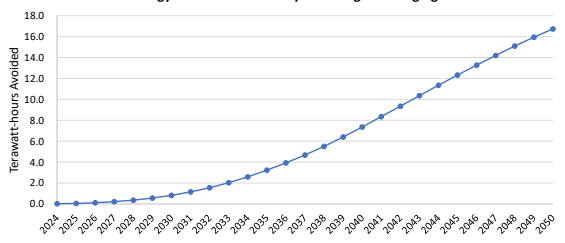
By 2050 and using the US DOT Statistical Value of Life, this would represent \$1,172 billion of avoided life loss.

Avoided Deaths from VMT Reduction



### ENERGY DEMAND

Energy Demand Avoided by Reducing EV Charging



By 2050, 31.5% Per Capita VMT reduction would lower energy demand by 167 TWh due to reduced electric vehicle charging. This would alleviate strain on the electrical grid to provide reliable service.

That's enough to completely meet New York City's current annual energy demand for 3.2 years!

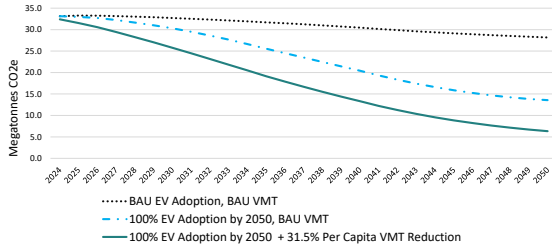
In the selected EV scenario, 100% EV Adoption by 2050, EVs will be 37% of vehicles by 2035 and will be 98% of vehicles by 2050, requiring new generation from the grid.

# Benefits of 31.5% Per Capita VMT reduction by 2050 in Indiana, given 100% EV Adoption by 2050

## EXECUTIVE SUMMARY

### CLIMATE IMPACT

Transportation Emissions Reduction Pathways



By 2050, EV adoption + VMT Reduction would reduce GHG emissions by up to 153 megatonnes MORE than 100% EV Adoption by 2050 alone

That's the same as preventing the annual emissions of 385 natural gas-fired plants!

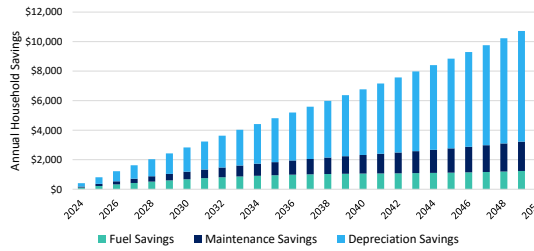
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### HOUSEHOLD SAVINGS

On average, 31.5% Per Capita VMT reduction would save each household \$5,574 a year from reduced automobile fuel, maintenance, and depreciation costs.

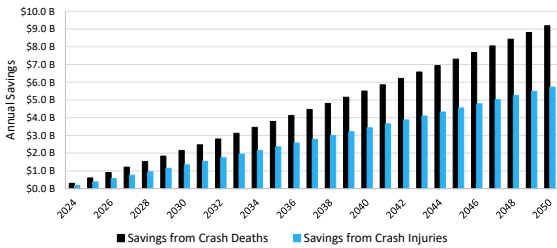
If expanded transportation options allow a family to downsize from two cars to one, household savings increase to \$12,000 a year per vehicle.

Annual Direct Household Savings from VMT Reduction



### ROAD SAFETY

Savings from Avoided Crash Injuries and Deaths



On average, 31.5% Per Capita VMT reduction would prevent 387 crash fatalities and 5,802 crash injuries per year.

By 2050, that adds up to \$200 billion in savings from avoided medical expenses, damages, and productivity losses.

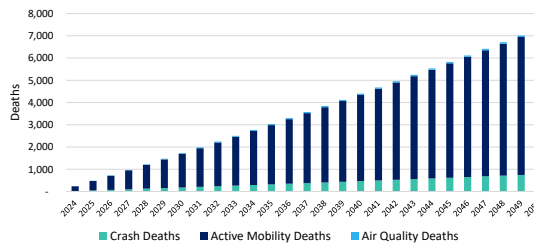
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### PUBLIC HEALTH

On average, 31.5% Per Capita VMT reduction would improve crash outcomes and alleviate mortality risks from air pollution and inactivity health outcomes, saving over 3,199 lives per year.

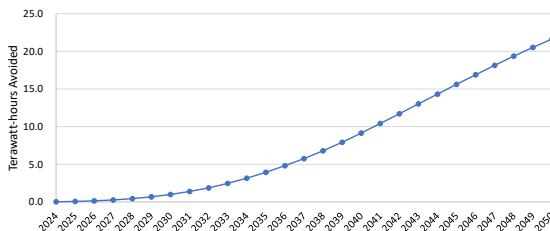
By 2050 and using the US DOT Statistical Value of Life, this would represent \$1,477 billion of avoided life loss.

Avoided Deaths from VMT Reduction



### ENERGY DEMAND

Energy Demand Avoided by Reducing EV Charging



By 2050, 31.5% Per Capita VMT reduction would lower energy demand by 211 TWh due to reduced electric vehicle charging. This would alleviate strain on the electrical grid to provide reliable service.

That's enough to completely meet New York City's current annual energy demand for 4 years!

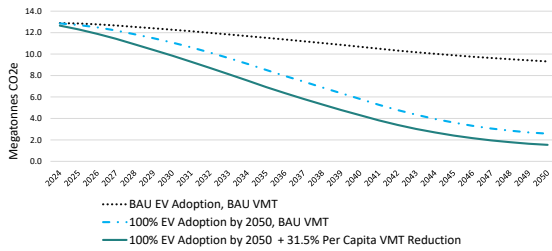
In the selected EV scenario, 100% EV Adoption by 2050, EVs will be 37% of vehicles by 2035 and will be 98% of vehicles by 2050, requiring new generation from the grid.

# Benefits of 31.5% Per Capita VMT reduction by 2050 in Iowa, given 100% EV Adoption by 2050

## EXECUTIVE SUMMARY

### CLIMATE IMPACT

Transportation Emissions Reduction Pathways



By 2050, EV adoption + VMT Reduction would reduce GHG emissions by up to 33 megatonnes MORE than 100% EV Adoption by 2050 alone

That's the same as preventing the annual emissions of 82 natural gas-fired plants!

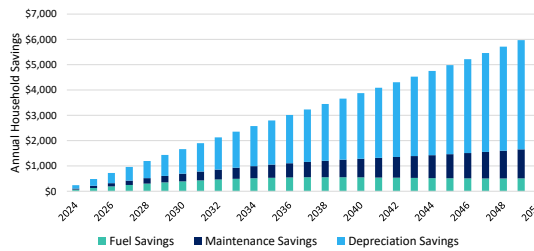
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### HOUSEHOLD SAVINGS

On average, 31.5% Per Capita VMT reduction would save each household \$3,175 a year from reduced automobile fuel, maintenance, and depreciation costs.

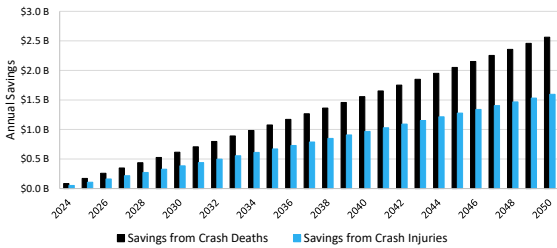
If expanded transportation options allow a family to downsize from two cars to one, household savings increase to \$12,000 a year per vehicle.

Annual Direct Household Savings from VMT Reduction



### ROAD SAFETY

Savings from Avoided Crash Injuries and Deaths



On average, 31.5% Per Capita VMT reduction would prevent 109 crash fatalities and 1,636 crash injuries per year.

By 2050, that adds up to \$56 billion in savings from avoided medical expenses, damages, and productivity losses.

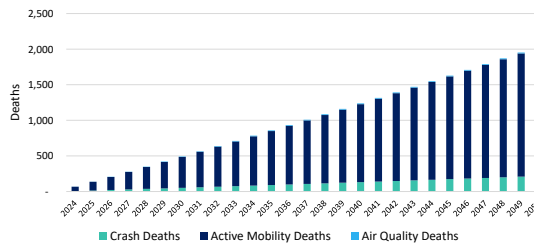
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### PUBLIC HEALTH

On average, 31.5% Per Capita VMT reduction would improve crash outcomes and alleviate mortality risks from air pollution and inactivity health outcomes, saving over 901 lives per year.

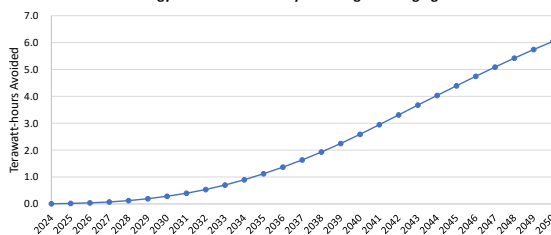
By 2050 and using the US DOT Statistical Value of Life, this would represent \$415 billion of avoided life loss.

Avoided Deaths from VMT Reduction



### ENERGY DEMAND

Energy Demand Avoided by Reducing EV Charging



By 2050, 31.5% Per Capita VMT reduction would lower energy demand by 60 TWh due to reduced electric vehicle charging. This would alleviate strain on the electrical grid to provide reliable service.

That's enough to completely meet New York City's current annual energy demand for 1.1 years!

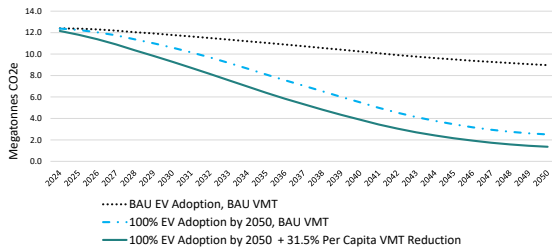
In the selected EV scenario, 100% EV Adoption by 2050, EVs will be 37% of vehicles by 2035 and will be 98% of vehicles by 2050, requiring new generation from the grid.

# Benefits of 31.5% Per Capita VMT reduction by 2050 in Kansas, given 100% EV Adoption by 2050

## EXECUTIVE SUMMARY

### CLIMATE IMPACT

Transportation Emissions Reduction Pathways



By 2050, EV adoption + VMT Reduction would reduce GHG emissions by up to 35 megatonnes MORE than 100% EV Adoption by 2050 alone

That's the same as preventing the annual emissions of 88 natural gas-fired plants!

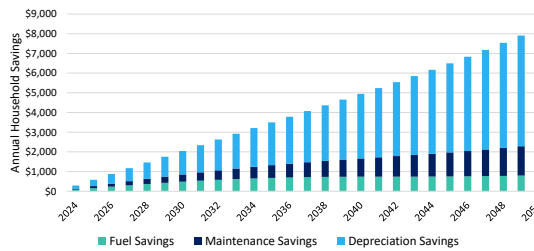
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### HOUSEHOLD SAVINGS

On average, 31.5% Per Capita VMT reduction would save each household \$4,077 a year from reduced automobile fuel, maintenance, and depreciation costs.

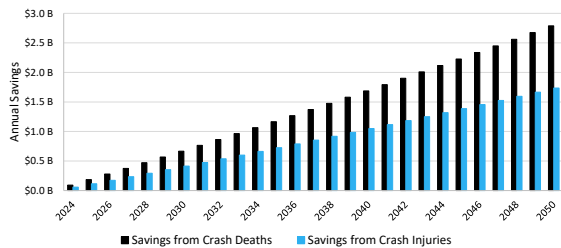
If expanded transportation options allow a family to downsize from two cars to one, household savings increase to \$12,000 a year per vehicle.

Annual Direct Household Savings from VMT Reduction



### ROAD SAFETY

Savings from Avoided Crash Injuries and Deaths



On average, 31.5% Per Capita VMT reduction would prevent 118 crash fatalities and 1,775 crash injuries per year.

By 2050, that adds up to \$61 billion in savings from avoided medical expenses, damages, and productivity losses.

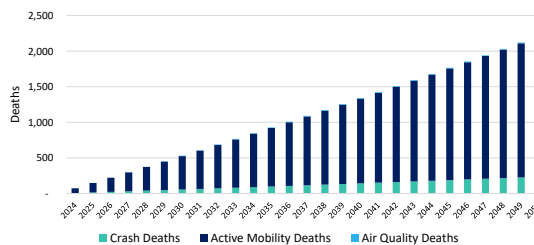
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### PUBLIC HEALTH

On average, 31.5% Per Capita VMT reduction would improve crash outcomes and alleviate mortality risks from air pollution and inactivity health outcomes, saving over 977 lives per year.

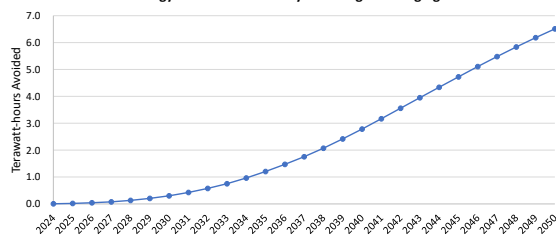
By 2050 and using the US DOT Statistical Value of Life, this would represent \$449 billion of avoided life loss.

Avoided Deaths from VMT Reduction



### ENERGY DEMAND

Energy Demand Avoided by Reducing EV Charging



By 2050, 31.5% Per Capita VMT reduction would lower energy demand by 64 TWh due to reduced electric vehicle charging. This would alleviate strain on the electrical grid to provide reliable service.

That's enough to completely meet New York City's current annual energy demand for 1.2 years!

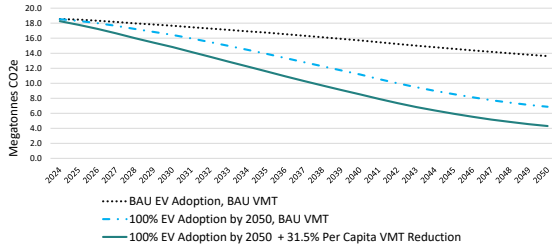
In the selected EV scenario, 100% EV Adoption by 2050, EVs will be 37% of vehicles by 2035 and will be 98% of vehicles by 2050, requiring new generation from the grid.

# Benefits of 31.5% Per Capita VMT reduction by 2050 in Kentucky, given 100% EV Adoption by 2050

## EXECUTIVE SUMMARY

### CLIMATE IMPACT

Transportation Emissions Reduction Pathways



By 2050, EV adoption + VMT Reduction would reduce GHG emissions by up to 56 megatonnes MORE than 100% EV Adoption by 2050 alone

That's the same as preventing the annual emissions of 141 natural gas-fired plants!

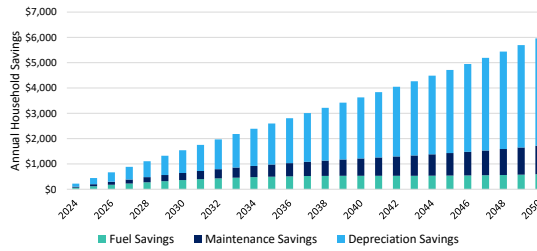
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### HOUSEHOLD SAVINGS

On average, 31.5% Per Capita VMT reduction would save each household \$2,986 a year from reduced automobile fuel, maintenance, and depreciation costs.

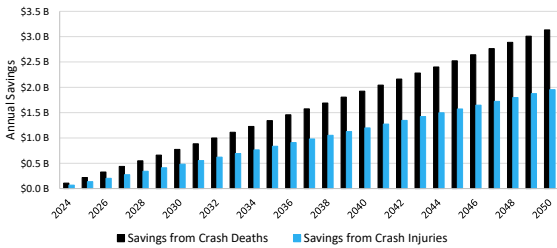
If expanded transportation options allow a family to downsize from two cars to one, household savings increase to \$12,000 a year per vehicle.

Annual Direct Household Savings from VMT Reduction



### ROAD SAFETY

Savings from Avoided Crash Injuries and Deaths



On average, 31.5% Per Capita VMT reduction would prevent 135 crash fatalities and 2,022 crash injuries per year.

By 2050, that adds up to \$70 billion in savings from avoided medical expenses, damages, and productivity losses.

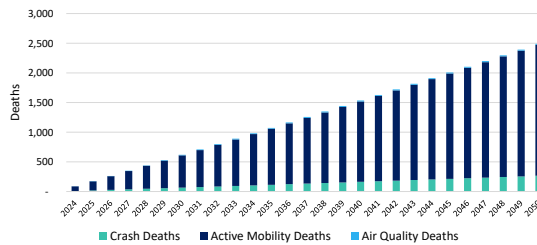
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### PUBLIC HEALTH

On average, 31.5% Per Capita VMT reduction would improve crash outcomes and alleviate mortality risks from air pollution and inactivity health outcomes, saving over 1,114 lives per year.

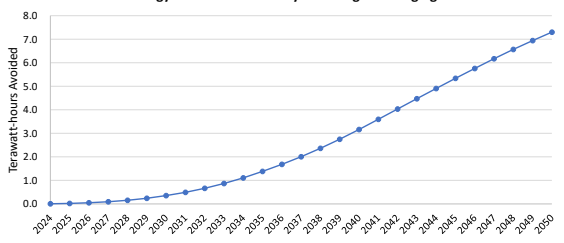
By 2050 and using the US DOT Statistical Value of Life, this would represent \$513 billion of avoided life loss.

Avoided Deaths from VMT Reduction



### ENERGY DEMAND

Energy Demand Avoided by Reducing EV Charging



By 2050, 31.5% Per Capita VMT reduction would lower energy demand by 72 TWh due to reduced electric vehicle charging. This would alleviate strain on the electrical grid to provide reliable service.

That's enough to completely meet New York City's current annual energy demand for 1.4 years!

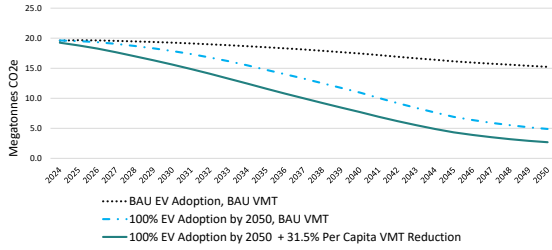
In the selected EV scenario, 100% EV Adoption by 2050, EVs will be 37% of vehicles by 2035 and will be 98% of vehicles by 2050, requiring new generation from the grid.

# Benefits of 31.5% Per Capita VMT reduction by 2050 in Louisiana, given 100% EV Adoption by 2050

## EXECUTIVE SUMMARY

### CLIMATE IMPACT

Transportation Emissions Reduction Pathways



By 2050, EV adoption + VMT Reduction would reduce GHG emissions by up to 66 megatonnes MORE than 100% EV Adoption by 2050 alone

That's the same as preventing the annual emissions of 166 natural gas-fired plants!

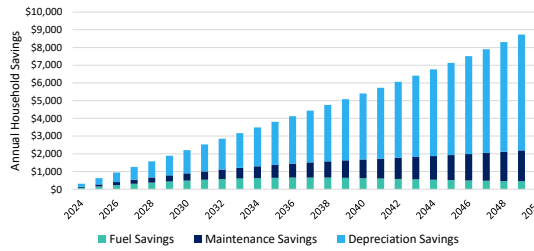
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### HOUSEHOLD SAVINGS

On average, 31.5% Per Capita VMT reduction would save each household \$4,457 a year from reduced automobile fuel, maintenance, and depreciation costs.

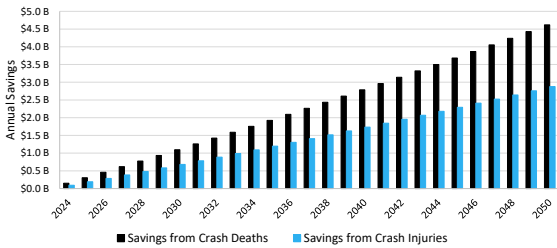
If expanded transportation options allow a family to downsize from two cars to one, household savings increase to \$12,000 a year per vehicle.

Annual Direct Household Savings from VMT Reduction



### ROAD SAFETY

Savings from Avoided Crash Injuries and Deaths



On average, 31.5% Per Capita VMT reduction would prevent 196 crash fatalities and 2,933 crash injuries per year.

By 2050, that adds up to \$101 billion in savings from avoided medical expenses, damages, and productivity losses.

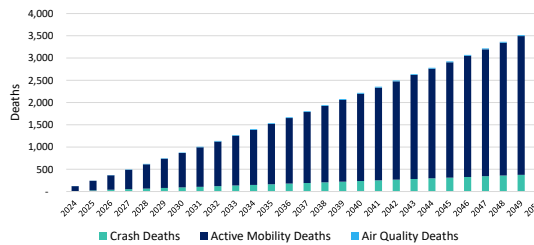
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### PUBLIC HEALTH

On average, 31.5% Per Capita VMT reduction would improve crash outcomes and alleviate mortality risks from air pollution and inactivity health outcomes, saving over 1,615 lives per year.

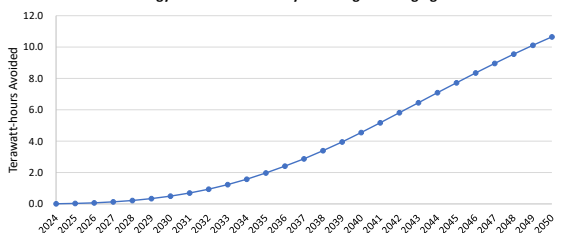
By 2050 and using the US DOT Statistical Value of Life, this would represent \$744 billion of avoided life loss.

Avoided Deaths from VMT Reduction



### ENERGY DEMAND

Energy Demand Avoided by Reducing EV Charging



By 2050, 31.5% Per Capita VMT reduction would lower energy demand by 105 TWh due to reduced electric vehicle charging. This would alleviate strain on the electrical grid to provide reliable service.

That's enough to completely meet New York City's current annual energy demand for 2 years!

In the selected EV scenario, 100% EV Adoption by 2050, EVs will be 37% of vehicles by 2035 and will be 98% of vehicles by 2050, requiring new generation from the grid.

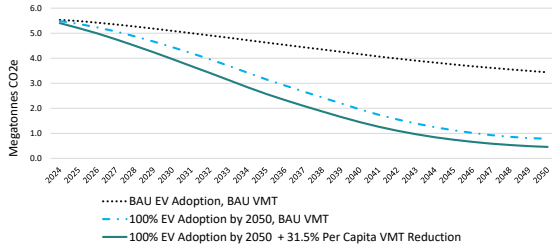


# Benefits of 31.5% Per Capita VMT reduction by 2050 in Maine, given 100% EV Adoption by 2050

## EXECUTIVE SUMMARY

### CLIMATE IMPACT

Transportation Emissions Reduction Pathways



By 2050, EV adoption + VMT Reduction would reduce GHG emissions by up to 11 megatonnes MORE than 100% EV Adoption by 2050 alone

That's the same as preventing the annual emissions of 29 natural gas-fired plants!

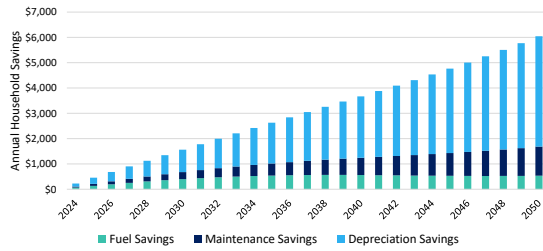
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### HOUSEHOLD SAVINGS

On average, 31.5% Per Capita VMT reduction would save each household \$3,023 a year from reduced automobile fuel, maintenance, and depreciation costs.

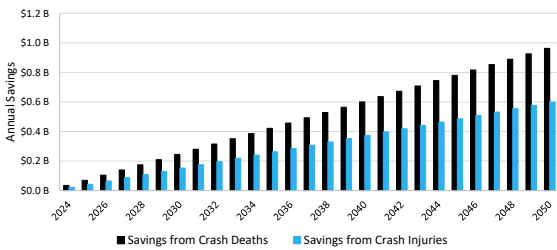
If expanded transportation options allow a family to downsize from two cars to one, household savings increase to \$12,000 a year per vehicle.

Annual Direct Household Savings from VMT Reduction



### ROAD SAFETY

Savings from Avoided Crash Injuries and Deaths



On average, 31.5% Per Capita VMT reduction would prevent 42 crash fatalities and 629 crash injuries per year.

By 2050, that adds up to \$22 billion in savings from avoided medical expenses, damages, and productivity losses.

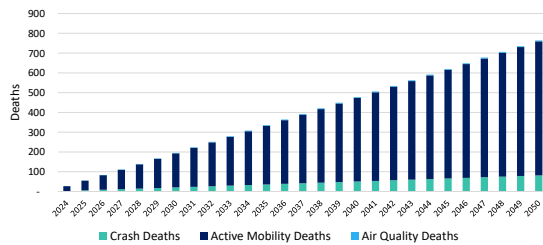
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### PUBLIC HEALTH

On average, 31.5% Per Capita VMT reduction would improve crash outcomes and alleviate mortality risks from air pollution and inactivity health outcomes, saving over 346 lives per year.

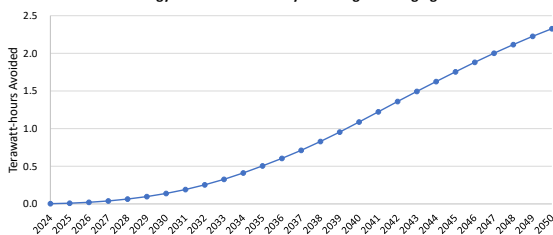
By 2050 and using the US DOT Statistical Value of Life, this would represent \$159 billion of avoided life loss.

Avoided Deaths from VMT Reduction



### ENERGY DEMAND

Energy Demand Avoided by Reducing EV Charging



By 2050, 31.5% Per Capita VMT reduction would lower energy demand by 24 TWh due to reduced electric vehicle charging. This would alleviate strain on the electrical grid to provide reliable service.

That's enough to completely meet New York City's current annual energy demand for 0.5 years!

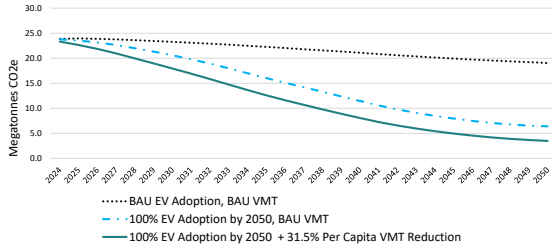
In the selected EV scenario, 100% EV Adoption by 2050, EVs will be 43% of vehicles by 2035 and will be 99% of vehicles by 2050, requiring new generation from the grid.

# Benefits of 31.5% Per Capita VMT reduction by 2050 in Maryland, given 100% EV Adoption by 2050

## EXECUTIVE SUMMARY

### CLIMATE IMPACT

Transportation Emissions Reduction Pathways



By 2050, EV adoption + VMT Reduction would reduce GHG emissions by up to 75 megatonnes MORE than 100% EV Adoption by 2050 alone

That's the same as preventing the annual emissions of 188 natural gas-fired plants!

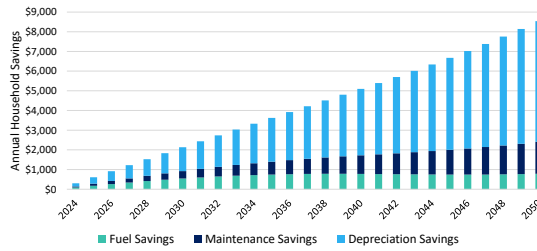
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### HOUSEHOLD SAVINGS

On average, 31.5% Per Capita VMT reduction would save each household \$4,207 a year from reduced automobile fuel, maintenance, and depreciation costs.

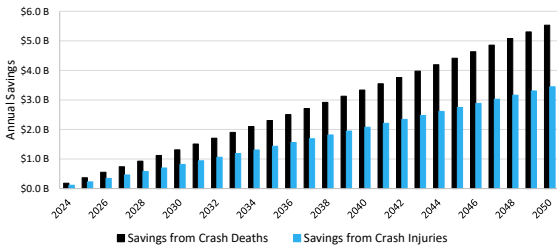
If expanded transportation options allow a family to downsize from two cars to one, household savings increase to \$12,000 a year per vehicle.

Annual Direct Household Savings from VMT Reduction



### ROAD SAFETY

Savings from Avoided Crash Injuries and Deaths



On average, 31.5% Per Capita VMT reduction would prevent 234 crash fatalities and 3,513 crash injuries per year.

By 2050, that adds up to \$121 billion in savings from avoided medical expenses, damages, and productivity losses.

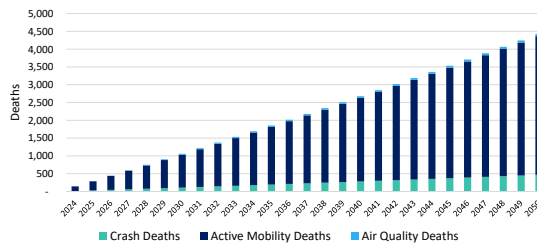
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### PUBLIC HEALTH

On average, 31.5% Per Capita VMT reduction would improve crash outcomes and alleviate mortality risks from air pollution and inactivity health outcomes, saving over 1,940 lives per year.

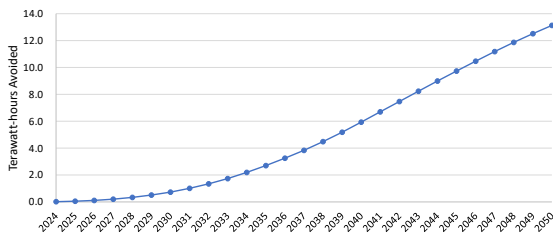
By 2050 and using the US DOT Statistical Value of Life, this would represent \$898 billion of avoided life loss.

Avoided Deaths from VMT Reduction



### ENERGY DEMAND

Energy Demand Avoided by Reducing EV Charging



By 2050, 31.5% Per Capita VMT reduction would lower energy demand by 134 TWh due to reduced electric vehicle charging. This would alleviate strain on the electrical grid to provide reliable service.

That's enough to completely meet New York City's current annual energy demand for 2.6 years!

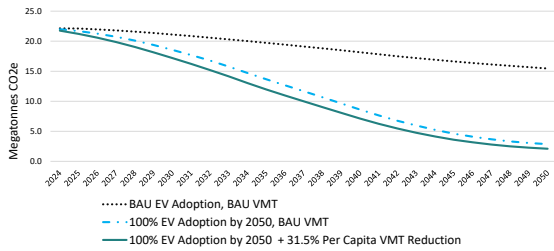
In the selected EV scenario, 100% EV Adoption by 2050, EVs will be 43% of vehicles by 2035 and will be 99% of vehicles by 2050, requiring new generation from the grid.

# Benefits of 31.5% Per Capita VMT reduction by 2050 in Massachusetts, given 100% EV Adoption by 2050

## EXECUTIVE SUMMARY

### CLIMATE IMPACT

Transportation Emissions Reduction Pathways



By 2050, EV adoption + VMT Reduction would reduce GHG emissions by up to 32 megatonnes MORE than 100% EV Adoption by 2050 alone

That's the same as preventing the annual emissions of 81 natural gas-fired plants!

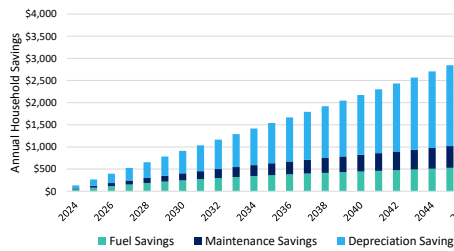
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### HOUSEHOLD SAVINGS

On average, 31.5% Per Capita VMT reduction would save each household \$1,793 a year from reduced automobile fuel, maintenance, and depreciation costs.

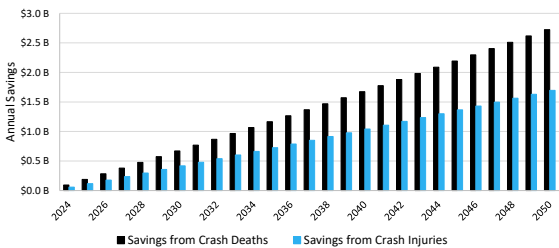
If expanded transportation options allow a family to downsize from two cars to one, household savings increase to \$12,000 a year per vehicle.

Annual Direct Household Savings from VMT Reduction



### ROAD SAFETY

Savings from Avoided Crash Injuries and Deaths



On average, 31.5% Per Capita VMT reduction would prevent 117 crash fatalities and 1,758 crash injuries per year.

By 2050, that adds up to \$61 billion in savings from avoided medical expenses, damages, and productivity losses.

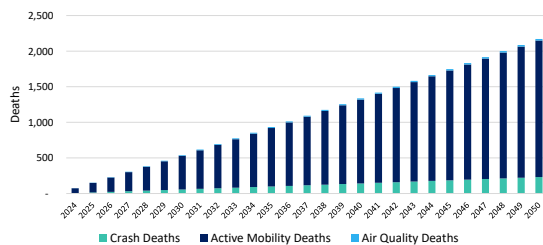
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### PUBLIC HEALTH

On average, 31.5% Per Capita VMT reduction would improve crash outcomes and alleviate mortality risks from air pollution and inactivity health outcomes, saving over 969 lives per year.

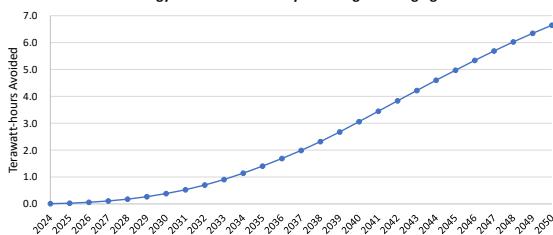
By 2050 and using the US DOT Statistical Value of Life, this would represent \$447 billion of avoided life loss.

Avoided Deaths from VMT Reduction



### ENERGY DEMAND

Energy Demand Avoided by Reducing EV Charging



By 2050, 31.5% Per Capita VMT reduction would lower energy demand by 69 TWh due to reduced electric vehicle charging. This would alleviate strain on the electrical grid to provide reliable service.

That's enough to completely meet New York City's current annual energy demand for 1.3 years!

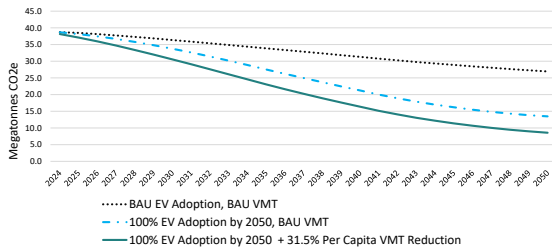
In the selected EV scenario, 100% EV Adoption by 2050, EVs will be 42% of vehicles by 2035 and will be 99% of vehicles by 2050, requiring new generation from the grid.

# Benefits of 31.5% Per Capita VMT reduction by 2050 in Michigan, given 100% EV Adoption by 2050

## EXECUTIVE SUMMARY

### CLIMATE IMPACT

Transportation Emissions Reduction Pathways



By 2050, EV adoption + VMT Reduction would reduce GHG emissions by up to 106 megatonnes MORE than 100% EV Adoption by 2050 alone

That's the same as preventing the annual emissions of 266 natural gas-fired plants!

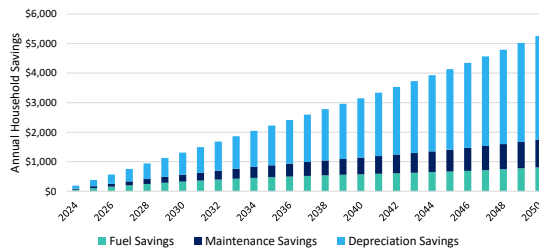
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### HOUSEHOLD SAVINGS

On average, 31.5% Per Capita VMT reduction would save each household \$2,600 a year from reduced automobile fuel, maintenance, and depreciation costs.

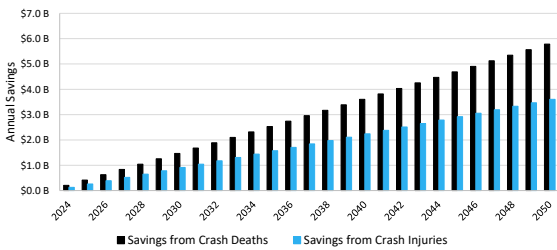
If expanded transportation options allow a family to downsize from two cars to one, household savings increase to \$12,000 a year per vehicle.

Annual Direct Household Savings from VMT Reduction



### ROAD SAFETY

Savings from Avoided Crash Injuries and Deaths



On average, 31.5% Per Capita VMT reduction would prevent 252 crash fatalities and 3,777 crash injuries per year.

By 2050, that adds up to \$130 billion in savings from avoided medical expenses, damages, and productivity losses.

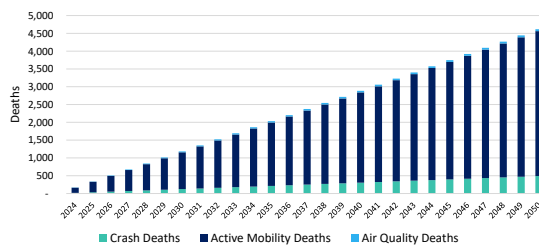
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### PUBLIC HEALTH

On average, 31.5% Per Capita VMT reduction would improve crash outcomes and alleviate mortality risks from air pollution and inactivity health outcomes, saving over 2,084 lives per year.

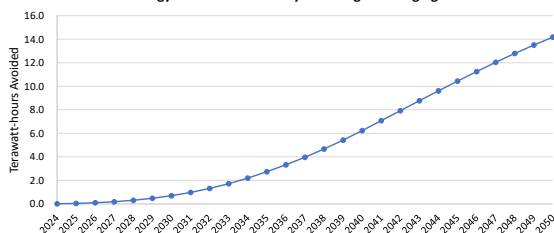
By 2050 and using the US DOT Statistical Value of Life, this would represent \$963 billion of avoided life loss.

Avoided Deaths from VMT Reduction



### ENERGY DEMAND

Energy Demand Avoided by Reducing EV Charging



By 2050, 31.5% Per Capita VMT reduction would lower energy demand by 142 TWh due to reduced electric vehicle charging. This would alleviate strain on the electrical grid to provide reliable service.

That's enough to completely meet New York City's current annual energy demand for 2.7 years!

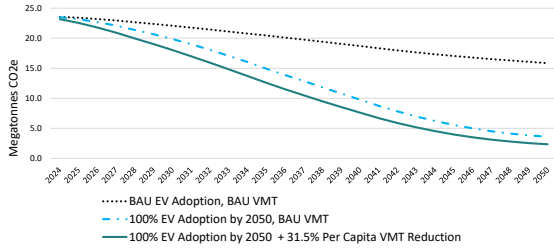
In the selected EV scenario, 100% EV Adoption by 2050, EVs will be 37% of vehicles by 2035 and will be 98% of vehicles by 2050, requiring new generation from the grid.

# Benefits of 31.5% Per Capita VMT reduction by 2050 in Minnesota, given 100% EV Adoption by 2050

## EXECUTIVE SUMMARY

### CLIMATE IMPACT

Transportation Emissions Reduction Pathways



By 2050, EV adoption + VMT Reduction would reduce GHG emissions by up to 46 megatonnes MORE than 100% EV Adoption by 2050 alone

That's the same as preventing the annual emissions of 116 natural gas-fired plants!

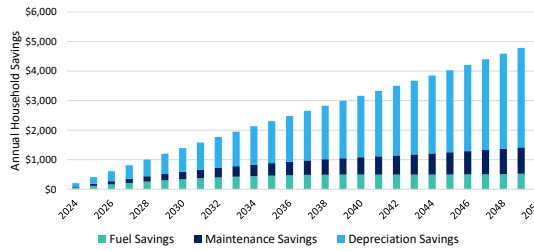
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### HOUSEHOLD SAVINGS

On average, 31.5% Per Capita VMT reduction would save each household \$2,589 a year from reduced automobile fuel, maintenance, and depreciation costs.

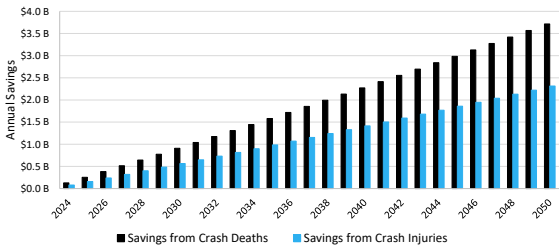
If expanded transportation options allow a family to downsize from two cars to one, household savings increase to \$12,000 a year per vehicle.

Annual Direct Household Savings from VMT Reduction



### ROAD SAFETY

Savings from Avoided Crash Injuries and Deaths



On average, 31.5% Per Capita VMT reduction would prevent 159 crash fatalities and 2,389 crash injuries per year.

By 2050, that adds up to \$82 billion in savings from avoided medical expenses, damages, and productivity losses.

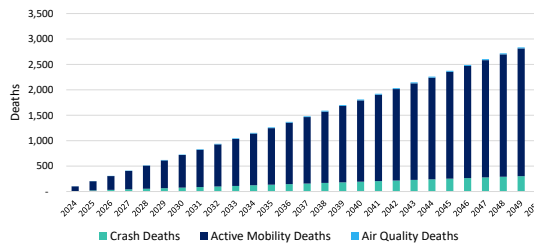
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### PUBLIC HEALTH

On average, 31.5% Per Capita VMT reduction would improve crash outcomes and alleviate mortality risks from air pollution and inactivity health outcomes, saving over 1,316 lives per year.

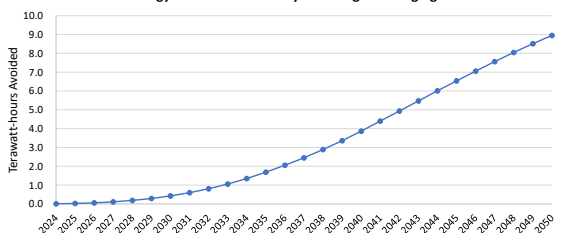
By 2050 and using the US DOT Statistical Value of Life, this would represent \$606 billion of avoided life loss.

Avoided Deaths from VMT Reduction



### ENERGY DEMAND

Energy Demand Avoided by Reducing EV Charging



By 2050, 31.5% Per Capita VMT reduction would lower energy demand by 89 TWh due to reduced electric vehicle charging. This would alleviate strain on the electrical grid to provide reliable service.

That's enough to completely meet New York City's current annual energy demand for 1.7 years!

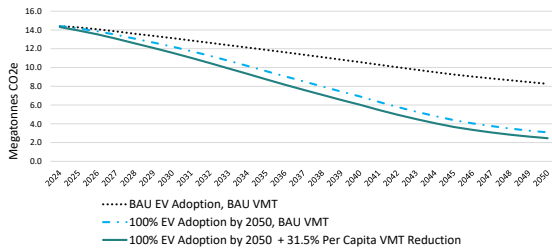
In the selected EV scenario, 100% EV Adoption by 2050, EVs will be 37% of vehicles by 2035 and will be 98% of vehicles by 2050, requiring new generation from the grid.

# Benefits of 31.5% Per Capita VMT reduction by 2050 in Mississippi, given 100% EV Adoption by 2050

## EXECUTIVE SUMMARY

### CLIMATE IMPACT

Transportation Emissions Reduction Pathways



By 2050, EV adoption + VMT Reduction would reduce GHG emissions by up to 19 megatonnes MORE than 100% EV Adoption by 2050 alone

That's the same as preventing the annual emissions of 47 natural gas-fired plants!

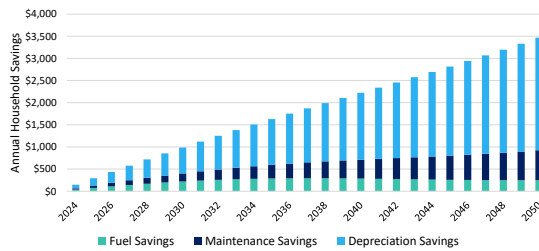
Scroll down →

### HOUSEHOLD SAVINGS

On average, 31.5% Per Capita VMT reduction would save each household \$1,817 a year from reduced automobile fuel, maintenance, and depreciation costs.

If expanded transportation options allow a family to downsize from two cars to one, household savings increase to \$12,000 a year per vehicle.

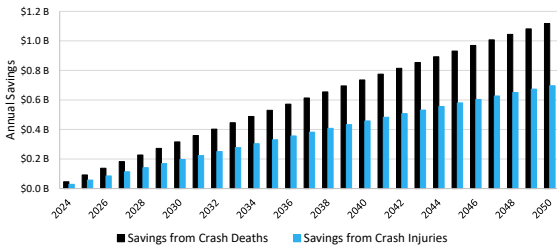
Annual Direct Household Savings from VMT Reduction



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### ROAD SAFETY

Savings from Avoided Crash Injuries and Deaths



On average, 31.5% Per Capita VMT reduction would prevent 51 crash fatalities and 765 crash injuries per year.

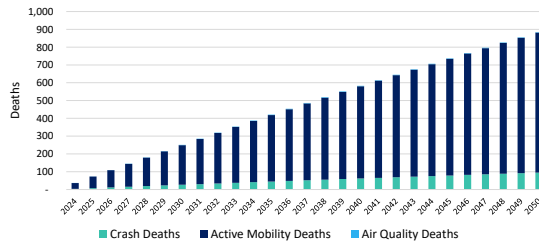
By 2050, that adds up to \$26 billion in savings from avoided medical expenses, damages, and productivity losses.

### PUBLIC HEALTH

On average, 31.5% Per Capita VMT reduction would improve crash outcomes and alleviate mortality risks from air pollution and inactivity health outcomes, saving over 421 lives per year.

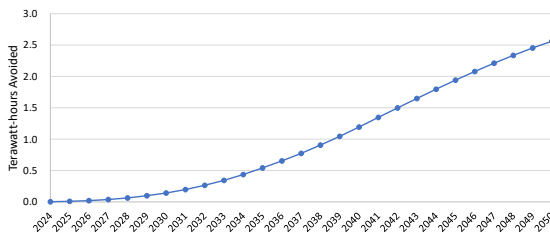
By 2050 and using the US DOT Statistical Value of Life, this would represent \$193 billion of avoided life loss.

Avoided Deaths from VMT Reduction



### ENERGY DEMAND

Energy Demand Avoided by Reducing EV Charging



By 2050, 31.5% Per Capita VMT reduction would lower energy demand by 27 TWh due to reduced electric vehicle charging. This would alleviate strain on the electrical grid to provide reliable service.

That's enough to completely meet New York City's current annual energy demand for 0.5 years!

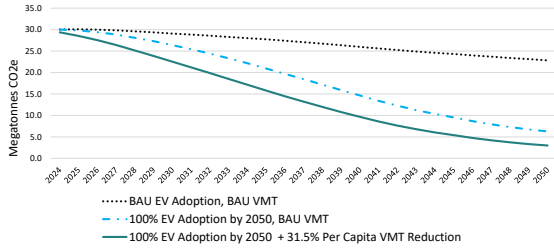
In the selected EV scenario, 100% EV Adoption by 2050, EVs will be 37% of vehicles by 2035 and will be 98% of vehicles by 2050, requiring new generation from the grid.

# Benefits of 31.5% Per Capita VMT reduction by 2050 in Missouri, given 100% EV Adoption by 2050

## EXECUTIVE SUMMARY

### CLIMATE IMPACT

Transportation Emissions Reduction Pathways



By 2050, EV adoption + VMT Reduction would reduce GHG emissions by up to 106 megatonnes MORE than 100% EV Adoption by 2050 alone

That's the same as preventing the annual emissions of 267 natural gas-fired plants!

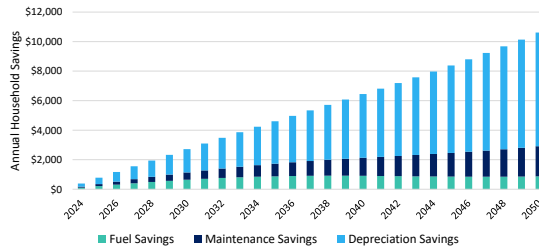
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### HOUSEHOLD SAVINGS

On average, 31.5% Per Capita VMT reduction would save each household \$5,299 a year from reduced automobile fuel, maintenance, and depreciation costs.

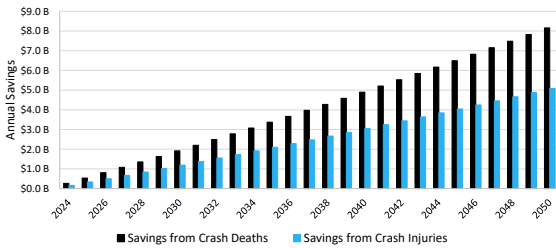
If expanded transportation options allow a family to downsize from two cars to one, household savings increase to \$12,000 a year per vehicle.

Annual Direct Household Savings from VMT Reduction



### ROAD SAFETY

Savings from Avoided Crash Injuries and Deaths



On average, 31.5% Per Capita VMT reduction would prevent 344 crash fatalities and 5,159 crash injuries per year.

By 2050, that adds up to \$178 billion in savings from avoided medical expenses, damages, and productivity losses.

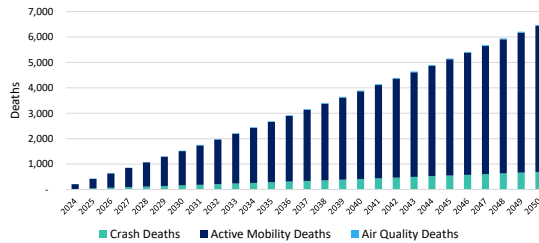
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### PUBLIC HEALTH

On average, 31.5% Per Capita VMT reduction would improve crash outcomes and alleviate mortality risks from air pollution and inactivity health outcomes, saving over 2,840 lives per year.

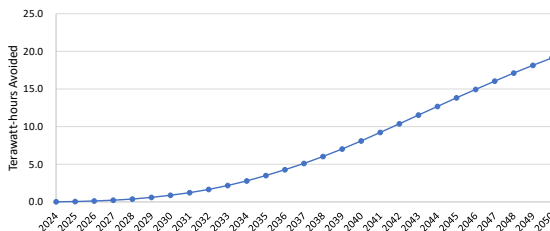
By 2050 and using the US DOT Statistical Value of Life, this would represent \$1,308 billion of avoided life loss.

Avoided Deaths from VMT Reduction



### ENERGY DEMAND

Energy Demand Avoided by Reducing EV Charging



By 2050, 31.5% Per Capita VMT reduction would lower energy demand by 187 TWh due to reduced electric vehicle charging. This would alleviate strain on the electrical grid to provide reliable service.

That's enough to completely meet New York City's current annual energy demand for 3.6 years!

In the selected EV scenario, 100% EV Adoption by 2050, EVs will be 37% of vehicles by 2035 and will be 98% of vehicles by 2050, requiring new generation from the grid.

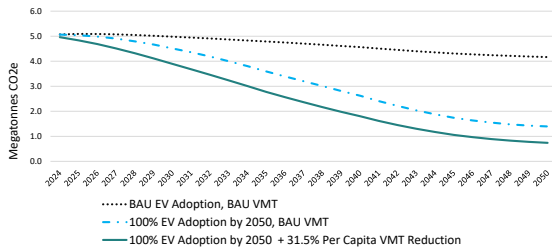


# Benefits of 31.5% Per Capita VMT reduction by 2050 in Montana, given 100% EV Adoption by 2050

## EXECUTIVE SUMMARY

### CLIMATE IMPACT

Transportation Emissions Reduction Pathways



By 2050, EV adoption + VMT Reduction would reduce GHG emissions by up to 18 megatonnes MORE than 100% EV Adoption by 2050 alone

That's the same as preventing the annual emissions of 44 natural gas-fired plants!

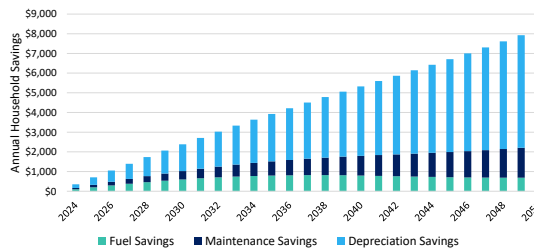
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### HOUSEHOLD SAVINGS

On average, 31.5% Per Capita VMT reduction would save each household \$4,351 a year from reduced automobile fuel, maintenance, and depreciation costs.

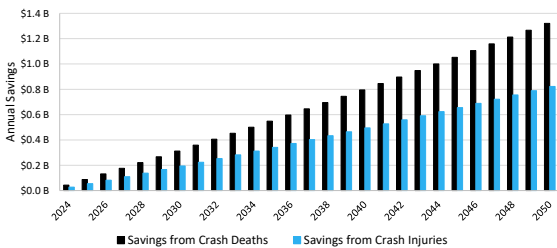
If expanded transportation options allow a family to downsize from two cars to one, household savings increase to \$12,000 a year per vehicle.

Annual Direct Household Savings from VMT Reduction



### ROAD SAFETY

Savings from Avoided Crash Injuries and Deaths



On average, 31.5% Per Capita VMT reduction would prevent 56 crash fatalities and 838 crash injuries per year.

By 2050, that adds up to \$29 billion in savings from avoided medical expenses, damages, and productivity losses.

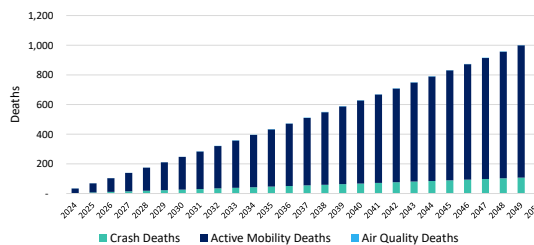
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### PUBLIC HEALTH

On average, 31.5% Per Capita VMT reduction would improve crash outcomes and alleviate mortality risks from air pollution and inactivity health outcomes, saving over 460 lives per year.

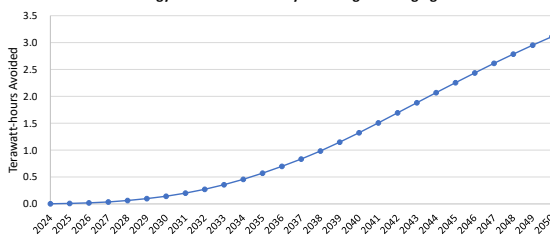
By 2050 and using the US DOT Statistical Value of Life, this would represent \$211 billion of avoided life loss.

Avoided Deaths from VMT Reduction



### ENERGY DEMAND

Energy Demand Avoided by Reducing EV Charging



By 2050, 31.5% Per Capita VMT reduction would lower energy demand by 31 TWh due to reduced electric vehicle charging. This would alleviate strain on the electrical grid to provide reliable service.

That's enough to completely meet New York City's current annual energy demand for 0.6 years!

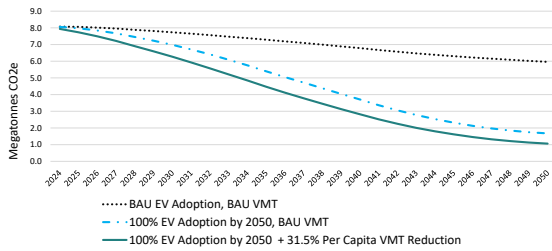
In the selected EV scenario, 100% EV Adoption by 2050, EVs will be 37% of vehicles by 2035 and will be 98% of vehicles by 2050, requiring new generation from the grid.

# Benefits of 31.5% Per Capita VMT reduction by 2050 in Nebraska, given 100% EV Adoption by 2050

## EXECUTIVE SUMMARY

### CLIMATE IMPACT

Transportation Emissions Reduction Pathways



By 2050, EV adoption + VMT Reduction would reduce GHG emissions by up to 19 megatonnes MORE than 100% EV Adoption by 2050 alone

That's the same as preventing the annual emissions of 48 natural gas-fired plants!

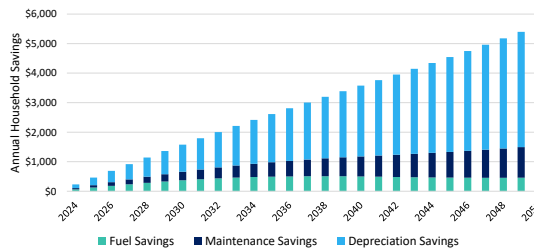
Scroll down →

### HOUSEHOLD SAVINGS

On average, 31.5% Per Capita VMT reduction would save each household \$2,925 a year from reduced automobile fuel, maintenance, and depreciation costs.

If expanded transportation options allow a family to downsize from two cars to one, household savings increase to \$12,000 a year per vehicle.

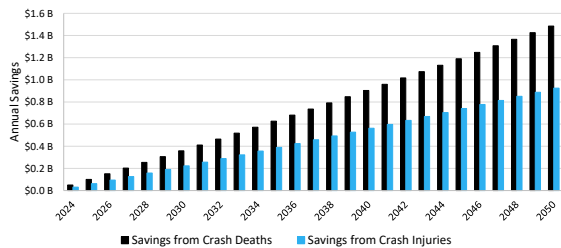
Annual Direct Household Savings from VMT Reduction



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### ROAD SAFETY

Savings from Avoided Crash Injuries and Deaths



On average, 31.5% Per Capita VMT reduction would prevent 63 crash fatalities and 950 crash injuries per year.

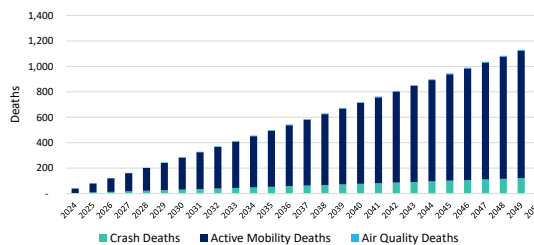
By 2050, that adds up to \$33 billion in savings from avoided medical expenses, damages, and productivity losses.

### PUBLIC HEALTH

On average, 31.5% Per Capita VMT reduction would improve crash outcomes and alleviate mortality risks from air pollution and inactivity health outcomes, saving over 523 lives per year.

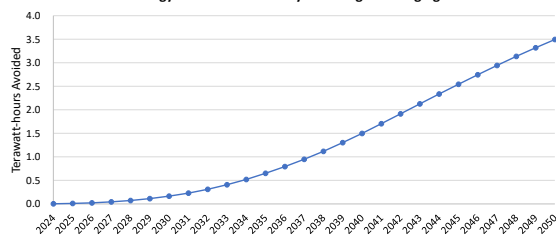
By 2050 and using the US DOT Statistical Value of Life, this would represent \$241 billion of avoided life loss.

Avoided Deaths from VMT Reduction



### ENERGY DEMAND

Energy Demand Avoided by Reducing EV Charging



By 2050, 31.5% Per Capita VMT reduction would lower energy demand by 34 TWh due to reduced electric vehicle charging. This would alleviate strain on the electrical grid to provide reliable service.

That's enough to completely meet New York City's current annual energy demand for 0.7 years!

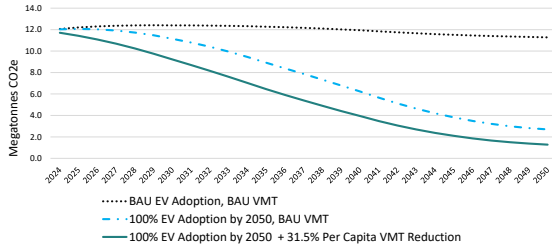
In the selected EV scenario, 100% EV Adoption by 2050, EVs will be 37% of vehicles by 2035 and will be 98% of vehicles by 2050, requiring new generation from the grid.

# Benefits of 31.5% Per Capita VMT reduction by 2050 in Nevada, given 100% EV Adoption by 2050

## EXECUTIVE SUMMARY

### CLIMATE IMPACT

Transportation Emissions Reduction Pathways



By 2050, EV adoption + VMT Reduction would reduce GHG emissions by up to 49 megatonnes MORE than 100% EV Adoption by 2050 alone

That's the same as preventing the annual emissions of 124 natural gas-fired plants!

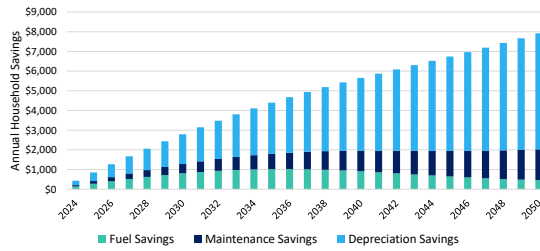
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### HOUSEHOLD SAVINGS

On average, 31.5% Per Capita VMT reduction would save each household \$4,574 a year from reduced automobile fuel, maintenance, and depreciation costs.

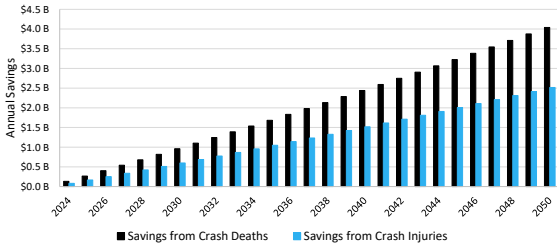
If expanded transportation options allow a family to downsize from two cars to one, household savings increase to \$12,000 a year per vehicle.

Annual Direct Household Savings from VMT Reduction



### ROAD SAFETY

Savings from Avoided Crash Injuries and Deaths



On average, 31.5% Per Capita VMT reduction would prevent 171 crash fatalities and 2,568 crash injuries per year.

By 2050, that adds up to \$89 billion in savings from avoided medical expenses, damages, and productivity losses.

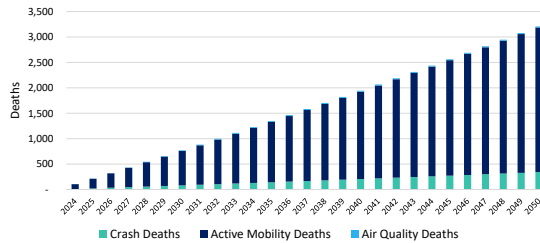
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### PUBLIC HEALTH

On average, 31.5% Per Capita VMT reduction would improve crash outcomes and alleviate mortality risks from air pollution and inactivity health outcomes, saving over 1,414 lives per year.

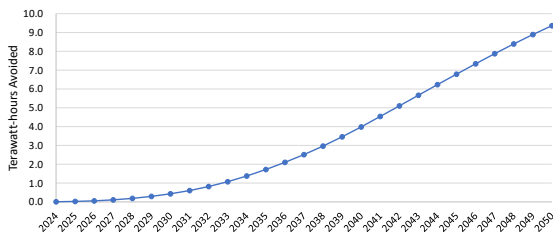
By 2050 and using the US DOT Statistical Value of Life, this would represent \$652 billion of avoided life loss.

Avoided Deaths from VMT Reduction



### ENERGY DEMAND

Energy Demand Avoided by Reducing EV Charging



By 2050, 31.5% Per Capita VMT reduction would lower energy demand by 92 TWh due to reduced electric vehicle charging. This would alleviate strain on the electrical grid to provide reliable service.

That's enough to completely meet New York City's current annual energy demand for 1.8 years!

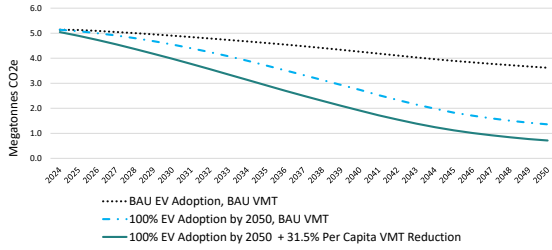
In the selected EV scenario, 100% EV Adoption by 2050, EVs will be 37% of vehicles by 2035 and will be 98% of vehicles by 2050, requiring new generation from the grid.

# Benefits of 31.5% Per Capita VMT reduction by 2050 in New Hampshire, given 100% EV Adoption by 2050

## EXECUTIVE SUMMARY

### CLIMATE IMPACT

Transportation Emissions Reduction Pathways



By 2050, EV adoption + VMT Reduction would reduce GHG emissions by up to 17 megatonnes MORE than 100% EV Adoption by 2050 alone

That's the same as preventing the annual emissions of 43 natural gas-fired plants!

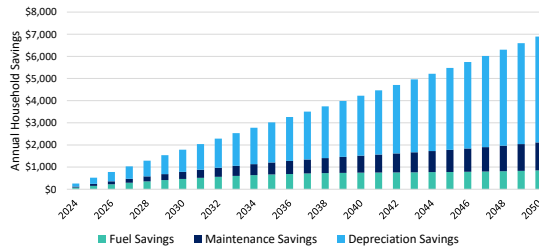
Scroll down →

### HOUSEHOLD SAVINGS

On average, 31.5% Per Capita VMT reduction would save each household \$3,470 a year from reduced automobile fuel, maintenance, and depreciation costs.

If expanded transportation options allow a family to downsize from two cars to one, household savings increase to \$12,000 a year per vehicle.

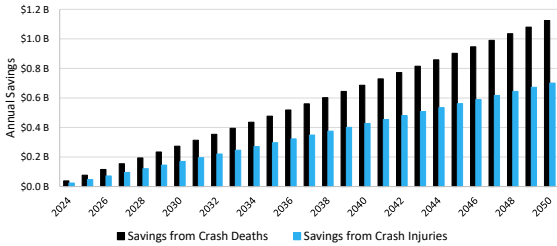
Annual Direct Household Savings from VMT Reduction



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### ROAD SAFETY

Savings from Avoided Crash Injuries and Deaths



On average, 31.5% Per Capita VMT reduction would prevent 48 crash fatalities and 722 crash injuries per year.

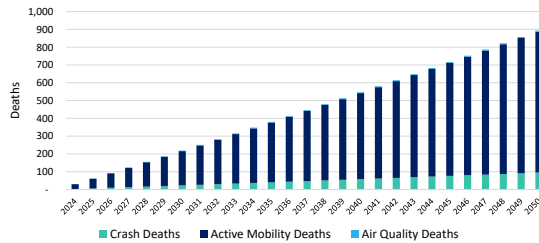
By 2050, that adds up to \$25 billion in savings from avoided medical expenses, damages, and productivity losses.

### PUBLIC HEALTH

On average, 31.5% Per Capita VMT reduction would improve crash outcomes and alleviate mortality risks from air pollution and inactivity health outcomes, saving over 397 lives per year.

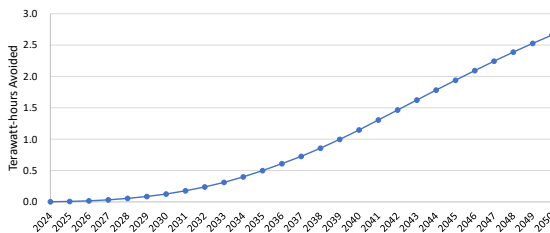
By 2050 and using the US DOT Statistical Value of Life, this would represent \$183 billion of avoided life loss.

Avoided Deaths from VMT Reduction



### ENERGY DEMAND

Energy Demand Avoided by Reducing EV Charging



By 2050, 31.5% Per Capita VMT reduction would lower energy demand by 26 TWh due to reduced electric vehicle charging. This would alleviate strain on the electrical grid to provide reliable service.

That's enough to completely meet New York City's current annual energy demand for 0.5 years!

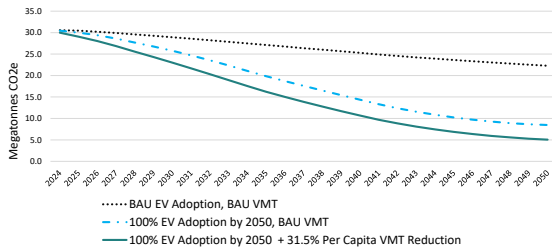
In the selected EV scenario, 100% EV Adoption by 2050, EVs will be 37% of vehicles by 2035 and will be 98% of vehicles by 2050, requiring new generation from the grid.

# Benefits of 31.5% Per Capita VMT reduction by 2050 in New Jersey, given 100% EV Adoption by 2050

## EXECUTIVE SUMMARY

### CLIMATE IMPACT

Transportation Emissions Reduction Pathways



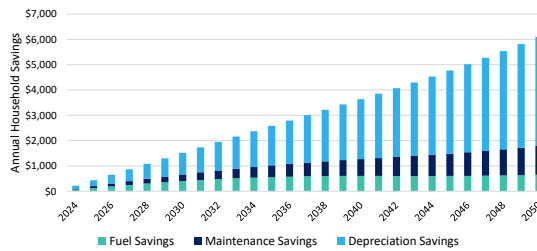
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### HOUSEHOLD SAVINGS

On average, 31.5% Per Capita VMT reduction would save each household \$3,003 a year from reduced automobile fuel, maintenance, and depreciation costs.

If expanded transportation options allow a family to downsize from two cars to one, household savings increase to \$12,000 a year per vehicle.

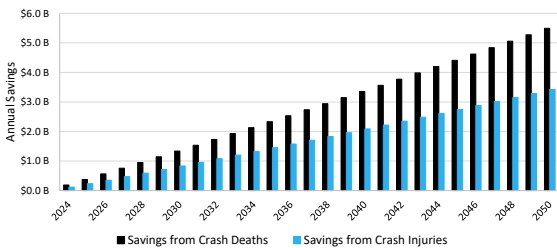
Annual Direct Household Savings from VMT Reduction



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### ROAD SAFETY

Savings from Avoided Crash Injuries and Deaths



On average, 31.5% Per Capita VMT reduction would prevent 235 crash fatalities and 3,526 crash injuries per year.

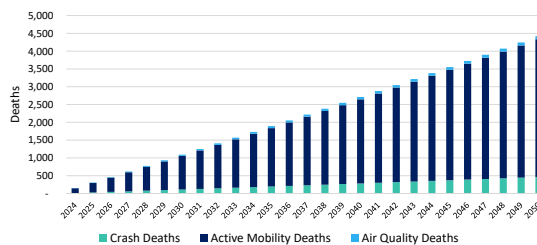
By 2050, that adds up to \$122 billion in savings from avoided medical expenses, damages, and productivity losses.

### PUBLIC HEALTH

On average, 31.5% Per Capita VMT reduction would improve crash outcomes and alleviate mortality risks from air pollution and inactivity health outcomes, saving over 1,952 lives per year.

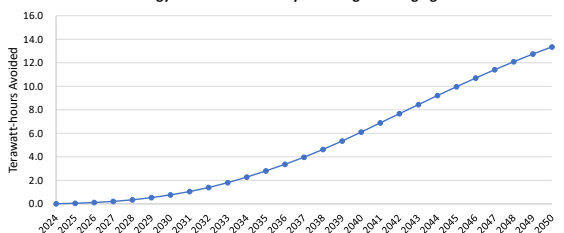
By 2050 and using the US DOT Statistical Value of Life, this would represent \$908 billion of avoided life loss.

Avoided Deaths from VMT Reduction



### ENERGY DEMAND

Energy Demand Avoided by Reducing EV Charging



By 2050, 31.5% Per Capita VMT reduction would lower energy demand by 137 TWh due to reduced electric vehicle charging. This would alleviate strain on the electrical grid to provide reliable service.

That's enough to completely meet New York City's current annual energy demand for 2.6 years!

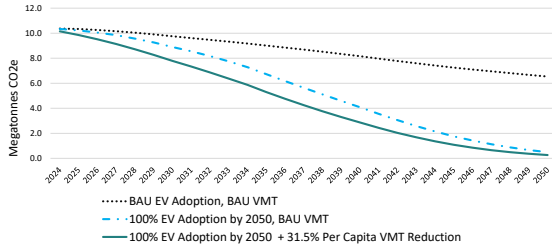
In the selected EV scenario, 100% EV Adoption by 2050, EVs will be 43% of vehicles by 2035 and will be 99% of vehicles by 2050, requiring new generation from the grid.

# Benefits of 31.5% Per Capita VMT reduction by 2050 in New Mexico, given 100% EV Adoption by 2050

## EXECUTIVE SUMMARY

### CLIMATE IMPACT

Transportation Emissions Reduction Pathways



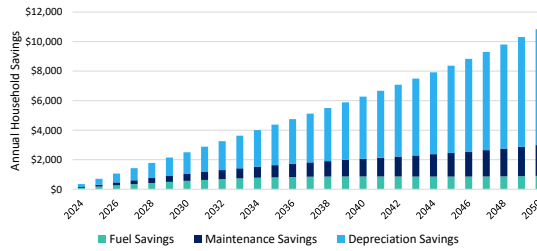
Scroll down →

### HOUSEHOLD SAVINGS

On average, 31.5% Per Capita VMT reduction would save each household \$5,192 a year from reduced automobile fuel, maintenance, and depreciation costs.

If expanded transportation options allow a family to downsize from two cars to one, household savings increase to \$12,000 a year per vehicle.

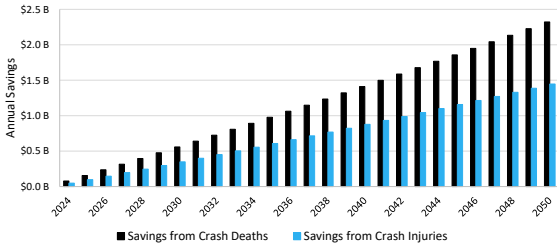
Annual Direct Household Savings from VMT Reduction



Scroll down →

### ROAD SAFETY

Savings from Avoided Crash Injuries and Deaths



On average, 31.5% Per Capita VMT reduction would prevent 99 crash fatalities and 1,483 crash injuries per year.

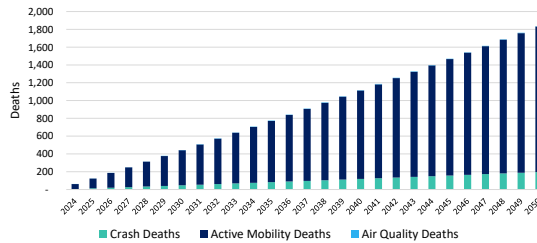
By 2050, that adds up to \$51 billion in savings from avoided medical expenses, damages, and productivity losses.

### PUBLIC HEALTH

On average, 31.5% Per Capita VMT reduction would improve crash outcomes and alleviate mortality risks from air pollution and inactivity health outcomes, saving over 815 lives per year.

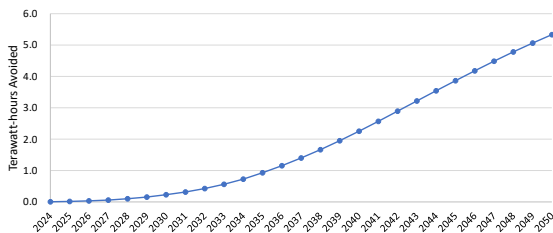
By 2050 and using the US DOT Statistical Value of Life, this would represent \$374 billion of avoided life loss.

Avoided Deaths from VMT Reduction



### ENERGY DEMAND

Energy Demand Avoided by Reducing EV Charging



By 2050, 31.5% Per Capita VMT reduction would lower energy demand by 52 TWh due to reduced electric vehicle charging. This would alleviate strain on the electrical grid to provide reliable service.

That's enough to completely meet New York City's current annual energy demand for 1 years!

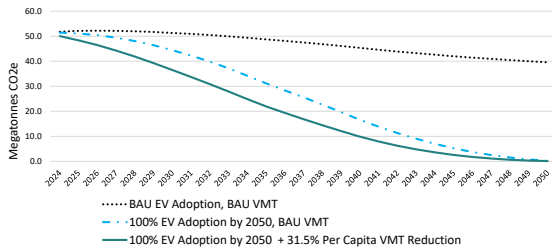
In the selected EV scenario, 100% EV Adoption by 2050, EVs will be 34% of vehicles by 2035 and will be 98% of vehicles by 2050, requiring new generation from the grid.

# Benefits of 31.5% Per Capita VMT reduction by 2050 in New York, given 100% EV Adoption by 2050

## EXECUTIVE SUMMARY

### CLIMATE IMPACT

Transportation Emissions Reduction Pathways



By 2050, EV adoption + VMT Reduction would reduce GHG emissions by up to 146 megatonnes MORE than 100% EV Adoption by 2050 alone

That's the same as preventing the annual emissions of 368 natural gas-fired plants!

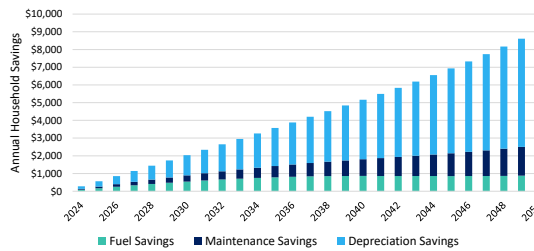
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### HOUSEHOLD SAVINGS

On average, 31.5% Per Capita VMT reduction would save each household \$4,284 a year from reduced automobile fuel, maintenance, and depreciation costs.

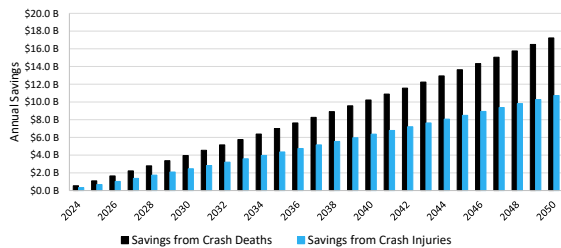
If expanded transportation options allow a family to downsize from two cars to one, household savings increase to \$12,000 a year per vehicle.

Annual Direct Household Savings from VMT Reduction



### ROAD SAFETY

Savings from Avoided Crash Injuries and Deaths



On average, 31.5% Per Capita VMT reduction would prevent 719 crash fatalities and 10,789 crash injuries per year.

By 2050, that adds up to \$372 billion in savings from avoided medical expenses, damages, and productivity losses.

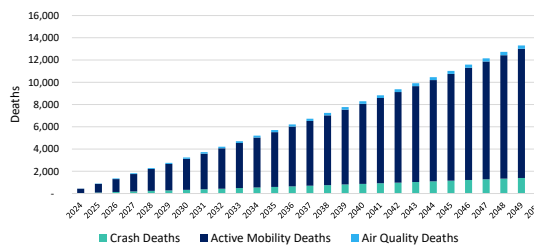
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### PUBLIC HEALTH

On average, 31.5% Per Capita VMT reduction would improve crash outcomes and alleviate mortality risks from air pollution and inactivity health outcomes, saving over 5,979 lives per year.

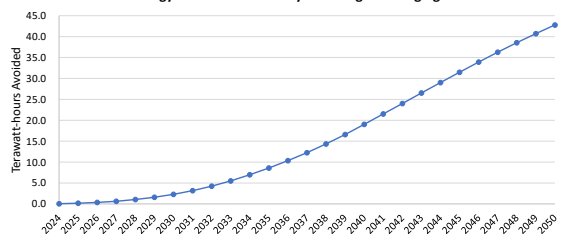
By 2050 and using the US DOT Statistical Value of Life, this would represent \$2,789 billion of avoided life loss.

Avoided Deaths from VMT Reduction



### ENERGY DEMAND

Energy Demand Avoided by Reducing EV Charging



By 2050, 31.5% Per Capita VMT reduction would lower energy demand by 432 TWh due to reduced electric vehicle charging. This would alleviate strain on the electrical grid to provide reliable service.

That's enough to completely meet New York City's current annual energy demand for 8.2 years!

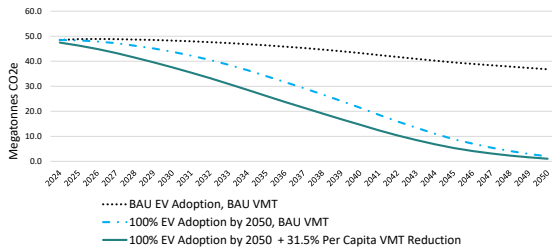
In the selected EV scenario, 100% EV Adoption by 2050, EVs will be 42% of vehicles by 2035 and will be 99% of vehicles by 2050, requiring new generation from the grid.

# Benefits of 31.5% Per Capita VMT reduction by 2050 in North Carolina, given 100% EV Adoption by 2050

## EXECUTIVE SUMMARY

### CLIMATE IMPACT

Transportation Emissions Reduction Pathways



By 2050, EV adoption + VMT Reduction would reduce GHG emissions by up to 135 megatonnes MORE than 100% EV Adoption by 2050 alone

That's the same as preventing the annual emissions of 340 natural gas-fired plants!

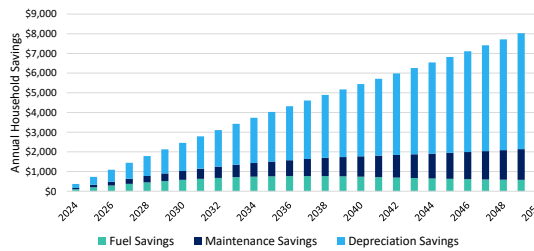
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### HOUSEHOLD SAVINGS

On average, 31.5% Per Capita VMT reduction would save each household \$4,438 a year from reduced automobile fuel, maintenance, and depreciation costs.

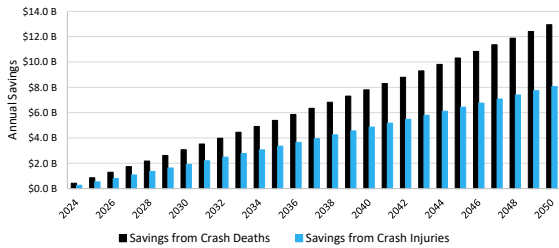
If expanded transportation options allow a family to downsize from two cars to one, household savings increase to \$12,000 a year per vehicle.

Annual Direct Household Savings from VMT Reduction



### ROAD SAFETY

Savings from Avoided Crash Injuries and Deaths



On average, 31.5% Per Capita VMT reduction would prevent 548 crash fatalities and 8,213 crash injuries per year.

By 2050, that adds up to \$283 billion in savings from avoided medical expenses, damages, and productivity losses.

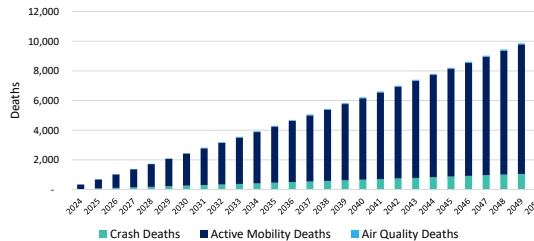
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### PUBLIC HEALTH

On average, 31.5% Per Capita VMT reduction would improve crash outcomes and alleviate mortality risks from air pollution and inactivity health outcomes, saving over 4,524 lives per year.

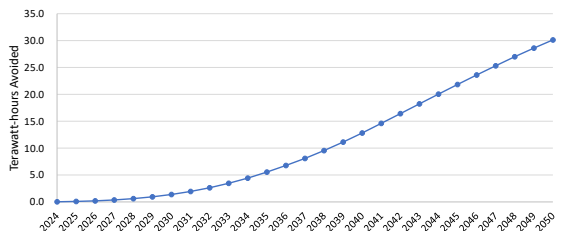
By 2050 and using the US DOT Statistical Value of Life, this would represent \$2,085 billion of avoided life loss.

Avoided Deaths from VMT Reduction



### ENERGY DEMAND

Energy Demand Avoided by Reducing EV Charging



By 2050, 31.5% Per Capita VMT reduction would lower energy demand by 296 TWh due to reduced electric vehicle charging. This would alleviate strain on the electrical grid to provide reliable service.

That's enough to completely meet New York City's current annual energy demand for 5.6 years!

In the selected EV scenario, 100% EV Adoption by 2050, EVs will be 37% of vehicles by 2035 and will be 98% of vehicles by 2050, requiring new generation from the grid.

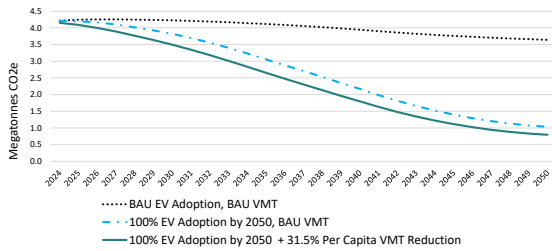


# Benefits of 31.5% Per Capita VMT reduction by 2050 in North Dakota, given 100% EV Adoption by 2050

## EXECUTIVE SUMMARY

### CLIMATE IMPACT

Transportation Emissions Reduction Pathways



By 2050, EV adoption + VMT Reduction would reduce GHG emissions by up to 8 megatonnes MORE than 100% EV Adoption by 2050 alone

That's the same as preventing the annual emissions of 20 natural gas-fired plants!

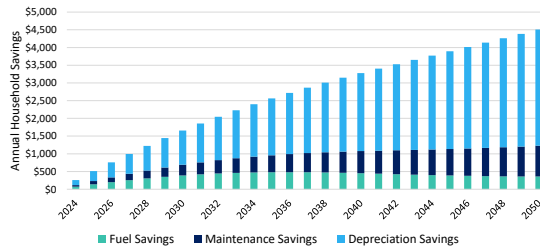
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### HOUSEHOLD SAVINGS

On average, 31.5% Per Capita VMT reduction would save each household \$2,653 a year from reduced automobile fuel, maintenance, and depreciation costs.

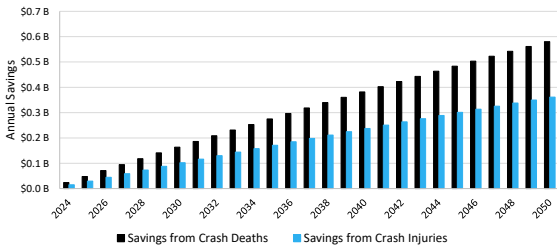
If expanded transportation options allow a family to downsize from two cars to one, household savings increase to \$12,000 a year per vehicle.

Annual Direct Household Savings from VMT Reduction



### ROAD SAFETY

Savings from Avoided Crash Injuries and Deaths



On average, 31.5% Per Capita VMT reduction would prevent 26 crash fatalities and 397 crash injuries per year.

By 2050, that adds up to \$14 billion in savings from avoided medical expenses, damages, and productivity losses.

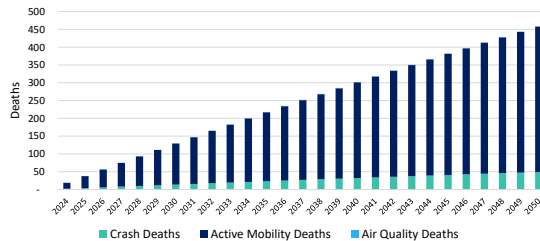
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### PUBLIC HEALTH

On average, 31.5% Per Capita VMT reduction would improve crash outcomes and alleviate mortality risks from air pollution and inactivity health outcomes, saving over 218 lives per year.

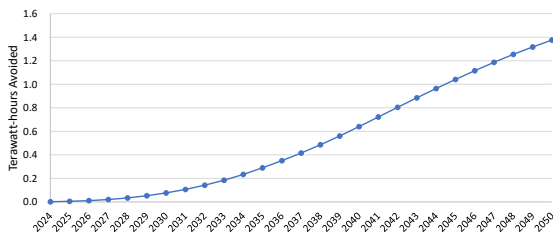
By 2050 and using the US DOT Statistical Value of Life, this would represent \$100 billion of avoided life loss.

Avoided Deaths from VMT Reduction



### ENERGY DEMAND

Energy Demand Avoided by Reducing EV Charging



By 2050, 31.5% Per Capita VMT reduction would lower energy demand by 14 TWh due to reduced electric vehicle charging. This would alleviate strain on the electrical grid to provide reliable service.

That's enough to completely meet New York City's current annual energy demand for 0.3 years!

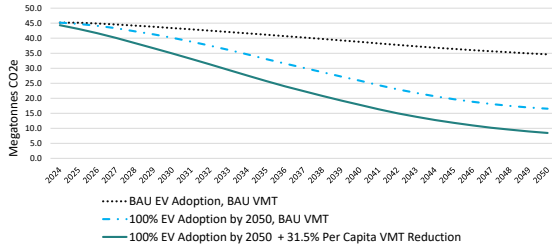
In the selected EV scenario, 100% EV Adoption by 2050, EVs will be 37% of vehicles by 2035 and will be 98% of vehicles by 2050, requiring new generation from the grid.

# Benefits of 31.5% Per Capita VMT reduction by 2050 in Ohio, given 100% EV Adoption by 2050

## EXECUTIVE SUMMARY

### CLIMATE IMPACT

Transportation Emissions Reduction Pathways



By 2050, EV adoption + VMT Reduction would reduce GHG emissions by up to 174 megatonnes MORE than 100% EV Adoption by 2050 alone

That's the same as preventing the annual emissions of 437 natural gas-fired plants!

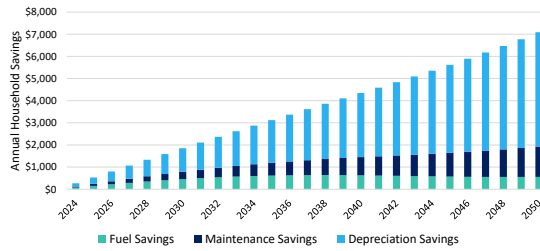
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### HOUSEHOLD SAVINGS

On average, 31.5% Per Capita VMT reduction would save each household \$3,568 a year from reduced automobile fuel, maintenance, and depreciation costs.

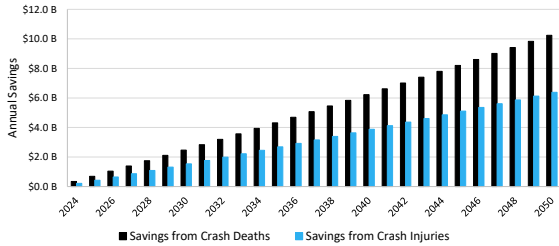
If expanded transportation options allow a family to downsize from two cars to one, household savings increase to \$12,000 a year per vehicle.

Annual Direct Household Savings from VMT Reduction



### ROAD SAFETY

Savings from Avoided Crash Injuries and Deaths



On average, 31.5% Per Capita VMT reduction would prevent 437 crash fatalities and 6,550 crash injuries per year.

By 2050, that adds up to \$226 billion in savings from avoided medical expenses, damages, and productivity losses.

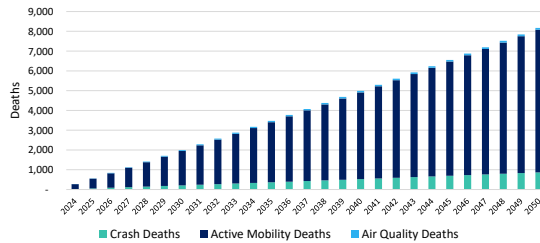
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### PUBLIC HEALTH

On average, 31.5% Per Capita VMT reduction would improve crash outcomes and alleviate mortality risks from air pollution and inactivity health outcomes, saving over 3,614 lives per year.

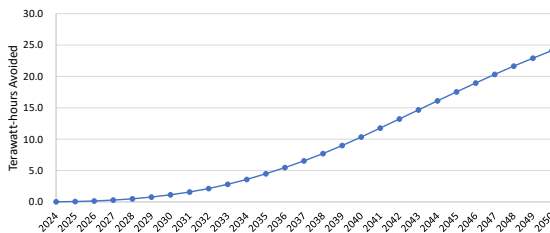
By 2050 and using the US DOT Statistical Value of Life, this would represent \$1,671 billion of avoided life loss.

Avoided Deaths from VMT Reduction



### ENERGY DEMAND

Energy Demand Avoided by Reducing EV Charging



By 2050, 31.5% Per Capita VMT reduction would lower energy demand by 238 TWh due to reduced electric vehicle charging. This would alleviate strain on the electrical grid to provide reliable service.

That's enough to completely meet New York City's current annual energy demand for 4.5 years!

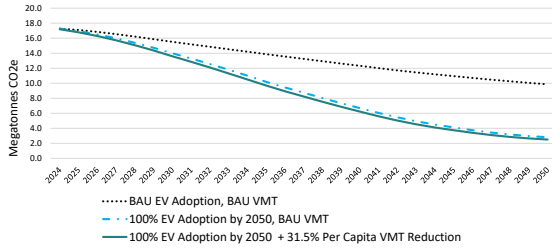
In the selected EV scenario, 100% EV Adoption by 2050, EVs will be 37% of vehicles by 2035 and will be 98% of vehicles by 2050, requiring new generation from the grid.

# Benefits of 31.5% Per Capita VMT reduction by 2050 in Oklahoma, given 100% EV Adoption by 2050

## EXECUTIVE SUMMARY

### CLIMATE IMPACT

Transportation Emissions Reduction Pathways



By 2050, EV adoption + VMT Reduction would reduce GHG emissions by up to 10 megatonnes MORE than 100% EV Adoption by 2050 alone

That's the same as preventing the annual emissions of 26 natural gas-fired plants!

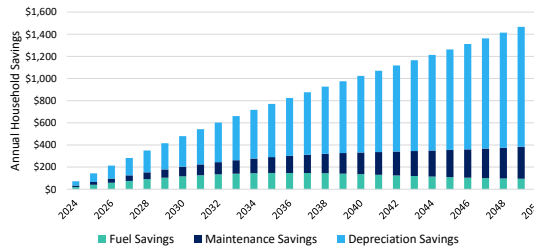
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### HOUSEHOLD SAVINGS

On average, 31.5% Per Capita VMT reduction would save each household \$833 a year from reduced automobile fuel, maintenance, and depreciation costs.

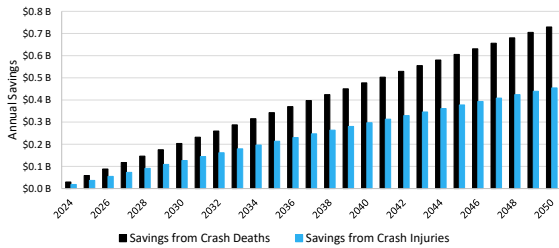
If expanded transportation options allow a family to downsize from two cars to one, household savings increase to \$12,000 a year per vehicle.

Annual Direct Household Savings from VMT Reduction



### ROAD SAFETY

Savings from Avoided Crash Injuries and Deaths



On average, 31.5% Per Capita VMT reduction would prevent 33 crash fatalities and 497 crash injuries per year.

By 2050, that adds up to \$17 billion in savings from avoided medical expenses, damages, and productivity losses.

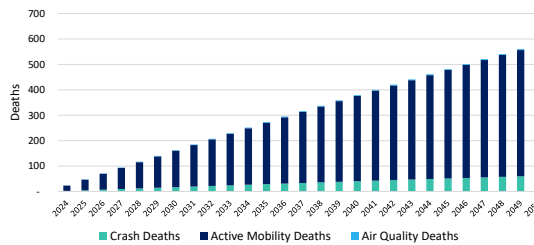
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### PUBLIC HEALTH

On average, 31.5% Per Capita VMT reduction would improve crash outcomes and alleviate mortality risks from air pollution and inactivity health outcomes, saving over 274 lives per year.

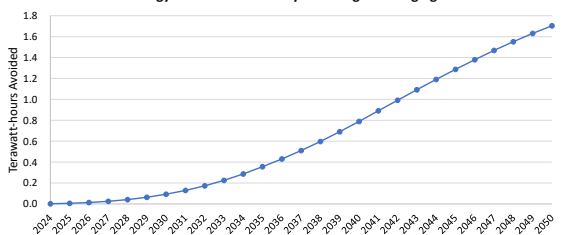
By 2050 and using the US DOT Statistical Value of Life, this would represent \$126 billion of avoided life loss.

Avoided Deaths from VMT Reduction



### ENERGY DEMAND

Energy Demand Avoided by Reducing EV Charging



By 2050, 31.5% Per Capita VMT reduction would lower energy demand by 18 TWh due to reduced electric vehicle charging. This would alleviate strain on the electrical grid to provide reliable service.

That's enough to completely meet New York City's current annual energy demand for 0.3 years!

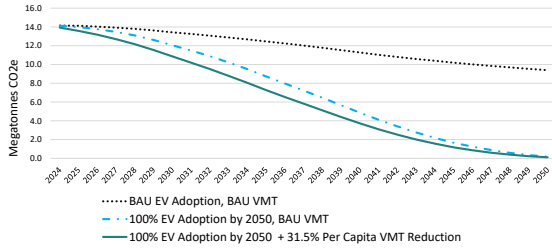
In the selected EV scenario, 100% EV Adoption by 2050, EVs will be 37% of vehicles by 2035 and will be 98% of vehicles by 2050, requiring new generation from the grid.

# Benefits of 31.5% Per Capita VMT reduction by 2050 in Oregon, given 100% EV Adoption by 2050

## EXECUTIVE SUMMARY

### CLIMATE IMPACT

Transportation Emissions Reduction Pathways



By 2050, EV adoption + VMT Reduction would reduce GHG emissions by up to 24 megatonnes MORE than 100% EV Adoption by 2050 alone

That's the same as preventing the annual emissions of 59 natural gas-fired plants!

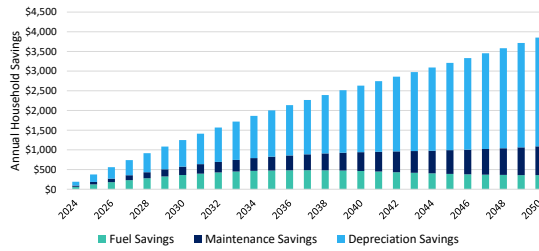
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### HOUSEHOLD SAVINGS

On average, 31.5% Per Capita VMT reduction would save each household \$2,137 a year from reduced automobile fuel, maintenance, and depreciation costs.

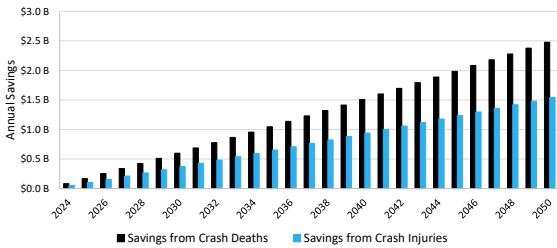
If expanded transportation options allow a family to downsize from two cars to one, household savings increase to \$12,000 a year per vehicle.

Annual Direct Household Savings from VMT Reduction



### ROAD SAFETY

Savings from Avoided Crash Injuries and Deaths



On average, 31.5% Per Capita VMT reduction would prevent 106 crash fatalities and 1,586 crash injuries per year.

By 2050, that adds up to \$55 billion in savings from avoided medical expenses, damages, and productivity losses.

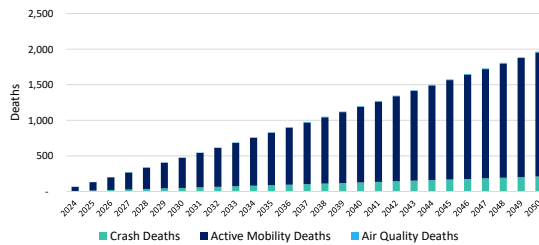
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### PUBLIC HEALTH

On average, 31.5% Per Capita VMT reduction would improve crash outcomes and alleviate mortality risks from air pollution and inactivity health outcomes, saving over 873 lives per year.

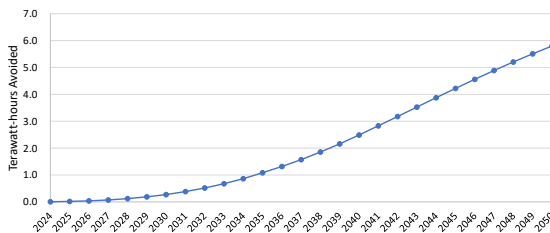
By 2050 and using the US DOT Statistical Value of Life, this would represent \$401 billion of avoided life loss.

Avoided Deaths from VMT Reduction



### ENERGY DEMAND

Energy Demand Avoided by Reducing EV Charging



By 2050, 31.5% Per Capita VMT reduction would lower energy demand by 57 TWh due to reduced electric vehicle charging. This would alleviate strain on the electrical grid to provide reliable service.

That's enough to completely meet New York City's current annual energy demand for 1.1 years!

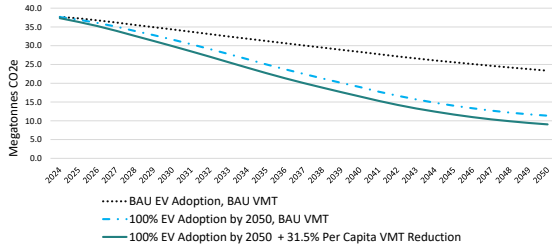
In the selected EV scenario, 100% EV Adoption by 2050, EVs will be 37% of vehicles by 2035 and will be 98% of vehicles by 2050, requiring new generation from the grid.

# Benefits of 31.5% Per Capita VMT reduction by 2050 in Pennsylvania, given 100% EV Adoption by 2050

## EXECUTIVE SUMMARY

### CLIMATE IMPACT

Transportation Emissions Reduction Pathways



By 2050, EV adoption + VMT Reduction would reduce GHG emissions by up to 54 megatonnes MORE than 100% EV Adoption by 2050 alone

That's the same as preventing the annual emissions of 136 natural gas-fired plants!

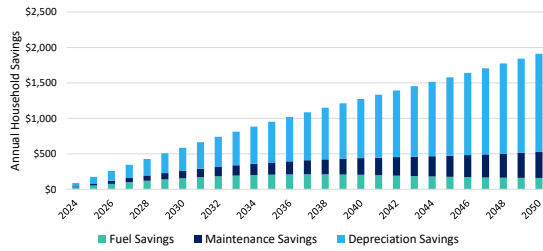
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### HOUSEHOLD SAVINGS

On average, 31.5% Per Capita VMT reduction would save each household \$1,036 a year from reduced automobile fuel, maintenance, and depreciation costs.

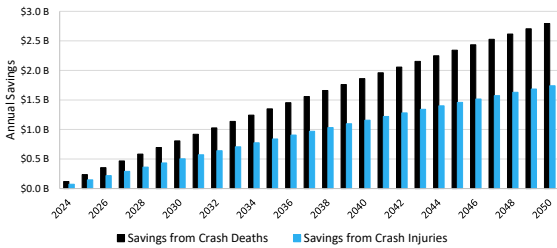
If expanded transportation options allow a family to downsize from two cars to one, household savings increase to \$12,000 a year per vehicle.

Annual Direct Household Savings from VMT Reduction



### ROAD SAFETY

Savings from Avoided Crash Injuries and Deaths



On average, 31.5% Per Capita VMT reduction would prevent 129 crash fatalities and 1,933 crash injuries per year.

By 2050, that adds up to \$67 billion in savings from avoided medical expenses, damages, and productivity losses.

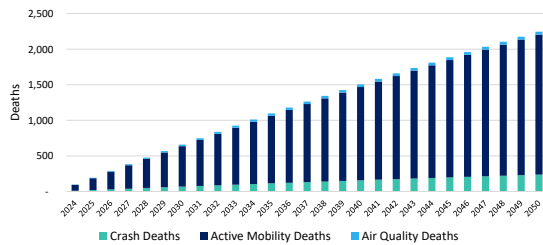
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### PUBLIC HEALTH

On average, 31.5% Per Capita VMT reduction would improve crash outcomes and alleviate mortality risks from air pollution and inactivity health outcomes, saving over 1,070 lives per year.

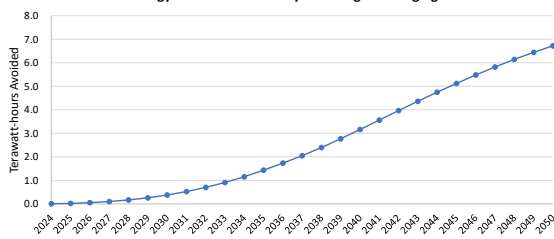
By 2050 and using the US DOT Statistical Value of Life, this would represent \$496 billion of avoided life loss.

Avoided Deaths from VMT Reduction



### ENERGY DEMAND

Energy Demand Avoided by Reducing EV Charging



By 2050, 31.5% Per Capita VMT reduction would lower energy demand by 70 TWh due to reduced electric vehicle charging. This would alleviate strain on the electrical grid to provide reliable service.

That's enough to completely meet New York City's current annual energy demand for 1.3 years!

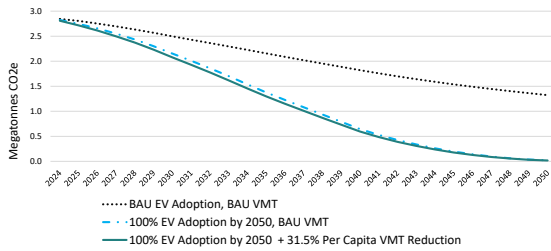
In the selected EV scenario, 100% EV Adoption by 2050, EVs will be 37% of vehicles by 2035 and will be 98% of vehicles by 2050, requiring new generation from the grid.

# Benefits of 31.5% Per Capita VMT reduction by 2050 in Rhode Island, given 100% EV Adoption by 2050

## EXECUTIVE SUMMARY

### CLIMATE IMPACT

Transportation Emissions Reduction Pathways



By 2050, EV adoption + VMT Reduction would reduce GHG emissions by up to 1 megatonnes MORE than 100% EV Adoption by 2050 alone

That's the same as preventing the annual emissions of 3 natural gas-fired plants!

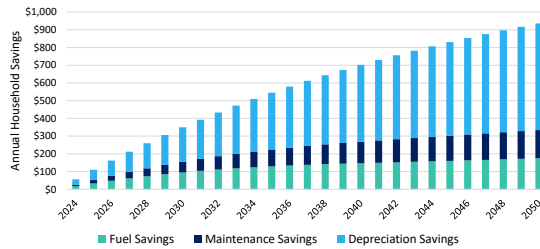
Scroll down →

### HOUSEHOLD SAVINGS

On average, 31.5% Per Capita VMT reduction would save each household \$565 a year from reduced automobile fuel, maintenance, and depreciation costs.

If expanded transportation options allow a family to downsize from two cars to one, household savings increase to \$12,000 a year per vehicle.

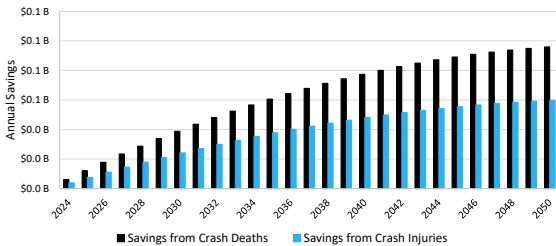
Annual Direct Household Savings from VMT Reduction



Scroll down →

### ROAD SAFETY

Savings from Avoided Crash Injuries and Deaths



On average, 31.5% Per Capita VMT reduction would prevent 5 crash fatalities and 79 crash injuries per year.

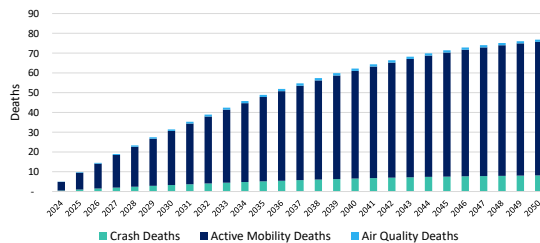
By 2050, that adds up to \$3 billion in savings from avoided medical expenses, damages, and productivity losses.

### PUBLIC HEALTH

On average, 31.5% Per Capita VMT reduction would improve crash outcomes and alleviate mortality risks from air pollution and inactivity health outcomes, saving over 43 lives per year.

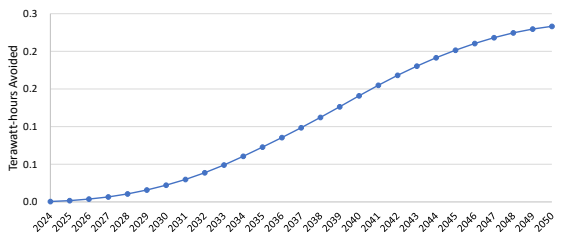
By 2050 and using the US DOT Statistical Value of Life, this would represent \$20 billion of avoided life loss.

Avoided Deaths from VMT Reduction



### ENERGY DEMAND

Energy Demand Avoided by Reducing EV Charging



By 2050, 31.5% Per Capita VMT reduction would lower energy demand by 3 TWh due to reduced electric vehicle charging. This would alleviate strain on the electrical grid to provide reliable service.

That's enough to completely meet New York City's current annual energy demand for 0.1 years!

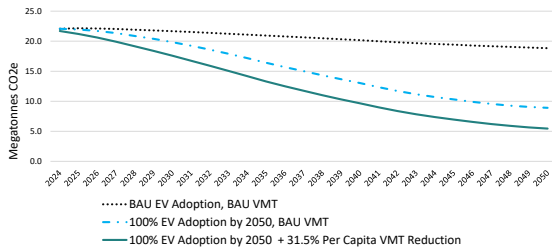
In the selected EV scenario, 100% EV Adoption by 2050, EVs will be 42% of vehicles by 2035 and will be 99% of vehicles by 2050, requiring new generation from the grid.

# Benefits of 31.5% Per Capita VMT reduction by 2050 in South Carolina, given 100% EV Adoption by 2050

## EXECUTIVE SUMMARY

### CLIMATE IMPACT

Transportation Emissions Reduction Pathways



By 2050, EV adoption + VMT Reduction would reduce GHG emissions by up to 74 megatonnes MORE than 100% EV Adoption by 2050 alone

That's the same as preventing the annual emissions of 186 natural gas-fired plants!

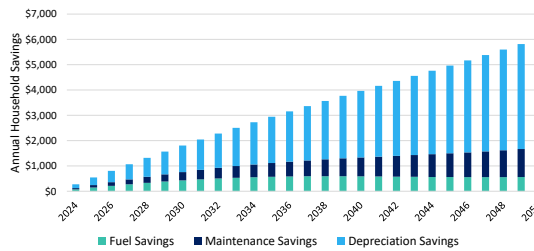
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### HOUSEHOLD SAVINGS

On average, 31.5% Per Capita VMT reduction would save each household \$3,236 a year from reduced automobile fuel, maintenance, and depreciation costs.

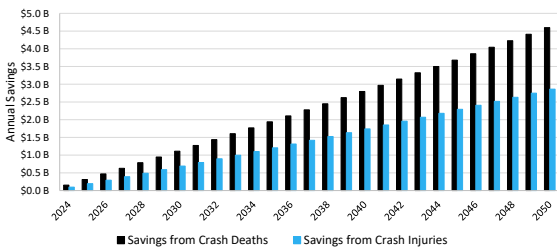
If expanded transportation options allow a family to downsize from two cars to one, household savings increase to \$12,000 a year per vehicle.

Annual Direct Household Savings from VMT Reduction



### ROAD SAFETY

Savings from Avoided Crash Injuries and Deaths



On average, 31.5% Per Capita VMT reduction would prevent 196 crash fatalities and 2,940 crash injuries per year.

By 2050, that adds up to \$101 billion in savings from avoided medical expenses, damages, and productivity losses.

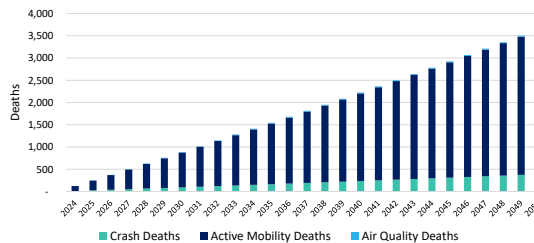
Scroll down →

### PUBLIC HEALTH

On average, 31.5% Per Capita VMT reduction would improve crash outcomes and alleviate mortality risks from air pollution and inactivity health outcomes, saving over 1,619 lives per year.

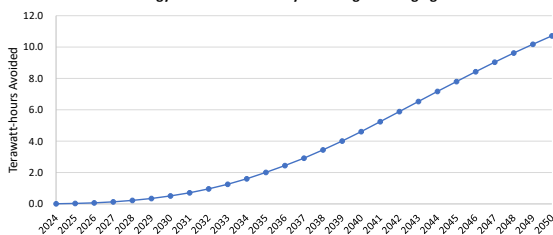
By 2050 and using the US DOT Statistical Value of Life, this would represent \$745 billion of avoided life loss.

Avoided Deaths from VMT Reduction



### ENERGY DEMAND

Energy Demand Avoided by Reducing EV Charging



By 2050, 31.5% Per Capita VMT reduction would lower energy demand by 106 TWh due to reduced electric vehicle charging. This would alleviate strain on the electrical grid to provide reliable service.

That's enough to completely meet New York City's current annual energy demand for 2 years!

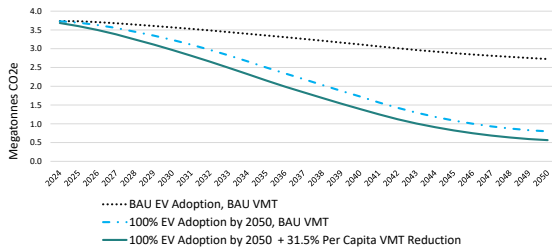
In the selected EV scenario, 100% EV Adoption by 2050, EVs will be 37% of vehicles by 2035 and will be 98% of vehicles by 2050, requiring new generation from the grid.

# Benefits of 31.5% Per Capita VMT reduction by 2050 in South Dakota, given 100% EV Adoption by 2050

## EXECUTIVE SUMMARY

### CLIMATE IMPACT

Transportation Emissions Reduction Pathways



By 2050, EV adoption + VMT Reduction would reduce GHG emissions by up to 7 megatonnes MORE than 100% EV Adoption by 2050 alone

That's the same as preventing the annual emissions of 18 natural gas-fired plants!

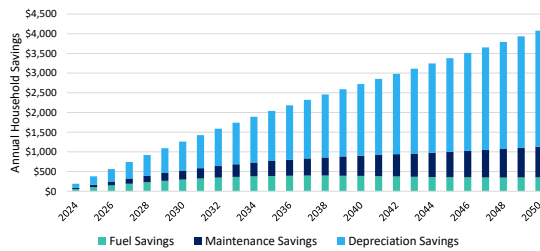
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### HOUSEHOLD SAVINGS

On average, 31.5% Per Capita VMT reduction would save each household \$2,218 a year from reduced automobile fuel, maintenance, and depreciation costs.

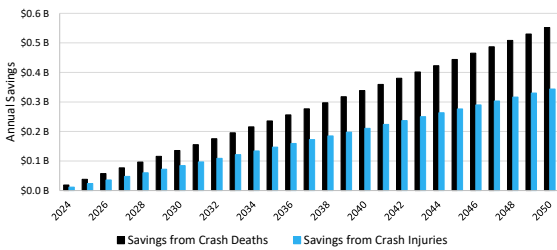
If expanded transportation options allow a family to downsize from two cars to one, household savings increase to \$12,000 a year per vehicle.

Annual Direct Household Savings from VMT Reduction



### ROAD SAFETY

Savings from Avoided Crash Injuries and Deaths



On average, 31.5% Per Capita VMT reduction would prevent 24 crash fatalities and 356 crash injuries per year.

By 2050, that adds up to \$12 billion in savings from avoided medical expenses, damages, and productivity losses.

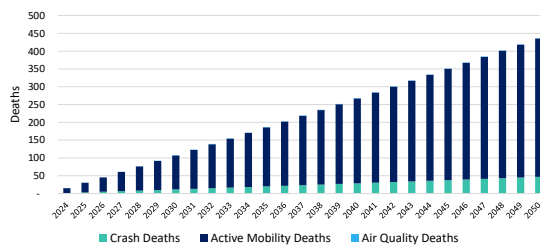
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### PUBLIC HEALTH

On average, 31.5% Per Capita VMT reduction would improve crash outcomes and alleviate mortality risks from air pollution and inactivity health outcomes, saving over 196 lives per year.

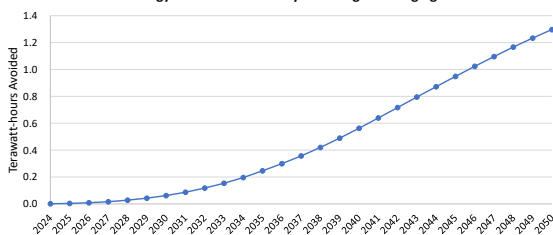
By 2050 and using the US DOT Statistical Value of Life, this would represent \$90 billion of avoided life loss.

Avoided Deaths from VMT Reduction



### ENERGY DEMAND

Energy Demand Avoided by Reducing EV Charging



By 2050, 31.5% Per Capita VMT reduction would lower energy demand by 13 TWh due to reduced electric vehicle charging. This would alleviate strain on the electrical grid to provide reliable service.

That's enough to completely meet New York City's current annual energy demand for 0.2 years!

In the selected EV scenario, 100% EV Adoption by 2050, EVs will be 37% of vehicles by 2035 and will be 98% of vehicles by 2050, requiring new generation from the grid.

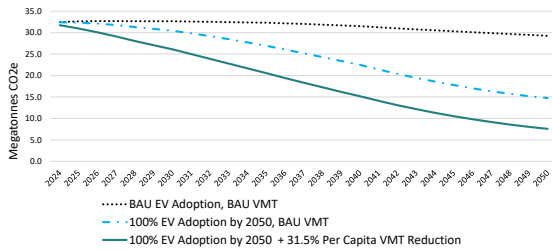


# Benefits of 31.5% Per Capita VMT reduction by 2050 in Tennessee, given 100% EV Adoption by 2050

## EXECUTIVE SUMMARY

### CLIMATE IMPACT

Transportation Emissions Reduction Pathways



By 2050, EV adoption + VMT Reduction would reduce GHG emissions by up to 154 megatonnes MORE than 100% EV Adoption by 2050 alone

That's the same as preventing the annual emissions of 387 natural gas-fired plants!

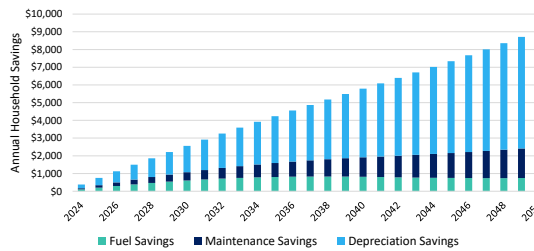
Scroll down →

### HOUSEHOLD SAVINGS

On average, 31.5% Per Capita VMT reduction would save each household \$4,734 a year from reduced automobile fuel, maintenance, and depreciation costs.

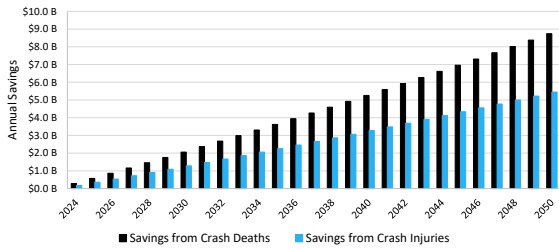
If expanded transportation options allow a family to downsize from two cars to one, household savings increase to \$12,000 a year per vehicle.

Annual Direct Household Savings from VMT Reduction



### ROAD SAFETY

Savings from Avoided Crash Injuries and Deaths



On average, 31.5% Per Capita VMT reduction would prevent 369 crash fatalities and 5,535 crash injuries per year.

By 2050, that adds up to \$191 billion in savings from avoided medical expenses, damages, and productivity losses.

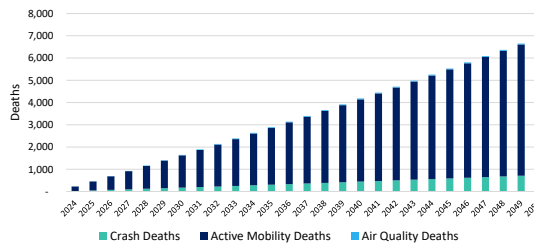
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### PUBLIC HEALTH

On average, 31.5% Per Capita VMT reduction would improve crash outcomes and alleviate mortality risks from air pollution and inactivity health outcomes, saving over 3,047 lives per year.

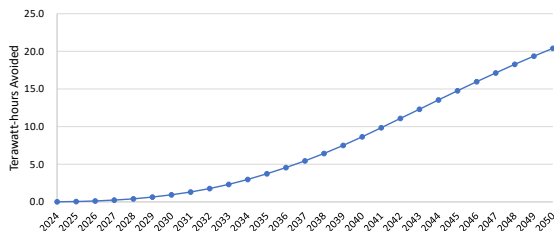
By 2050 and using the US DOT Statistical Value of Life, this would represent \$1,404 billion of avoided life loss.

Avoided Deaths from VMT Reduction



### ENERGY DEMAND

Energy Demand Avoided by Reducing EV Charging



By 2050, 31.5% Per Capita VMT reduction would lower energy demand by 200 TWh due to reduced electric vehicle charging. This would alleviate strain on the electrical grid to provide reliable service.

That's enough to completely meet New York City's current annual energy demand for 3.8 years!

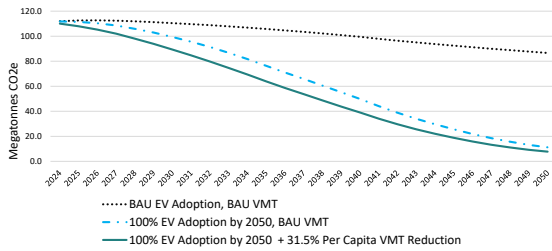
In the selected EV scenario, 100% EV Adoption by 2050, EVs will be 37% of vehicles by 2035 and will be 98% of vehicles by 2050, requiring new generation from the grid.

# Benefits of 31.5% Per Capita VMT reduction by 2050 in Texas, given 100% EV Adoption by 2050

## EXECUTIVE SUMMARY

### CLIMATE IMPACT

Transportation Emissions Reduction Pathways



By 2050, EV adoption + VMT Reduction would reduce GHG emissions by up to 227 megatonnes MORE than 100% EV Adoption by 2050 alone

That's the same as preventing the annual emissions of 571 natural gas-fired plants!

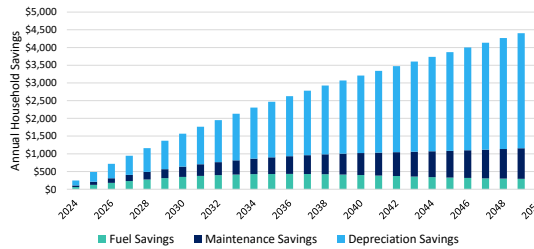
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### HOUSEHOLD SAVINGS

On average, 31.5% Per Capita VMT reduction would save each household \$2,600 a year from reduced automobile fuel, maintenance, and depreciation costs.

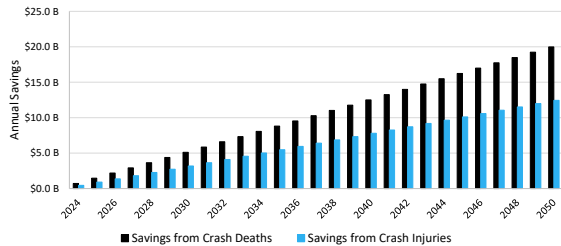
If expanded transportation options allow a family to downsize from two cars to one, household savings increase to \$12,000 a year per vehicle.

Annual Direct Household Savings from VMT Reduction



### ROAD SAFETY

Savings from Avoided Crash Injuries and Deaths



On average, 31.5% Per Capita VMT reduction would prevent 874 crash fatalities and 13,110 crash injuries per year.

By 2050, that adds up to \$452 billion in savings from avoided medical expenses, damages, and productivity losses.

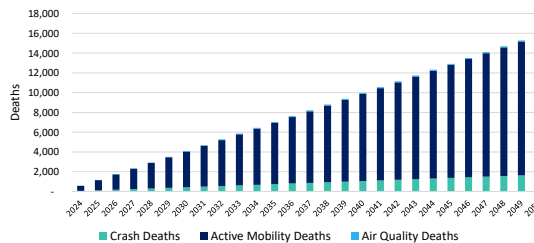
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### PUBLIC HEALTH

On average, 31.5% Per Capita VMT reduction would improve crash outcomes and alleviate mortality risks from air pollution and inactivity health outcomes, saving over 7,221 lives per year.

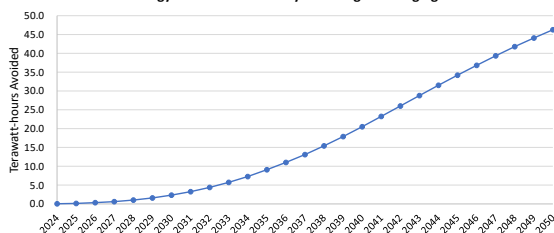
By 2050 and using the US DOT Statistical Value of Life, this would represent \$3,324 billion of avoided life loss.

Avoided Deaths from VMT Reduction



### ENERGY DEMAND

Energy Demand Avoided by Reducing EV Charging



By 2050, 31.5% Per Capita VMT reduction would lower energy demand by 466 TWh due to reduced electric vehicle charging. This would alleviate strain on the electrical grid to provide reliable service.

That's enough to completely meet New York City's current annual energy demand for 8.9 years!

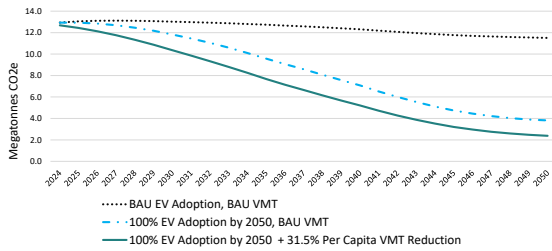
In the selected EV scenario, 100% EV Adoption by 2050, EVs will be 37% of vehicles by 2035 and will be 98% of vehicles by 2050, requiring new generation from the grid.

# Benefits of 31.5% Per Capita VMT reduction by 2050 in Utah, given 100% EV Adoption by 2050

## EXECUTIVE SUMMARY

### CLIMATE IMPACT

Transportation Emissions Reduction Pathways



By 2050, EV adoption + VMT Reduction would reduce GHG emissions by up to 40 megatonnes MORE than 100% EV Adoption by 2050 alone

That's the same as preventing the annual emissions of 101 natural gas-fired plants!

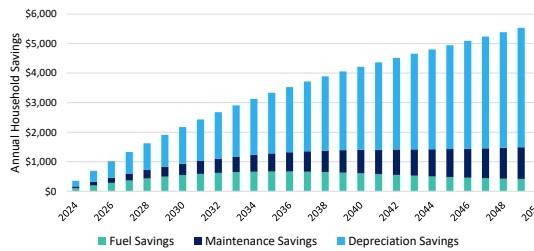
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### HOUSEHOLD SAVINGS

On average, 31.5% Per Capita VMT reduction would save each household \$3,411 a year from reduced automobile fuel, maintenance, and depreciation costs.

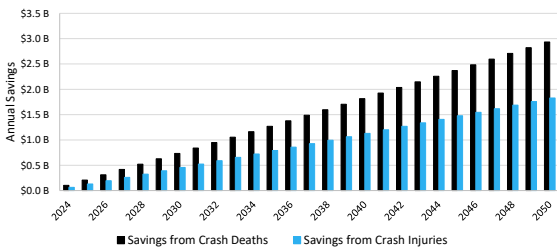
If expanded transportation options allow a family to downsize from two cars to one, household savings increase to \$12,000 a year per vehicle.

Annual Direct Household Savings from VMT Reduction



### ROAD SAFETY

Savings from Avoided Crash Injuries and Deaths



On average, 31.5% Per Capita VMT reduction would prevent 127 crash fatalities and 1,905 crash injuries per year.

By 2050, that adds up to \$66 billion in savings from avoided medical expenses, damages, and productivity losses.

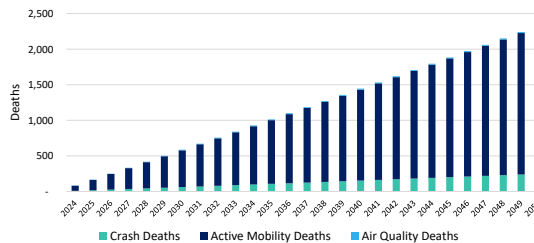
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### PUBLIC HEALTH

On average, 31.5% Per Capita VMT reduction would improve crash outcomes and alleviate mortality risks from air pollution and inactivity health outcomes, saving over 1,049 lives per year.

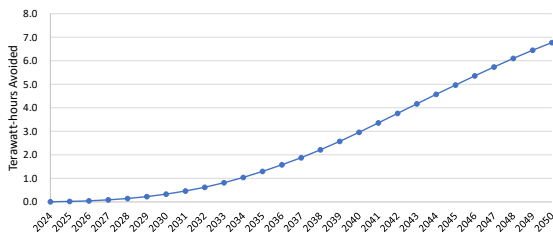
By 2050 and using the US DOT Statistical Value of Life, this would represent \$483 billion of avoided life loss.

Avoided Deaths from VMT Reduction



### ENERGY DEMAND

Energy Demand Avoided by Reducing EV Charging



By 2050, 31.5% Per Capita VMT reduction would lower energy demand by 68 TWh due to reduced electric vehicle charging. This would alleviate strain on the electrical grid to provide reliable service.

That's enough to completely meet New York City's current annual energy demand for 1.3 years!

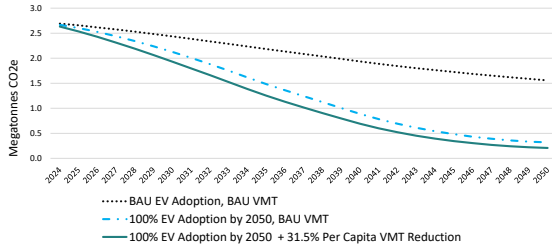
In the selected EV scenario, 100% EV Adoption by 2050, EVs will be 37% of vehicles by 2035 and will be 98% of vehicles by 2050, requiring new generation from the grid.

# Benefits of 31.5% Per Capita VMT reduction by 2050 in Vermont, given 100% EV Adoption by 2050

## EXECUTIVE SUMMARY

### CLIMATE IMPACT

Transportation Emissions Reduction Pathways



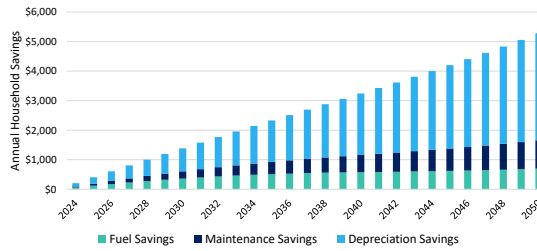
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### HOUSEHOLD SAVINGS

On average, 31.5% Per Capita VMT reduction would save each household \$2,669 a year from reduced automobile fuel, maintenance, and depreciation costs.

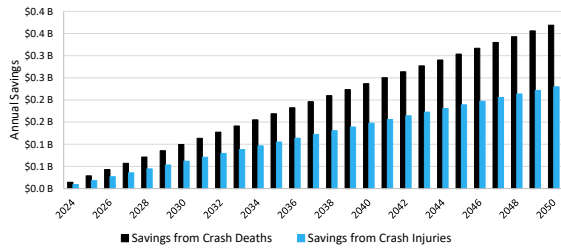
If expanded transportation options allow a family to downsize from two cars to one, household savings increase to \$12,000 a year per vehicle.

Annual Direct Household Savings from VMT Reduction



### ROAD SAFETY

Savings from Avoided Crash Injuries and Deaths



On average, 31.5% Per Capita VMT reduction would prevent 16 crash fatalities and 247 crash injuries per year.

By 2050, that adds up to \$9 billion in savings from avoided medical expenses, damages, and productivity losses.

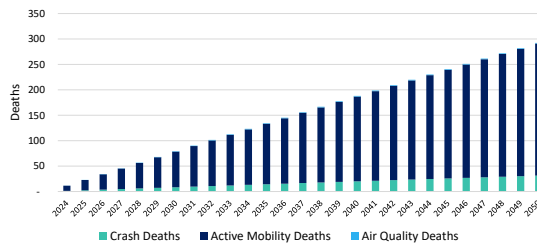
Scroll down →

### PUBLIC HEALTH

On average, 31.5% Per Capita VMT reduction would improve crash outcomes and alleviate mortality risks from air pollution and inactivity health outcomes, saving over 136 lives per year.

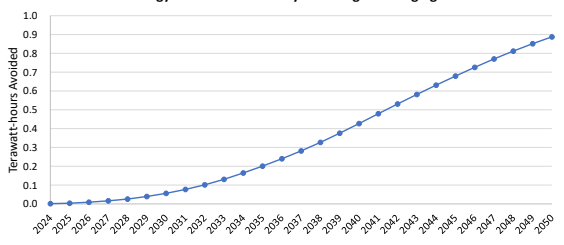
By 2050 and using the US DOT Statistical Value of Life, this would represent \$62 billion of avoided life loss.

Avoided Deaths from VMT Reduction



### ENERGY DEMAND

Energy Demand Avoided by Reducing EV Charging



By 2050, 31.5% Per Capita VMT reduction would lower energy demand by 9 TWh due to reduced electric vehicle charging. This would alleviate strain on the electrical grid to provide reliable service.

That's enough to completely meet New York City's current annual energy demand for 0.2 years!

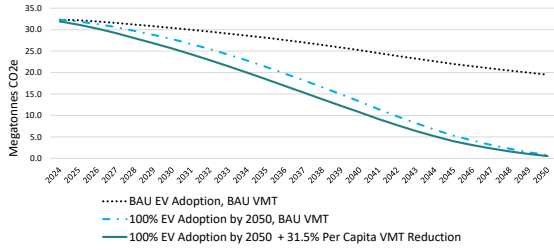
In the selected EV scenario, 100% EV Adoption by 2050, EVs will be 42% of vehicles by 2035 and will be 99% of vehicles by 2050, requiring new generation from the grid.

# Benefits of 31.5% Per Capita VMT reduction by 2050 in Virginia, given 100% EV Adoption by 2050

## EXECUTIVE SUMMARY

### CLIMATE IMPACT

Transportation Emissions Reduction Pathways



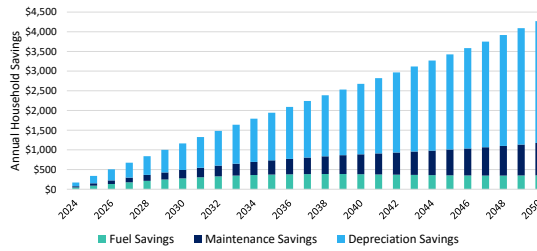
Scroll down →

### HOUSEHOLD SAVINGS

On average, 31.5% Per Capita VMT reduction would save each household \$2,193 a year from reduced automobile fuel, maintenance, and depreciation costs.

If expanded transportation options allow a family to downsize from two cars to one, household savings increase to \$12,000 a year per vehicle.

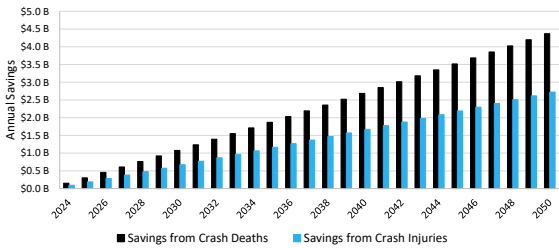
Annual Direct Household Savings from VMT Reduction



Scroll down →

### ROAD SAFETY

Savings from Avoided Crash Injuries and Deaths



On average, 31.5% Per Capita VMT reduction would prevent 188 crash fatalities and 2,819 crash injuries per year.

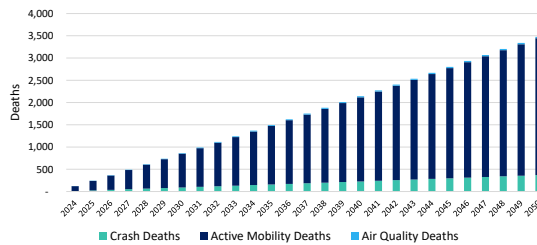
By 2050, that adds up to \$97 billion in savings from avoided medical expenses, damages, and productivity losses.

### PUBLIC HEALTH

On average, 31.5% Per Capita VMT reduction would improve crash outcomes and alleviate mortality risks from air pollution and inactivity health outcomes, saving over 1,553 lives per year.

By 2050 and using the US DOT Statistical Value of Life, this would represent \$716 billion of avoided life loss.

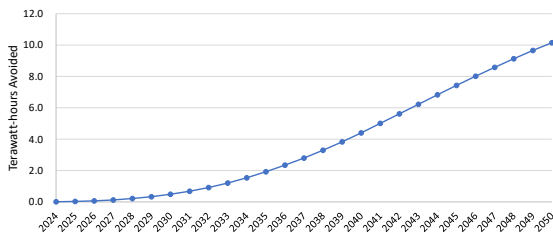
Avoided Deaths from VMT Reduction



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### ENERGY DEMAND

Energy Demand Avoided by Reducing EV Charging



By 2050, 31.5% Per Capita VMT reduction would lower energy demand by 101 TWh due to reduced electric vehicle charging. This would alleviate strain on the electrical grid to provide reliable service.

That's enough to completely meet New York City's current annual energy demand for 1.9 years!

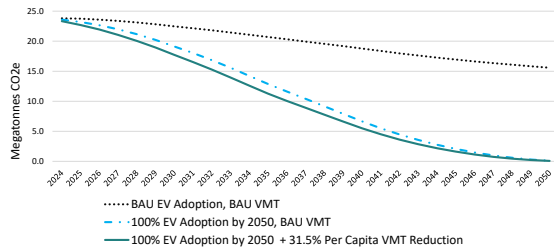
In the selected EV scenario, 100% EV Adoption by 2050, EVs will be 37% of vehicles by 2035 and will be 98% of vehicles by 2050, requiring new generation from the grid.

# Benefits of 31.5% Per Capita VMT reduction by 2050 in Washington, given 100% EV Adoption by 2050

## EXECUTIVE SUMMARY

### CLIMATE IMPACT

Transportation Emissions Reduction Pathways



By 2050, EV adoption + VMT Reduction would reduce GHG emissions by up to 25 megatonnes MORE than 100% EV Adoption by 2050 alone

That's the same as preventing the annual emissions of 64 natural gas-fired plants!

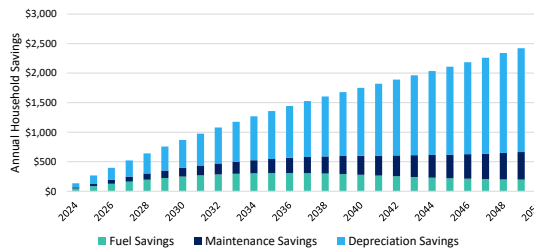
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### HOUSEHOLD SAVINGS

On average, 31.5% Per Capita VMT reduction would save each household \$1,426 a year from reduced automobile fuel, maintenance, and depreciation costs.

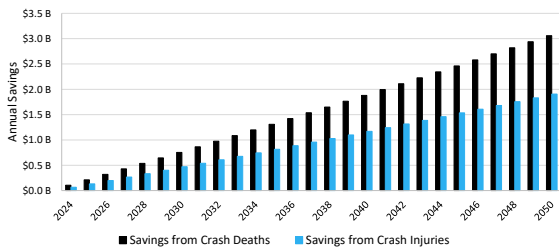
If expanded transportation options allow a family to downsize from two cars to one, household savings increase to \$12,000 a year per vehicle.

Annual Direct Household Savings from VMT Reduction



### ROAD SAFETY

Savings from Avoided Crash Injuries and Deaths



On average, 31.5% Per Capita VMT reduction would prevent 132 crash fatalities and 1,974 crash injuries per year.

By 2050, that adds up to \$68 billion in savings from avoided medical expenses, damages, and productivity losses.

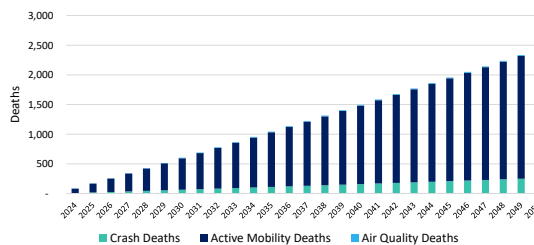
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### PUBLIC HEALTH

On average, 31.5% Per Capita VMT reduction would improve crash outcomes and alleviate mortality risks from air pollution and inactivity health outcomes, saving over 1,087 lives per year.

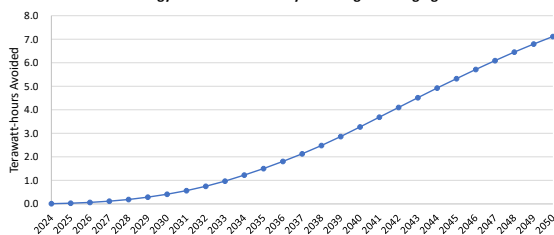
By 2050 and using the US DOT Statistical Value of Life, this would represent \$500 billion of avoided life loss.

Avoided Deaths from VMT Reduction



### ENERGY DEMAND

Energy Demand Avoided by Reducing EV Charging



By 2050, 31.5% Per Capita VMT reduction would lower energy demand by 73 TWh due to reduced electric vehicle charging. This would alleviate strain on the electrical grid to provide reliable service.

That's enough to completely meet New York City's current annual energy demand for 1.4 years!

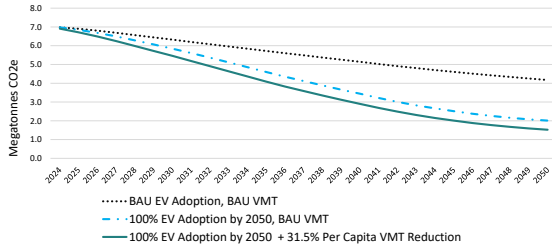
In the selected EV scenario, 100% EV Adoption by 2050, EVs will be 42% of vehicles by 2035 and will be 99% of vehicles by 2050, requiring new generation from the grid.

# Benefits of 31.5% Per Capita VMT reduction by 2050 in West Virginia, given 100% EV Adoption by 2050

## EXECUTIVE SUMMARY

### CLIMATE IMPACT

Transportation Emissions Reduction Pathways



By 2050, EV adoption + VMT Reduction would reduce GHG emissions by up to 12 megatonnes MORE than 100% EV Adoption by 2050 alone

That's the same as preventing the annual emissions of 29 natural gas-fired plants!

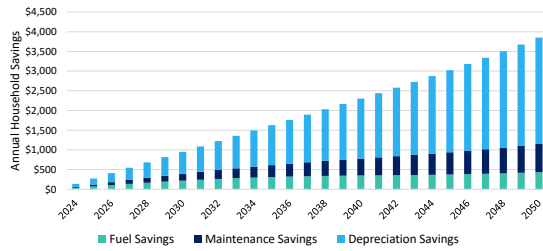
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### HOUSEHOLD SAVINGS

On average, 31.5% Per Capita VMT reduction would save each household \$1,898 a year from reduced automobile fuel, maintenance, and depreciation costs.

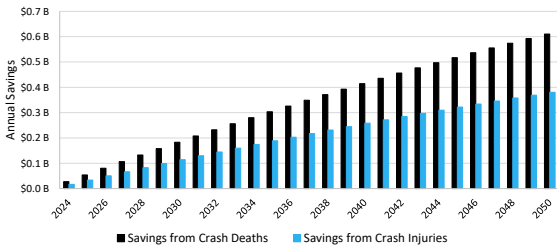
If expanded transportation options allow a family to downsize from two cars to one, household savings increase to \$12,000 a year per vehicle.

Annual Direct Household Savings from VMT Reduction



### ROAD SAFETY

Savings from Avoided Crash Injuries and Deaths



On average, 31.5% Per Capita VMT reduction would prevent 29 crash fatalities and 430 crash injuries per year.

By 2050, that adds up to \$15 billion in savings from avoided medical expenses, damages, and productivity losses.

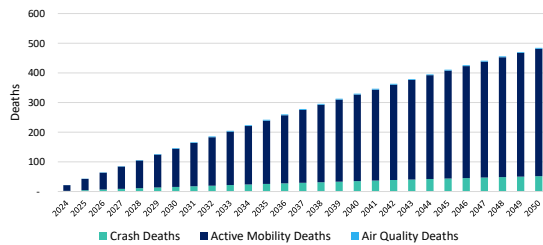
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### PUBLIC HEALTH

On average, 31.5% Per Capita VMT reduction would improve crash outcomes and alleviate mortality risks from air pollution and inactivity health outcomes, saving over 237 lives per year.

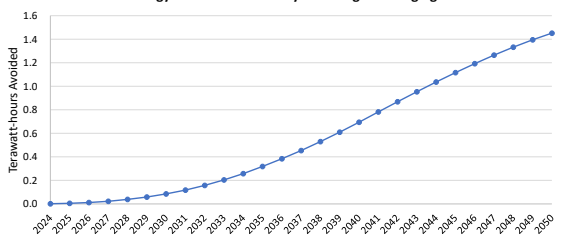
By 2050 and using the US DOT Statistical Value of Life, this would represent \$109 billion of avoided life loss.

Avoided Deaths from VMT Reduction



### ENERGY DEMAND

Energy Demand Avoided by Reducing EV Charging



By 2050, 31.5% Per Capita VMT reduction would lower energy demand by 15 TWh due to reduced electric vehicle charging. This would alleviate strain on the electrical grid to provide reliable service.

That's enough to completely meet New York City's current annual energy demand for 0.3 years!

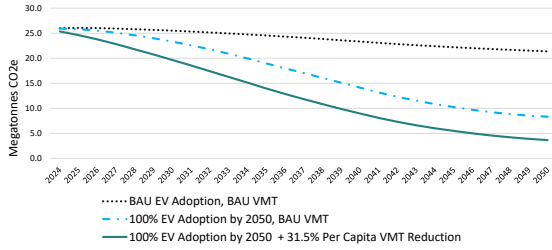
In the selected EV scenario, 100% EV Adoption by 2050, EVs will be 37% of vehicles by 2035 and will be 98% of vehicles by 2050, requiring new generation from the grid.

# Benefits of 31.5% Per Capita VMT reduction by 2050 in Wisconsin, given 100% EV Adoption by 2050

## EXECUTIVE SUMMARY

### CLIMATE IMPACT

Transportation Emissions Reduction Pathways



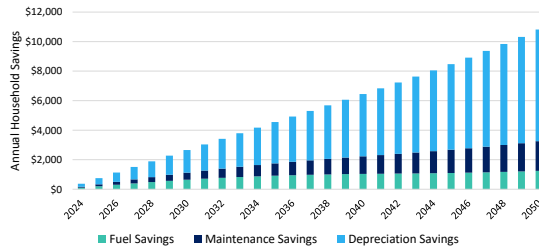
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### HOUSEHOLD SAVINGS

On average, 31.5% Per Capita VMT reduction would save each household \$5,313 a year from reduced automobile fuel, maintenance, and depreciation costs.

If expanded transportation options allow a family to downsize from two cars to one, household savings increase to \$12,000 a year per vehicle.

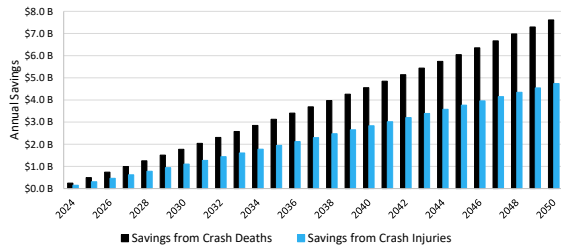
Annual Direct Household Savings from VMT Reduction



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### ROAD SAFETY

Savings from Avoided Crash Injuries and Deaths



On average, 31.5% Per Capita VMT reduction would prevent 320 crash fatalities and 4,799 crash injuries per year.

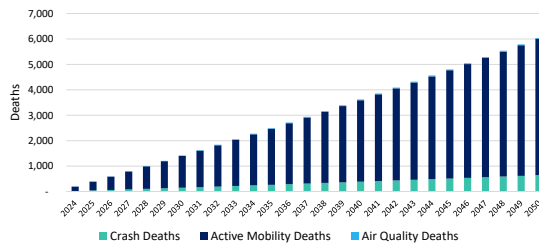
By 2050, that adds up to \$165 billion in savings from avoided medical expenses, damages, and productivity losses.

### PUBLIC HEALTH

On average, 31.5% Per Capita VMT reduction would improve crash outcomes and alleviate mortality risks from air pollution and inactivity health outcomes, saving over 2,642 lives per year.

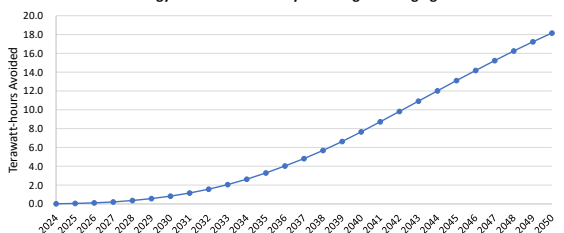
By 2050 and using the US DOT Statistical Value of Life, this would represent \$1,217 billion of avoided life loss.

Avoided Deaths from VMT Reduction



### ENERGY DEMAND

Energy Demand Avoided by Reducing EV Charging



By 2050, 31.5% Per Capita VMT reduction would lower energy demand by 177 TWh due to reduced electric vehicle charging. This would alleviate strain on the electrical grid to provide reliable service.

That's enough to completely meet New York City's current annual energy demand for 3.4 years!

In the selected EV scenario, 100% EV Adoption by 2050, EVs will be 37% of vehicles by 2035 and will be 98% of vehicles by 2050, requiring new generation from the grid.

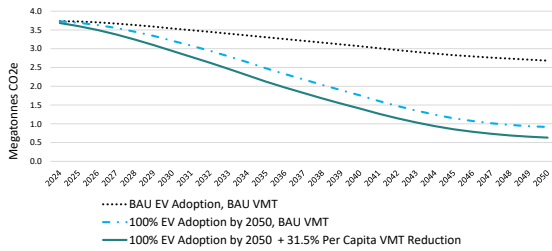


# Benefits of 31.5% Per Capita VMT reduction by 2050 in Wyoming, given 100% EV Adoption by 2050

## EXECUTIVE SUMMARY

### CLIMATE IMPACT

Transportation Emissions Reduction Pathways



By 2050, EV adoption + VMT Reduction would reduce GHG emissions by up to 8 megatonnes MORE than 100% EV Adoption by 2050 alone

That's the same as preventing the annual emissions of 19 natural gas-fired plants!

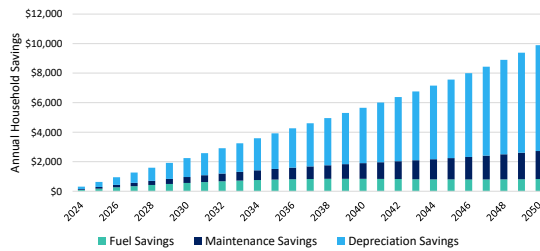
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### HOUSEHOLD SAVINGS

On average, 31.5% Per Capita VMT reduction would save each household \$4,686 a year from reduced automobile fuel, maintenance, and depreciation costs.

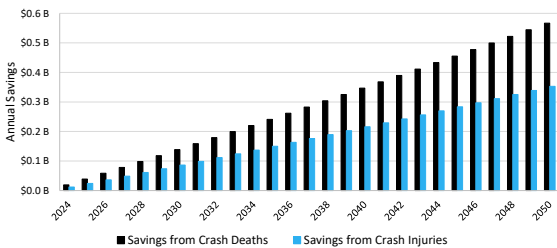
If expanded transportation options allow a family to downsize from two cars to one, household savings increase to \$12,000 a year per vehicle.

Annual Direct Household Savings from VMT Reduction



### ROAD SAFETY

Savings from Avoided Crash Injuries and Deaths



On average, 31.5% Per Capita VMT reduction would prevent 24 crash fatalities and 364 crash injuries per year.

By 2050, that adds up to \$13 billion in savings from avoided medical expenses, damages, and productivity losses.

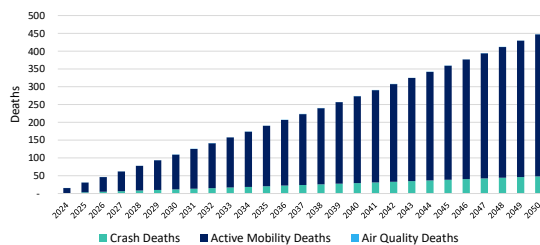
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### PUBLIC HEALTH

On average, 31.5% Per Capita VMT reduction would improve crash outcomes and alleviate mortality risks from air pollution and inactivity health outcomes, saving over 200 lives per year.

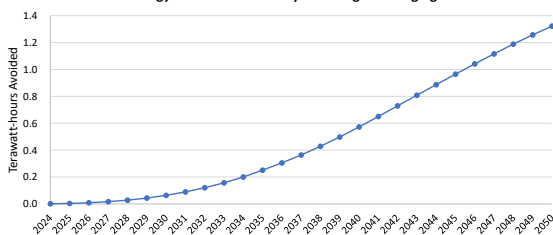
By 2050 and using the US DOT Statistical Value of Life, this would represent \$92 billion of avoided life loss.

Avoided Deaths from VMT Reduction



### ENERGY DEMAND

Energy Demand Avoided by Reducing EV Charging



By 2050, 31.5% Per Capita VMT reduction would lower energy demand by 13 TWh due to reduced electric vehicle charging. This would alleviate strain on the electrical grid to provide reliable service.

That's enough to completely meet New York City's current annual energy demand for 0.2 years!

In the selected EV scenario, 100% EV Adoption by 2050, EVs will be 37% of vehicles by 2035 and will be 98% of vehicles by 2050, requiring new generation from the grid.