



Catalog of State Actions Transportation and Land Use Technical Work Group

A catalog of state-level, GHG-reducing actions and policy options based on actions undertaken or considered by state, local and private actors.

This document contains the notional ratings results. The table below is the key that was used during the ratings process.

Key to Rankings of Options in the Following Tables

Potential GHG Emission Reductions ¹	Potential Cost or Cost Savings ^{1,2}
High (H): At least 1.0 million metric tons of carbon dioxide equivalent (MMtCO ₂ e) per year by 2020	High (H): \$50 per metric ton of carbon dioxide equivalent (tCO ₂ e) or above
Medium (M): From 0.1 to 1.0 MMtCO ₂ e per year by 2020	Medium (M): \$5–50/tCO ₂ e
Low (L): Less than 0.1 MMtCO ₂ e per year by 2020, or 1.0 MMtCO ₂ e by 2050	Low (L): Less than \$5/tCO ₂ e
Uncertain (U): Not able to estimate at this time	Negative (Neg): Net cost savings
	Uncertain (U): Not able to estimate at this time
¹ Several measures may overlap in terms of emission reductions and/or cost impacts. Estimates assume measures would be implemented independently from other measures.	
² Costs are denoted by a positive number. Cost savings (i.e., “negative costs”) are denoted by a negative number.	

INSTRUCTIONS FOR BALLOTING: Mark an “X” in the “Priority for Analysis” for your top ten (10) choices. The options will be prioritized as follows based on the results of the balloting. Please mark any additional comments/bundling suggestions below your votes in the “Priority for Analysis” column.

Definition of “Priorities for Analysis”:

- **High:** High-priority options will be analyzed first.
- **Medium:** Medium-priority options will be analyzed next, time and resources permitting.
- **Low:** Low-priority options will be analyzed last, time and resources permitting.

Catalog of State Actions Transportation and Land Use (TLU) Technical Work Group

Option No.	GHG Reduction Policy Option	Potential GHG Emission Reductions	Cost per Ton	Externalities, Feasibility Considerations	Priority for Analysis	Notes/Related Actions
TLU-1	PASSENGER VEHICLES					
TLU-1.1	PASSENGER VEHICLE TECHNOLOGY					
1.1.1	New Vehicle Standards: Tailpipe GHG and Fuel Economy”	H H: 6 M: 1 L: 0 U: 0	L H: 1 M: 1 L: 5 N: 0 U: 0			<ul style="list-style-type: none"> • Adopt CA GHG & fuel economy standards • Federal must lead this effort • New (“New” = Not included in MARC’s Long-Range Transportation Plan, MARC’s Air Quality Action Plan, KCMO Climate Protection plan, or MARC’s Creating Quality Places Principles)
1.1.2	ZEV/LEV II Implementation	H H: 6 M: 1 L: 0 U: 0	M H: 2 M: 1 L: 4 N: 0 U: 0			<ul style="list-style-type: none"> • Combine with 1.1.1 • Federal-National industry action • New

Option No.	GHG Reduction Policy Option	Potential GHG Emission Reductions	Cost per Ton	Externalities, Feasibility Considerations	Priority for Analysis	Notes/Related Actions
1.1.3	Research and Development and Bringing to Market Lower-GHG Vehicle Technologies	M H: 3 M: 3 L: 1 U: 0	M H: 3 M: 1 L: 1 N: 0 U: 2			<ul style="list-style-type: none"> •Fuel costs leading us in this direction •New
1.1.4	Vehicle Add-On Technologies (e.g., Low-Friction Oil and Fuel Efficient Tires)	M H: 1 M: 3 L: 3 U: 0	L H: 0 M: 1 L: 4 N: 0 U: 1			<ul style="list-style-type: none"> •Combine with 1.2.2 •New
1.1.5	Support Stronger Federal CAFE Standards	H H: 6 M: 1 L: 0 U: 0	L H: 1 M: 1 L: 5 N: 0 U: 0			<ul style="list-style-type: none"> •This is within federal jurisdiction. •If congress adopts •KCMO Climate Protection Plan
1.1.6	Programs for GHG Emissions: Consumer Information for Newly Purchased Cars	L H: 1 M: 0 L: 5 U: 1	L H: 0 M: 0 L: 7 N: 0 U: 0			<ul style="list-style-type: none"> •New

Option No.	GHG Reduction Policy Option	Potential GHG Emission Reductions	Cost per Ton	Externalities, Feasibility Considerations	Priority for Analysis	Notes/Related Actions
1.1.7	Develop Infrastructure for Plug-In Vehicles	M H: 1 M: 5 L: 1 U: 0	H H: 3 M: 2 L: 0 N: 0 U: 2			<ul style="list-style-type: none"> •Federal action-Utilities cooperation •KCMO Climate Protection Plan (Dependent on electricity generation strategy)
TLU-1.2	•PASSENGER VEHICLE OPERATIONS					
1.2.1	Enforce Speed Limits	M H: 4 M: 2 L: 1 U: 0	L/N H: 0 M: 2 L: 2 N: 3 U: 0			<ul style="list-style-type: none"> •Reduces death or injury and fuel cost savings •New – Same as 3.2.2
1.2.2	Vehicle Maintenance and Driver Training	M H: 0 M: 4 L: 2 U: 0	L H: 0 M: 1 L: 4 N: 1 U: 0			<ul style="list-style-type: none"> •Fuel costs savings
1.2.3	Improved Transportation System Management (e.g., Traffic Signal Synchronization and Intelligent Transportation Systems)	M H: 2 M: 5 L: 0 U: 0	M H: 2 M: 2 L: 2 N: 0 U: 1			<ul style="list-style-type: none"> •KCMO Climate Protection Plan. Transportation Outlook 2030

Option No.	GHG Reduction Policy Option	Potential GHG Emission Reductions	Cost per Ton	Externalities, Feasibility Considerations	Priority for Analysis	Notes/Related Actions
1.2.4	Driver Information Technologies, Including Pay-As-You-Drive Insurance	L H: 0 M: 1 L: 4 U: 1	L H: 0 M: 0 L: 5 N: 0 U: 1			<ul style="list-style-type: none"> •Provides feedback on driving habits. •Combine with 1.2.2
1.2.5	Tune-Up Services, Including Tire Pressure Checks	M H: 0 M: 5 L: 1 U: 1	L H: 0 M: 1 L: 5 N: 0 U: 1			<ul style="list-style-type: none"> •Combine with 1.2.2 •Combine with 1.2.2 •MARC Air Quality Action Plan
1.2.6	Passenger Vehicle Idling Restrictions	M H: 1 M: 3 L: 3 U: 0	L H: 0 M: 1 L: 4 N: 1 U: 1			<ul style="list-style-type: none"> •Takes education and marketing •New
1.2.7	School Education Programs	L H: 0 M: 2 L: 3 U: 1	L H: 0 M: 0 L: 6 N: 0 U: 0			<ul style="list-style-type: none"> •Combine with 1.2.6 •Needs to be included in the school program

Option No.	GHG Reduction Policy Option	Potential GHG Emission Reductions	Cost per Ton	Externalities, Feasibility Considerations	Priority for Analysis	Notes/Related Actions
1.2.8	Public Education	M H: 1 M: 1 L: 4 U: 1	M H: 1 M: 1 L: 4 N: 0 U: 1			<ul style="list-style-type: none"> •KCMO Climate Protection Plan
1.2.9	Lower Speed Limits	M H: 2 M: 5 L: 0 U: 0	L H: 0 M: 1 L: 5 N: 1 U: 0			<ul style="list-style-type: none"> •Very unpopular •New
1.2.10	Reduce Bottlenecks Through Infrastructure Improvements	M H: 0 M: 5 L: 2 U: 0	M H: 4 M: 0 L: 1 N: 0 U: 2			<ul style="list-style-type: none"> •Transportation Outlook 2030, although plan language is not specific to GHG reductions

Option No.	GHG Reduction Policy Option	Potential GHG Emission Reductions	Cost per Ton	Externalities, Feasibility Considerations	Priority for Analysis	Notes/Related Actions
TLU-1.3	●PASSENGER VEHICLE INCENTIVES AND DISINCENTIVES					
1.3.1	Procurement of Efficient Fleet Vehicles	M H: 0 M: 4 L: 2 U: 0	M H: 2 M: 0 L: 3 N: 0 U: 1			<ul style="list-style-type: none"> •Includes government and large private-sector fleets. •Some government sectors are looking into this area
1.3.2	Feebates (State-Specific or Regional)	M H: 1 M: 2 L: 1 U: 2	M H: 1 M: 1 L: 2 N: 0 U: 2			
1.3.3	CO ₂ -Based Registration Fees and Vehicle Licensing Fees	M H: 1 M: 1 L: 3 U: 1	M H: 1 M: 1 L: 3 N: 0 U: 1			<ul style="list-style-type: none"> •Combine with 1.3.2 •Not certain this would be popular without giving the public a chance for some add-on mechanism or incentives to scrap-trade in for more fuel efficient measures
1.3.4	Tax Credits for Efficient Vehicles	M H: 2 M: 4 L: 1 U: 0	M H: 2 M: 1 L: 3 N: 0			<ul style="list-style-type: none"> •Kansas House Bill 2222 for taxable years 2007 and 2008 there is a tax credit of \$2,500 for the purchase of a hybrid

Option No.	GHG Reduction Policy Option	Potential GHG Emission Reductions	Cost per Ton	Externalities, Feasibility Considerations	Priority for Analysis	Notes/Related Actions
			U: 1			<p>motor vehicle.</p> <ul style="list-style-type: none"> • Kansas Statute 79-32,201 Tax Credit for Alternative-Fueled Motor Vehicle Property Expenditures: • 40% of the cost of alternative-fueled motor vehicle up to \$2,400 for a weight of less than 10,000 lbs, \$4,000 for a heavy duty vehicle with a weight between 10,000 – 26,000 lbs., \$40,000 for a motor vehicle with a weight greater than 26,000 lbs. • for any qualified alternative-fuel fueling station 40% of the total amount expended for each qualified alternative-fuel fueling station, but not to exceed \$160,000 before January 1, 2009 or \$100,000 after January 1, 2009 • if the other tax credits above aren't taken there

Option No.	GHG Reduction Policy Option	Potential GHG Emission Reductions	Cost per Ton	Externalities, Feasibility Considerations	Priority for Analysis	Notes/Related Actions
						<p>is the option of a credit in the amount of the lesser of %% of the cost of the vehicle or \$750 for a vehicle equipped with an alternative fuel system</p> <ul style="list-style-type: none"> •Senate Bill 140 provides for up to a \$750 tax credit for an alternative-fueled motor vehicle or fueling station (goes until January 1, 2010) •Combine with 1.3.2 •Proven method to foster hybrid purchases •New
1.3.5	Vehicle Scrappage	<p>M H: 1 M: 2 L: 3 U: 0</p>	<p>M H: 3 M/H: 1 M: 1 L: 1 N: 0 U: 0</p>			<ul style="list-style-type: none"> •This is an incentive to replace low-fuel-economy vehicles sooner. •Depends on the participation I suspect but worth implementing for the results

Option No.	GHG Reduction Policy Option	Potential GHG Emission Reductions	Cost per Ton	Externalities, Feasibility Considerations	Priority for Analysis	Notes/Related Actions
1.3.6	Emission-Based Tolling (Discounts for Clean Vehicles)	L H: 0 M: 1 L: 5 U: 1	M H: 2 M: 0 L: 3 N: 0 U: 2			<ul style="list-style-type: none"> •This is an incentive to replace light-duty vehicles sooner. •New
1.3.7	Establish a Carbon Emission Tax Modeled After the Clean Air Discount Bill	M H: 2 M: 0 L: 3 U: 2	M H: 1 M/H: 1 M: 1 L: 3 N: 0 U: 1			<ul style="list-style-type: none"> •Combine with 1.3.2 •New
1.3.8	Establish a Fleet Replacement Grant Program	L H: 0 M: 1 L: 4 U: 1	M H: 3 M: 0 L: 2 N: 0 U: 1			<ul style="list-style-type: none"> •Combine with 1.3.5 •Good idea
1.3.9	Provide a Tax Incentive for Adult Bicycles	L H: 1 M: 0 L: 6 U: 0	L H: 1 M: 1 L: 4 N: 1 U: 0			<ul style="list-style-type: none"> •Should be considered for Kansas and should be cheap •New

Option No.	GHG Reduction Policy Option	Potential GHG Emission Reductions	Cost per Ton	Externalities, Feasibility Considerations	Priority for Analysis	Notes/Related Actions
1.3.10	Support Alternative Travel in the Advertising Mainstream	M H: 2 M: 1 L: 4 U: 0	L H: 1 M: 1 L: 3 N: 1 U: 1			<ul style="list-style-type: none"> • Feasible alternatives for Kansas needs to be established for this one • New
TLU-1.4	• FUEL RELATED MEASURES					
1.4.1	Low-GHG Fuel Standard (e.g. renewable)	H H: 4 M: 3 L: 0 U: 0	H H: 2 M: 2 L: 0 N: 0 U: 3			<ul style="list-style-type: none"> • Also known as a low-carbon fuel standard. • Federal must lead • New
1.4.2	Low-GHG for State Fleets (e.g., CNG, Biodiesel)	M H: 1 M: 4 M/L: 1 L: 1 U: 0	M H: 2 M: 3 L: 1 N: 0 U: 1			<ul style="list-style-type: none"> • New
1.4.3	Biodiesel Expansion (Biodiesel, CNG, LPG, Cellulosic Ethanol)	M H: 2 M: 4 L: 1 U: 0	H H: 3 M: 2 L: 0 N: 0 U: 2			<ul style="list-style-type: none"> • New

Option No.	GHG Reduction Policy Option	Potential GHG Emission Reductions	Cost per Ton	Externalities, Feasibility Considerations	Priority for Analysis	Notes/Related Actions
1.4.4	Alternative-Fuel Infrastructure Development	M H: 2 M: 4 L: 1 U: 0	H H: 3 M: 3 L: 0 N: 0 U: 1			<ul style="list-style-type: none"> •This includes liquefied natural gas •Will probably take Federal action as well •New
1.4.5	Fund Research and Development for a Full Range of Renewable Transportation Fuels	M H: 2 M: 1 L: 2 U: 2	H H: 3 M/H: 1 M: 1 L: 0 N: 0 U: 2			<ul style="list-style-type: none"> •New
1.4.6	Develop Life-Cycle Analyses of Transportation Fuels to Determine the Appropriate Pathways to Sustainably Protect Natural Resources	L H: 0 M: 1 L: 4 U: 2	M H: 1 M: 0 L: 2 N: 0 U: 4			<ul style="list-style-type: none"> •New
1.4.7	Hydrogen Fuels	H H: 4 M: 1 L: 1 U: 1	H H: 5 M: 0 L: 0 N: 0 U: 2			<ul style="list-style-type: none"> •Federal Research is okay, not state – H2 is very difficult to store •New

Option No.	GHG Reduction Policy Option	Potential GHG Emission Reductions	Cost per Ton	Externalities, Feasibility Considerations	Priority for Analysis	Notes/Related Actions
1.4.8	Fuel (e.g. ethanol) Blending Requirement	M H: 0 M: 3 L: 2 U: 2	M H: 1 M: 2 L: 2 N: 0 U: 2			<ul style="list-style-type: none"> •Only if total system analysis proves real CO2 reduction •New
TLU-2	•LAND USE EFFICIENCY AND MODAL OPTIONS					
TLU-2.1	•GENERAL LOCATION EFFICIENCY					
2.1.1	Statewide Growth Management Plan	M H: 3 M: 1 L: 2 U: 1	L H: 0 M: 2 L: 2 N: 1 U: 2			<ul style="list-style-type: none"> •This may already be done. Any cost projection? •New
2.1.2	Include GHG Evaluations in State Policies	M H: 2 M: 3 L: 2 U: 0	L H: 0 M: 1 L: 5 N: 0 U: 1			<ul style="list-style-type: none"> •New
2.1.3	Shape Investment To Maximize GHG Reductions	M H: 2 M: 1 L: 2 U: 0	L H: 0 M: 0 L: 4 N: 0 U: 3			<ul style="list-style-type: none"> •New

Option No.	GHG Reduction Policy Option	Potential GHG Emission Reductions	Cost per Ton	Externalities, Feasibility Considerations	Priority for Analysis	Notes/Related Actions
2.1.4	Provide Technical and Financial Support to Local Agencies	M H: 1 M: 1 L: 4 U: 1	M H: 0 M: 3 M/L: 1 L: 0 N: 0 U: 3			<ul style="list-style-type: none"> •Including training and creating staffing. •Combine with 2.1.5 •New
2.1.5	Smart Growth Planning, Modeling, and Tools	M H: 4 M: 1 L: 2 U: 0	M H: 2 M: 1 L: 3 N: 0 U: 1			<ul style="list-style-type: none"> •Needs to be done •KCMO Climate Protection Plan. MARC Air Quality Action Plan. Transportation Outlook 2030. Creating Quality Places
2.1.6	Land Use, Zoning, Tax, and Building Code Reform	H H: 4 M: 1 L: 1 U: 1	M H: 1 M: 1 L: 2 N: 0 U: 3			<ul style="list-style-type: none"> •Combine with 2.1.5 •I suspect this needs to be done and perhaps included with 2.1.5 •KCMO Climate Protection Plan. MARC Air Quality Action Plan. Transportation Outlook 2030. Creating Quality Places

Option No.	GHG Reduction Policy Option	Potential GHG Emission Reductions	Cost per Ton	Externalities, Feasibility Considerations	Priority for Analysis	Notes/Related Actions
2.1.7	State Congressional Advocates for Federal Action	M H: 3 M: 1 L: 3 U: 0	L H: 0 M: 0 L: 6 N: 0 U: 1			<ul style="list-style-type: none"> •Okay but Kansas is a small state •New
2.1.8	Use of Flexible Federal Transportation Funding	M H: 2 M: 2 L: 2 U: 1	L H: 0 M/H: 1 M: 0 L: 3 N: 0 U: 3			<ul style="list-style-type: none"> •MARC has used flexible funding for CMAQ and STP, although not for GHG reductions
2.1.9	Downtown Revitalization	M H: 1 M: 1 L: 4 U: 1	M H: 2 M: 0 L: 3 N: 0 U: 2			<ul style="list-style-type: none"> •This is being done in Wichita •KCMO Climate Protection Plan. MARC Air Quality Action Plan. Transportation Outlook 2030. Creating Quality Places

Option No.	GHG Reduction Policy Option	Potential GHG Emission Reductions	Cost per Ton	Externalities, Feasibility Considerations	Priority for Analysis	Notes/Related Actions
2.1.10	Brownfield Redevelopment	M H: 1 M: 3 L: 2 U: 1	M H: 2 M: 1 L: 2 N: 0 U: 2			<ul style="list-style-type: none"> •Combine with 2.1.9 •KCMO Climate Protection Plan. MARC Air Quality Action Plan. Transportation Outlook 2030. Creating Quality Places
2.1.11	Infill Development	M H: 1 M: 4 L: 1 U: 1	M H: 1 M: 2 L: 2 N: 0 U: 2			<ul style="list-style-type: none"> •Combine with 2.1.9 •KCMO Climate Protection Plan. MARC Air Quality Action Plan. Transportation Outlook 2030. Creating Quality Places
2.1.12	Transit-Oriented Development	M H: 3 M: 3 L: 1 U: 0	M H: 1 M: 1 L: 3 N: 0 U: 2			<ul style="list-style-type: none"> •Combine with 2.1.5 •Good idea •KCMO Climate Protection Plan. MARC Air Quality Action Plan. Transportation Outlook 2030. Creating Quality Places

Option No.	GHG Reduction Policy Option	Potential GHG Emission Reductions	Cost per Ton	Externalities, Feasibility Considerations	Priority for Analysis	Notes/Related Actions
2.1.13	Traffic Calming	L H: 1 M: 0 M/L: 1 L: 4 U: 1	M H: 0 M/H: 1 M: 2 L: 3 N: 0 U: 1			•New
2.1.14	Targeted Open-Space Protection	M H: 3 M: 0 L: 4 U: 0	L H: 0 M: 1 L: 1 N: 1 U: 3			•Combine with 2.1.5 •KCMO Climate Protection Plan. MARC Air Quality Action Plan. Transportation Outlook 2030. Creating Quality Places.
2.1.15	Balance Economic Development With Agriculture, Protection of Natural Resources, and Preservation of Rural Character	M H: 3 M: 0 L: 3 U: 0	L H: 0 M: 1 L: 2 N: 0 U: 3			•Combine with 2.1.5
TLU-2.2	•INCREASING LOW-GHG TRAVEL OPTIONS					

Option No.	GHG Reduction Policy Option	Potential GHG Emission Reductions	Cost per Ton	Externalities, Feasibility Considerations	Priority for Analysis	Notes/Related Actions
2.2.1	Make Full Use of CMAQ Funds—With Application Reviews Considering GHG Reductions	L H: 0 M: 1 L: 3 U: 2	L H: 0 M: 0 L: 4 N: 0 U: 2			
2.2.2	Improve Transit Service (Frequency, Convenience, and Quality)	M H: 3 M: 3 L: 1 U: 0	M H: 1 M/H: 1 M: 3 L: 2 N: 0 U: 0			<ul style="list-style-type: none"> •Combine with 2.2.4 •A must for increased and stable ridership. Increase safety and security as well •KCMO Climate Protection Plan. MARC Air Quality Action Plan. Transportation Outlook 2030. Creating Quality Places
2.2.3	Transit Marketing and Promotion (Including Individualized Transit Marketing)	M H: 2 M: 1 L: 4 U: 0	L H: 0 M: 0 L: 7 N: 0 U: 0			<ul style="list-style-type: none"> •New

Option No.	GHG Reduction Policy Option	Potential GHG Emission Reductions	Cost per Ton	Externalities, Feasibility Considerations	Priority for Analysis	Notes/Related Actions
2.2.4	Expand Transit Infrastructure (Light Rail, Bus, Bus Rapid Transit)	M H: 2 M: 4 L: 1 U: 0	M H: 3 M: 2 L: 2 N: 0 U: 0			<ul style="list-style-type: none"> •Combine with 2.2.2 and 4.5 •KCMO Climate Protection Plan. MARC Air Quality Action Plan. Transportation Outlook 2030. Creating Quality Places
2.2.5	Transit Prioritization (Signal Prioritization, HOV Lanes)	M H: 2 M: 3 L: 2 U: 0	M H: 1 M: 3 L: 2 N: 0 U: 1			<ul style="list-style-type: none"> •Combine with 2.2.4 •KCMO Climate Protection Plan. MARC Air Quality Action Plan. Transportation Outlook 2030. Creating Quality Places
2.2.6	Guaranteed Ride Home	M H: 1 M: 2 L: 3 U: 1	L H: 0 M: 0 L: 6 N: 0 U: 1			<ul style="list-style-type: none"> •Too uncertain to calculate •MARC Air Quality Action Plan. Transportation Outlook 2030. Creating Quality Places

Option No.	GHG Reduction Policy Option	Potential GHG Emission Reductions	Cost per Ton	Externalities, Feasibility Considerations	Priority for Analysis	Notes/Related Actions
2.2.7	Create Regional Multimodal Transportation Centers	M H: 1 M: 5 L: 1 U: 0	M H: 2 M/H: 1 M: 2 L: 1 N: 0 U: 1			<ul style="list-style-type: none"> •Combine with 2.2.4 •I suspect this depends on cooperation and coordination of the market driven entities •KCMO Climate Protection Plan. MARC Air Quality Action Plan. Transportation Outlook 2030. Creating Quality Places
2.2.8	Bike and Pedestrian Infrastructure	M H: 1 M: 2 L: 4 U: 0	M H: 2 M: 2 L: 3 N: 0 U: 0			<ul style="list-style-type: none"> •Needs to be done regardless due to low cost. Depends on volunteer participation I suspect •KCMO Climate Protection Plan. Transportation Outlook 2030. Creating Quality Places
2.2.9	HOV Lanes	M H: 1 M: 3 M/L: 1 L: 1 U: 1	M H: 3 M: 2 M/L: 1 L: 0 N: 0 U: 1			<ul style="list-style-type: none"> •Transportation Outlook 2030. Creating Quality Places

Option No.	GHG Reduction Policy Option	Potential GHG Emission Reductions	Cost per Ton	Externalities, Feasibility Considerations	Priority for Analysis	Notes/Related Actions
2.2.10	Van Pooling and Car Pooling	M H: 3 M: 3 L: 1 U: 0	L H: 0 M: 0 L: 6 N: 0 U: 1			<ul style="list-style-type: none"> •KCMO Climate Protection Plan. Transportation Outlook 2030. Creating Quality Places
2.2.11	Park-and-Ride Lots	M H: 3 M: 2 L: 2 U: 0	M H: 0 M: 5 L: 1 N: 0 U: 1			<ul style="list-style-type: none"> •KCMO Climate Protection Plan. Transportation Outlook 2030. Creating Quality Places
2.2.12	Car Sharing	M H: 1 M: 1 L: 3 U: 1	M H: 1 M: 1 L: 1 N: 0 U: 3			<ul style="list-style-type: none"> •Not popular with individuals. Might look into other models in different states to see what the percentage of ridership participation can be

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2.2.13	Telecommute, Live Near Your Work, and Compressed Work Week	M H: 4 M: 2 L: 1 U: 0	L H: 0 M: 0 L: 6 N: 0 U: 1			<ul style="list-style-type: none"> • In Kansas, living near work is not always feasible but a compressed work week is very inviting and feasible in my opinion • KCMO Climate Protection Plan. Transportation Outlook 2030. Creating Quality Places
2.2.14	Require Government Agencies To Use Telecommuting	M H: 2 M: 1 L: 3 U: 1	L H: 0 M: 0 L: 6 N: 0 U: 1			<ul style="list-style-type: none"> • KCMO Climate Protection Plan
2.2.15	Telecommuting Centers, Support, and Incentives	M H: 3 M: 0 L: 3 U: 1	M H: 0 M: 1 L: 4 N: 0 U: 2			<ul style="list-style-type: none"> • Combine with 2.2.13 • Depends on the logistics and the participation • New

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2.2.16	E-Commerce	M H: 2 M: 0 L: 3 U: 1	L H: 1 M: 0 L: 4 N: 0 U: 1			
2.2.17	Thorough Analysis of Future Infrastructure Capacity Expansion	M H: 3 M: 0 L: 3 U: 1	L H: 0 M: 1 L: 2 N: 1 U: 3			<ul style="list-style-type: none"> •Transportation Outlook 2030. Creating Quality Places
2.2.18	Hybrid Buses	M H: 2 M: 2 L: 2 U: 0	L H: 1 M: 2 L: 2 N: 1 U: 0			<ul style="list-style-type: none"> •Fuel cost savings & federal incentives should pay for the extra cost of the buses
2.2.19	Bicycle Transportation (e.g., Rails to Trails)	M H: 1 M: 2 L: 4 U: 0	M H: 1 M: 1 L: 4 N: 0 U: 1			<ul style="list-style-type: none"> •Combine with 2.2.8 •Transportation Outlook 2030. Creating Quality Places

Option No.	GHG Reduction Policy Option	Potential GHG Emission Reductions	Cost per Ton	Externalities, Feasibility Considerations	Priority for Analysis	Notes/Related Actions
TLU-2.3	●INCENTIVES AND DISINCENTIVES					
2.3.1	Commuter Choice Programs/Parking Cash-Out	M H: 2 M: 1 L: 3 U: 1	L H: 1 M: 1 L: 4 N: 0 U: 1			●Any models from other states to look at the feasibility in Kansas KCMO Climate Protection Plan
2.3.2	Adopt Best Work Places for Commuters Policies	L H: 1 M: 0 L: 4 U: 2	L H: 0 M: 0 L: 5 N: 1 U: 1			●Transportation Outlook 2030. Creating Quality Places
2.3.3	Issue Free Bus Passes to Downtown Workers, Students, and Retired People	M H: 1 M: 3 L: 2 U: 0	M H: 2 M: 2 L: 1 N: 1 U: 0			●Combine with 2.3.4 ●Combine with 2.3.3 with 2.3.4
2.3.4	Transit Pricing Incentives	M H: 1 M: 1 L: 2 U: 2	M H: 1 M: 3 L: 1 N: 0 U: 1			●Combine with 2.3.3

Option No.	GHG Reduction Policy Option	Potential GHG Emission Reductions	Cost per Ton	Externalities, Feasibility Considerations	Priority for Analysis	Notes/Related Actions
2.3.5	Free Downtown Parking to Car Poolers	M H: 2 M: 0 L: 5 U: 0	M H: 1 M: 3 L: 3 N: 0 U: 0			<ul style="list-style-type: none"> •Combine 2.3.5 with 2.3.6 and 2.3.7 •KCMO Climate Protection Plan
2.3.6	Reserve Parking Spaces for High-Occupancy Vehicles and Car-Share Programs	L H: 0 M: 0 L: 7 U: 0	L H: 0 M: 0 L: 6 N: 1 U: 0			<ul style="list-style-type: none"> •Combine with 2.3.5 and 2.3.7 •KCMO Climate Protection Plan
2.3.7	Benefits for Low-GHG Vehicles (Preferential Parking, Use of HOV Lanes)	L H: 0 M: 0 L: 6 U: 0	L H: 0 M: 0 L: 6 N: 0 U: 0			<ul style="list-style-type: none"> •Combine with 2.3.5 and 2.3.6
2.3.8	Location-Efficient Mortgages	L H: 0 M: 0 L: 4 U: 3	L H: 0 M: 0 L: 3 N: 0 U: 4			<ul style="list-style-type: none"> •New

Option No.	GHG Reduction Policy Option	Potential GHG Emission Reductions	Cost per Ton	Externalities, Feasibility Considerations	Priority for Analysis	Notes/Related Actions
2.3.9	VMT Charges	M H: 3 M: 2 L: 1 U: 1	L H: 1 M: 1 L: 1 N: 1 U: 3			•New
2.3.10	Increased Fuel Tax (With Targeted Use of Revenue Toward Travel Alternatives)	M H: 2 M: 2 L: 2 U: 1	L H: 1 M: 1 L: 1 N: 1 U: 3			•Not sure how individuals and corporations will look at this one with today's situation •New
2.3.11	Pay-As-You-Drive Insurance	L H: 1 M: 2 L: 3 U: 2	L H: 0 M: 1 L: 4 N: 0 U: 2			•Regressive in my opinion. Insurance companies may already be doing some of this. This would work better in states that have big metro areas with mass transit already in place for alternative modes of transportation •New

Option No.	GHG Reduction Policy Option	Potential GHG Emission Reductions	Cost per Ton	Externalities, Feasibility Considerations	Priority for Analysis	Notes/Related Actions
2.3.12	Congestion Pricing (With Targeted Use of Revenue Toward Travel Alternatives)	M H: 1 M: 2 L: 3 U: 1	L H: 0 M: 2 L: 2 N: 0 U: 2			<ul style="list-style-type: none"> •Combine 2.3.12 through 2.3.15 •New
2.3.13	Emission-Based Tolls (With Targeted Use of Revenue Toward Travel Alternatives)	M H: 1 M: 1 L: 3 U: 2	L H: 1 M: 2 L: 1 N: 1 U: 2			<ul style="list-style-type: none"> •Combine 2.3.12 through 2.3.15 •New
2.3.14	Urban and Intercity Road Tolls (With Targeted Use of Revenue Toward Travel Alternatives)	M H: 1 M/H: 1 M: 0 L: 4 U: 1	L H: 0 M: 4 L: 0 N: 1 U: 2			<ul style="list-style-type: none"> •Combine 2.3.12 through 2.3.15 •New
2.3.15	Cordon Pricing	L H: 0 M: 1 L: 3 U: 3	L H: 0 M: 0 L: 3 N: 0 U: 4			<ul style="list-style-type: none"> •Combine 2.3.12 through 2.3.15 •New

Option No.	GHG Reduction Policy Option	Potential GHG Emission Reductions	Cost per Ton	Externalities, Feasibility Considerations	Priority for Analysis	Notes/Related Actions
2.3.16	Parking Pricing, Excise Tax, and/or Supply Restrictions	M H: 1 M: 2 L: 3 U: 1	L H: 0 M: 0 L: 5 N: 1 U: 1			<ul style="list-style-type: none"> •Not an issue in our area unless an event, i.e. River Festival, the arena then parking becomes an issue •KCMO Climate Protection Plan
2.3.17	VMT/GHG Offset Requirements for Large Developments	M H: 2 M: 1 L: 3 U: 1	L H: 0 M: 0 L: 4 N: 0 U: 3			<ul style="list-style-type: none"> •Probably won't fly with developers •New
2.3.18	Research the Impact of GHG Emission Reduction Strategies on Transportation Revenue Sources	M H: 2 M: 1 L: 4 U: 0	M H: 1 M: 1 L: 4 N: 0 U: 1			<ul style="list-style-type: none"> •Combine with 2.3.19 •Critical to study •New
2.3.19	Research Alternative Ways to Fund Transportation That Creates Incentives To Drive Less	M H: 3 M: 1 L: 2 U: 1	M H: 1 M: 3 L: 1 N: 1 U: 1			<ul style="list-style-type: none"> •Critical to study •New

Option No.	GHG Reduction Policy Option	Potential GHG Emission Reductions	Cost per Ton	Externalities, Feasibility Considerations	Priority for Analysis	Notes/Related Actions
2.3.20	CO ₂ Conformity Requirements	M H: 2 M/H: 1 M: 0 L: 2 U: 2	H H: 1 M: 0 L: 0 N: 0 U: 6			<ul style="list-style-type: none"> •Federal must lead in this effort •New
2.3.21	Encourage Coordination and/or Consolidation of Transit Agencies	L H: 0 M: 0 L: 6 U: 1	M H: 2 M: 0 L: 4 N: 0 U: 1			<ul style="list-style-type: none"> •Not sure how Kansas is going to benefit with this at this time •Transportation Outlook 2030. Creating Quality Places
2.3.22	Use Market Approaches or LEED for Neighborhood Development	H H: 4 M: 1 L: 1 U: 1	M H: 1 M: 1 L: 2 N: 0 U: 2			<ul style="list-style-type: none"> •Not sure why this is here and perhaps should be referred to RCI TWG? •MARC Clean Air Action Plan
2.3.23	Use Incentives to Promote Alternative Uses of Transportation (such as biking and walking)	M H: 1 M: 3 L: 3 U: 0	L H: 1 M: 2 L: 2 N: 1 U: 1			<ul style="list-style-type: none"> •MARC Clean Air Action Plan
TLU-3	•HEAVY-DUTY VEHICLES					
TLU-3.1	•HEAVY-DUTY VEHICLE TECHNOLOGIES					

Option No.	GHG Reduction Policy Option	Potential GHG Emission Reductions	Cost per Ton	Externalities, Feasibility Considerations	Priority for Analysis	Notes/Related Actions
3.1.1	Vehicle Technology Improvements (e.g., Aerodynamics)	M H: 1 M: 4 L: 1 U: 0	M H: 2 M: 1 L: 1 N: 1 U: 1			<ul style="list-style-type: none"> •Federal & manufactures must lead this effort
3.1.2	R&D on Low-GHG Vehicle Technology	M H: 1 M: 1 L: 4 U: 0	M H: 3 M: 1 L: 0 N: 0 U: 2			<ul style="list-style-type: none"> •Federal & manufactures must lead this effort
3.1.3	Black Carbon Control Technologies (e.g., Use of Particulate Traps, Other Complementary Technologies)	L H: 0 M: 1 L: 4 U: 1	M H: 1 M: 1 L: 1 N: 0 U: 3			<ul style="list-style-type: none"> •Black carbon can affect climate by absorbing sunlight and heating the air, thereby altering large-scale atmospheric circulation and the hydrologic cycle. •Federal must lead this effort
3.1.4	Facilitate Adoption of New Clean Technologies—Rail and Marine Engines	M H: 0 M: 3 L: 3 U: 1	M H: 1 M: 3 L: 0 N: 0 U: 3			<ul style="list-style-type: none"> •Will probably take a federal mandate •MARC Clean Air Action Plan

Option No.	GHG Reduction Policy Option	Potential GHG Emission Reductions	Cost per Ton	Externalities, Feasibility Considerations	Priority for Analysis	Notes/Related Actions
3.1.5	Single-Wide Tires, Low-Resistance Radials, Automatic Tire Inflation	M H: 1 M: 3 L: 3 U: 0	L H: 0 M: 2 L: 5 N: 0 U: 0			<ul style="list-style-type: none"> •Combine with 3.1.1 •Federal must lead in this effort •New
3.1.6	Development of Electric, Natural Gas, and Other Innovative Vehicle Technologies	M H: 22 M: 2 L: 1 U: 1	M H: 1 M: 2 L: 0 N: 0 U: 3			<ul style="list-style-type: none"> •Federal must lead in this effort
TLU-3.2	•HEAVY-DUTY VEHICLE OPERATIONS					
3.2.1	Freight Logistics Improvements/GIS	M H: 1 M: 4 L: 0 U: 1	L H: 0 M: 1 L: 4 N: 0 U: 1			<ul style="list-style-type: none"> •Pricing of fuel – market leading them in this direction but industry must lead
3.2.2	Enforce Speed Limits	M H: 3 M: 3 L: 1 U: 0	L H: 0 M: 3 L: 3 N: 1 U: 0			<ul style="list-style-type: none"> •Fuel savings will result •Same as 1.2.1

Option No.	GHG Reduction Policy Option	Potential GHG Emission Reductions	Cost per Ton	Externalities, Feasibility Considerations	Priority for Analysis	Notes/Related Actions
3.2.3	Improve Traffic Flow	M H: 1 M: 6 L: 0 U: 0	M H: 2 M: 4 L: 0 N: 0 U: 1			•New
3.2.4	Increased Size and Weight of Trucks	M H: 1 M: 0 M/L: 1 L: 3 U: 1	L H: 1 M: 0 L: 1 N: 1 U: 3			•Oppose. Increased road wear and safety issues •New
3.2.5	Pre-Clearance at Scale Houses	M H: 0 M: 3 L: 3 U: 0	L H: 0 M: 2 L: 3 N: 1 U: 0			•Already being done
3.2.6	Truck Stop Electrification	M H: 1 M: 3 L: 2 U: 1	M H: 2 M: 2 L: 1 N: 0 U: 2			•Further cuts down idling •MARC Clean Air Action Plan

Option No.	GHG Reduction Policy Option	Potential GHG Emission Reductions	Cost per Ton	Externalities, Feasibility Considerations	Priority for Analysis	Notes/Related Actions
3.2.7	Enforce Anti-Idling	M H: 1 M: 5 L: 1 U: 0	L H: 0 M: 1 L: 4 N: 2 U: 0			<ul style="list-style-type: none"> •MARC Clean Air Action Plan
3.2.8	Clean Freight Operating Improvements	M H: 1 M: 1 M/L: 1 L: 1 U: 3	M H: 1 M: 1 L: 2 N: 0 U: 3			<ul style="list-style-type: none"> •Example: particulates from freight, including coal train coal dust. •Should be done or have technology change the way we fill covered operations
3.2.9	Freight Village/Consolidation Centers	M H: 0 M: 3 L: 1 U: 2	M H: 1 M: 1 L: 1 N: 0 U: 3			<ul style="list-style-type: none"> •Let market lead this effort
3.2.10	Lower Speed Limits	H H: M: 3 L: 0 U: 0	L H: 0 M: 0 L: 6 N: 0 U: 1			<ul style="list-style-type: none"> •Increases our time on roads, cost of moving products •New
TLU-3.3	<ul style="list-style-type: none"> •INCREASING LOW-GHG HEAVY-DUTY TRANSPORTATION OPTIONS 					

Option No.	GHG Reduction Policy Option	Potential GHG Emission Reductions	Cost per Ton	Externalities, Feasibility Considerations	Priority for Analysis	Notes/Related Actions
3.3.1	Intermodal Freight Initiatives	M H: 2 M: 3 M/L: 1 L: 0 U: 0	M H: 1 M: 3 L: 1 N: 0 U: 1			•Combine with 3.2.9
3.3.2	Feeder Barge Container Service	L H: 1 M: 0 L: 4 U: 0	M H: 3 M: 1 L: 3 N: 0 U: 2			•N/A
3.3.3	Increase Rail Capacity and Address Rail Freight System Bottlenecks	H H: 3 M/H: 12 M: 1 L: 0 U: 1	M H: 3 M: 1 L: 0 N: 1 U: 2			•Let market decide? Perhaps not an issue in Kansas •New
3.3.4	Shift Freight Movements From Truck to Rail	H H: 3 M/H: 2 M: 2 L: 0 U: 0	M H: 1 M: 1 L: 3 N: 0 U: 2			•Combine with 3.3.3 •Market driven by high fuel costs •Transportation Outlook 2030. Creating Quality Places

Option No.	GHG Reduction Policy Option	Potential GHG Emission Reductions	Cost per Ton	Externalities, Feasibility Considerations	Priority for Analysis	Notes/Related Actions
3.3.5	Promote Strategies To Ease the Movement of Freight in More GHG-Efficient Ways	M H: 2 M/H: 1 M: 3 L: 0 U: 1	L H: 0 M: 1 L: 3 N: 0 U: 3			<ul style="list-style-type: none"> •Combine with 3.3.3 •Market driven by high fuel costs •New
TLU-3.4	•HEAVY-DUTY VEHICLE INCENTIVES AND DISINCENTIVES					
3.4.1	Procurement of Efficient Fleet Vehicles (Public, Private, or Other)	M H: 2 M: 4 L: 1 U: 0	M H: 1 M: 2 L: 2 N: 0 U: 2			<ul style="list-style-type: none"> •Combine with 3.4.2 •Industry working towards this •KCMO Climate Protection Plan
3.4.2	Incentives To Retire or Improve Older, Less Efficient Vehicles	M H: 1 M: 5 L: 1 U: 0	M H: 2 M: 1 L: 2 N: 0 U: 2			<ul style="list-style-type: none"> •New
3.4.3	Maintenance and Driver Training	L H: 0 M: 1 L: 4 U: 1	L H: 0 M: 0 L: 5 N: 0 U: 1			<ul style="list-style-type: none"> •Should already be conducting

Option No.	GHG Reduction Policy Option	Potential GHG Emission Reductions	Cost per Ton	Externalities, Feasibility Considerations	Priority for Analysis	Notes/Related Actions
3.4.4	Increased Emission-Based Truck Tolls or Highway User Fees	M H: 2 M: 1 L: 3 U: 1	M H: 1 M: 2 L: 3 N: 0 U: 1			<ul style="list-style-type: none"> •May hurt business in Kansas if it is not followed through at least regionally •New
3.4.5	Tax Credits and Incentives for New Equipment	M H: 0 M: 4 L: 1 U: 1	M H: 2 M: 1 L: 1 N: 0 U: 2			<ul style="list-style-type: none"> •Combine with 3.4.2
TLU-4	•INTERCITY PASSENGER TRAVEL: AVIATION, RAIL, BUS					
4.1	High-Speed Rail	M H: 2 M: 4 L: 1 U: 0	M H: 6 M: 0 L: 0 N: 1 U: 0			<ul style="list-style-type: none"> •Combine with 4.5 •Cost of rail lines and infrastructure is high •New
4.2	Integrated Aviation, Rail, Bus Networks (Planning, Governance, and Investment)	M H: 2 M: 1 L: 2 U: 1	H H: 3 M: 1 L: 0 N: 0 U: 2			<ul style="list-style-type: none"> •Kansas is all spread out and not feasible like in the big metro areas like San Francisco, Washington DC, etc.

Option No.	GHG Reduction Policy Option	Potential GHG Emission Reductions	Cost per Ton	Externalities, Feasibility Considerations	Priority for Analysis	Notes/Related Actions
4.3	Aircraft Emissions	M H: 1 M: 0 L: 3 U: 3	H H: 2 M: 1 L: 0 N: 0 U: 4			<ul style="list-style-type: none"> •Federal & International market driven •Clean Air Action Plan
4.4	Intercity Bus Incentives and Subsidies	M H: 1 M: 2 L: 2 U: 1	M H: 1 M: 3 L: 1 N: 0 U: 1			<ul style="list-style-type: none"> •Tends to appeal to the individuals that do not drive usually
4.5	Improved Passenger Rail Service	M H: 2 M: 4 L: 1 U: 0	M H: 3 M: 1 L: 1 N: 1 U: 1			<ul style="list-style-type: none"> •The need for light rail-needs implementation and infrastructure. Need the market and incentives to get individuals out of their vehicles •Transportation Outlook 2030

Option No.	GHG Reduction Policy Option	Potential GHG Emission Reductions	Cost per Ton	Externalities, Feasibility Considerations	Priority for Analysis	Notes/Related Actions
4.6	Bicycle Transportation (e.g. Rails to Trails)	L H: 1 M: 1 L: 5 U: 0	L H: 0 M: 2 L: 3 N: 1 U: 1			<ul style="list-style-type: none"> •Needs implementation – good idea but how many would this attract? Should provide incentives for those within the Cities •KCMO Climate Protection Plan. (Duplicate policy option.)
TLU-5	•OFF-ROAD VEHICLES (CONSTRUCTION EQUIPMENT, OUTBOARD MOTORS, ATVS, FEED TRUCKS, MANURE SPREADERS, DUMP TRUCKS, ETC.)					
5.1	Incentives for Purchase of Efficient Vehicles and Equipment	M H: 1 M/H: 1 M: 2 L: 1 U: 2	H H: 2 M: 2 L: 0 N: 0 U: 3			<ul style="list-style-type: none"> •MARC Clean Air Action Plan
5.2	Improved Operations, Operator Training	M H: 1 M: 2 L: 3 U: 1	L H: 0 M: 1 L: 5 N: 0 U: 1			<ul style="list-style-type: none"> •New

Option No.	GHG Reduction Policy Option	Potential GHG Emission Reductions	Cost per Ton	Externalities, Feasibility Considerations	Priority for Analysis	Notes/Related Actions
5.3	Increased Use of Alternative Fuels or Low-Sulfur Diesel	L H: 0 M: 1 M/L: 1 L: 2 U: 2	M H: 0 M: 2 L: 2 N: 0 U: 2			• Federally mandated
5.4	Adopt Green Port Strategy (Port Land-Side: Clean Up Port-Dwelling and Cargo-Handling Equipment Operations)	M H: 0 M: 1 L: 1 U: 3	H H: 1 M: 1 L: 0 N: 0 U: 3			• N/A
5.5	Low-Carbon Fuel (Off-Road and Recreational Marine)	L H: 0 M: 1 L: 3 U: 2	M H: 1 M: 1 L: 2 N: 0 U: 2			
5.6	Locomotive Idling Reductions	M H: 1 M: 3 L: 2 U: 1	L H: 0 M: 2 L: 3 N: 2 U: 0			• Combine 5.6 and 5.7 • MARC Clean Air Action Plan

Option No.	GHG Reduction Policy Option	Potential GHG Emission Reductions	Cost per Ton	Externalities, Feasibility Considerations	Priority for Analysis	Notes/Related Actions
5.7	Inclusion of Idling Reduction Requirements	M H: 1 M: 2 L: 3 U: 1	L H: 0 M: 1 L: 4 N: 2 U: 0			<ul style="list-style-type: none"> •Combine with 5.6 •MARC Clean Air Action Plan
5.8	Diesel Cranes at Port-Electrification or Other GHG-Reducing Alternatives	L H: 0 M: 1 L: 3 U: 1	L H: 0 M: 1 L: 3 N: 0 U: 1			<ul style="list-style-type: none"> •N/A
5.9	“Shore Power” at Port Sites	L H: 0 M: 1 L: 3 U: 1	M H: 2 M: 1 L: 1 N: 0 U: 1			<ul style="list-style-type: none"> •N/A
5.10	Airport Ground Equipment	L H: 0 M: 1 L: 4 U: 1	M H: 0 M: 2 L: 1 N: 0 U: 3			<ul style="list-style-type: none"> •Need to assess impact in Kansas

Option No.	GHG Reduction Policy Option	Potential GHG Emission Reductions	Cost per Ton	Externalities, Feasibility Considerations	Priority for Analysis	Notes/Related Actions
5.11	Lawnmowers and Other Small Gas-Powered (e.g., Two-Stroke) Engines	M H: 1 M/H: 1 M: 1 L: 2 U: 2	M H: 1 M: 1 L: 3 N: 0 U: 2			<ul style="list-style-type: none"> • Include electric mowers as an option • KCMO Climate Protection Plan