CMAQ Program

Mid-Performance Period Progress Report
FY 2022-2025 Performance Period

EAST-WEST GATEWAY
Council of Governments

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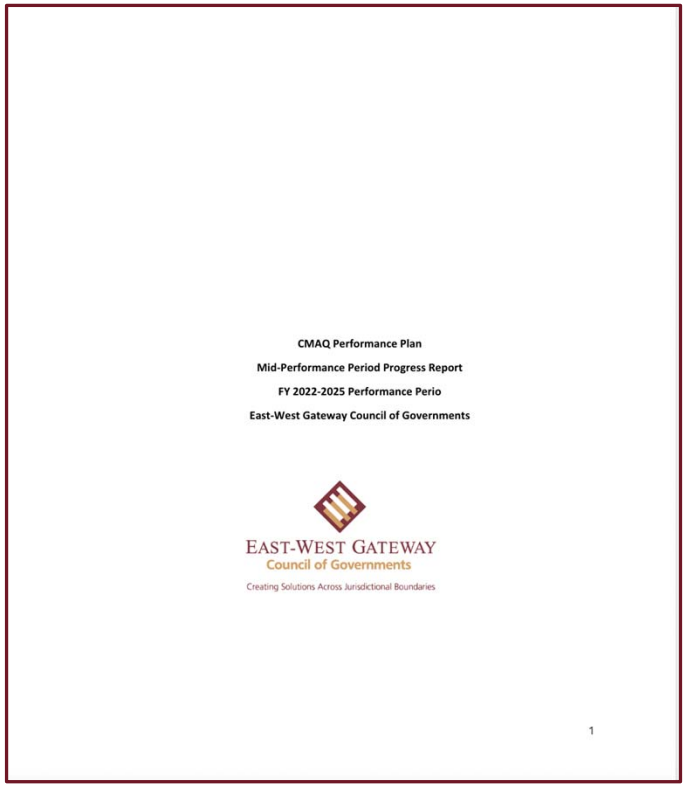
CMAQ Performance Plan

Mid-Performance Period Progress Report

FY 2022-2025 Performance Perio

East-West Gateway Council of Governments

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Creating Solutions Across Jurisdictional Boundaries

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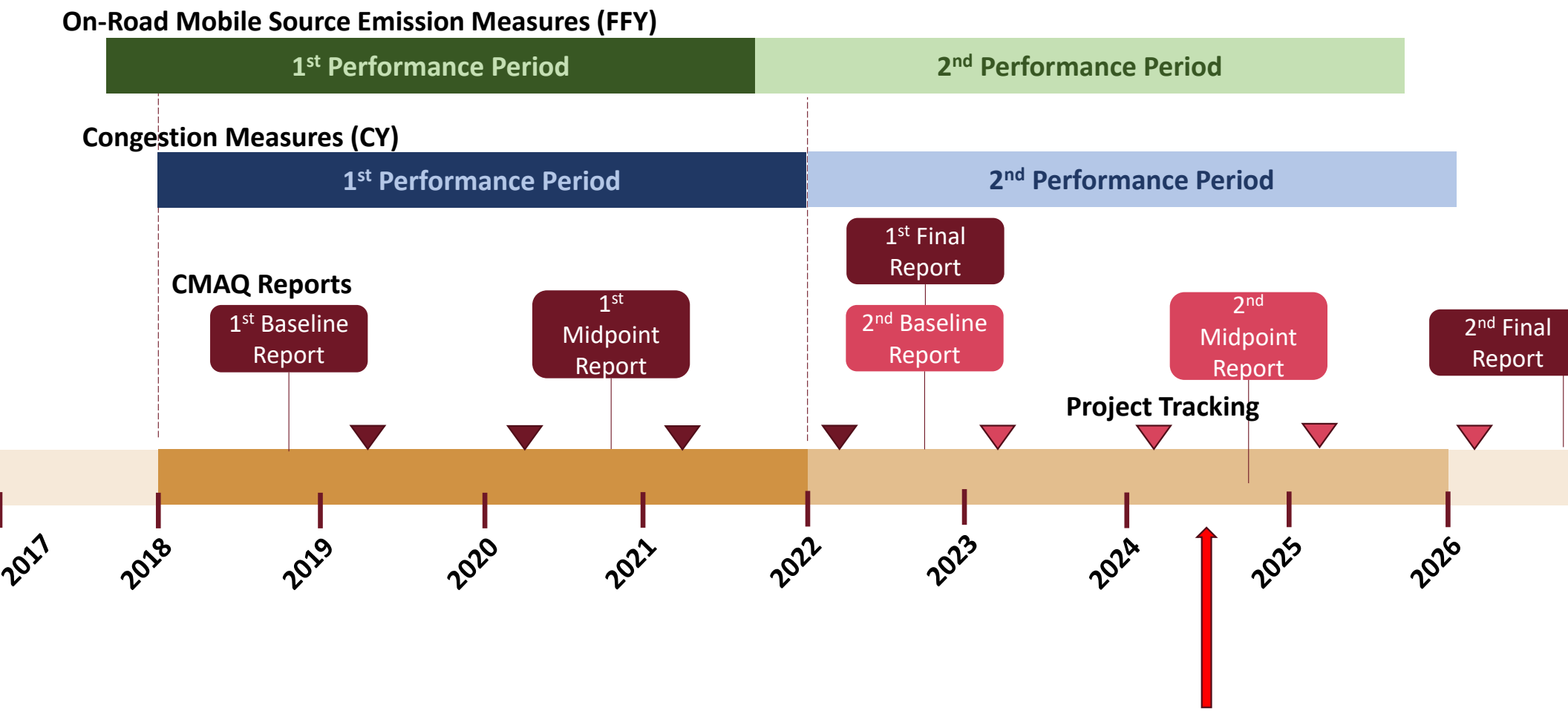
CMAQ Overview

- Congestion Mitigation and Air Quality Improvement Program (CMAQ)
  - Created in 1991 under ISTEA
  - MAP-21 / Fast Act – Performance Based Planning Process
  - Reauthorized under IIJA
- Provides funding to regions that face the challenge of attaining or maintaining the National Ambient Air Quality Standards (NAAQS) for ozone, carbon monoxide, and/or particulate matter as established under the Clean Air Act.

Performance Reporting Timeline

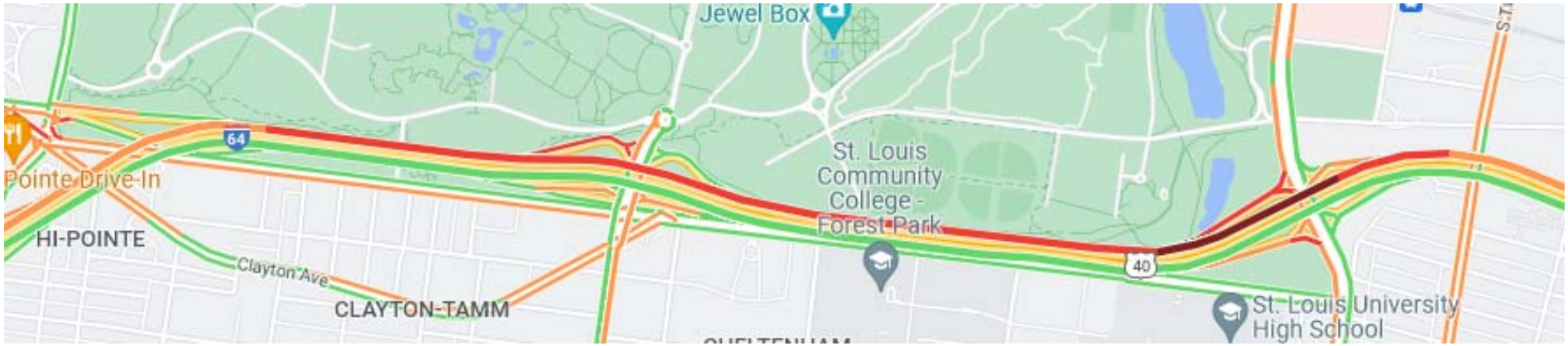


Peak Hour Excessive Delay (PHED)

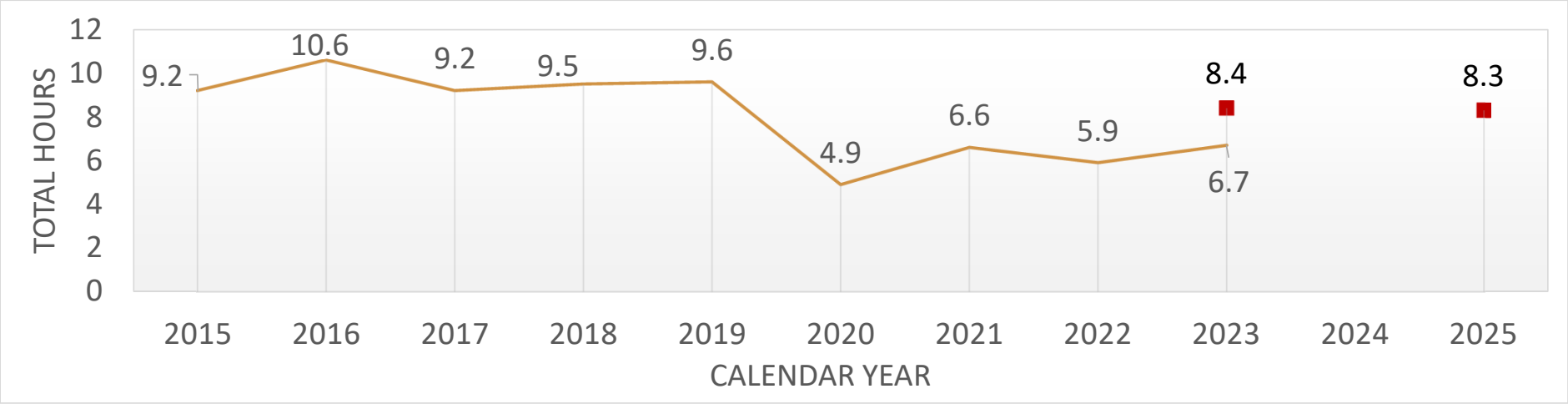
Traffic Congestion measure

- Excessive delay that travelers experience per year from traveling on National Highway System (NHS) roadways during peak travel periods per capita
- Our region's peak is 3pm to 7pm

Desired Trend



Peak Hour Excessive Delay (PHED) Targets



2-Year Target Performance

2023 Target: 8.4 hours
2023 Actual: 6.7 hours

Met Target: Yes

4-Year Target

Target

2025: 8.3 hours

Methodology

Used a hybrid approach studying pre-pandemic trends and 2023 monthly PHED data

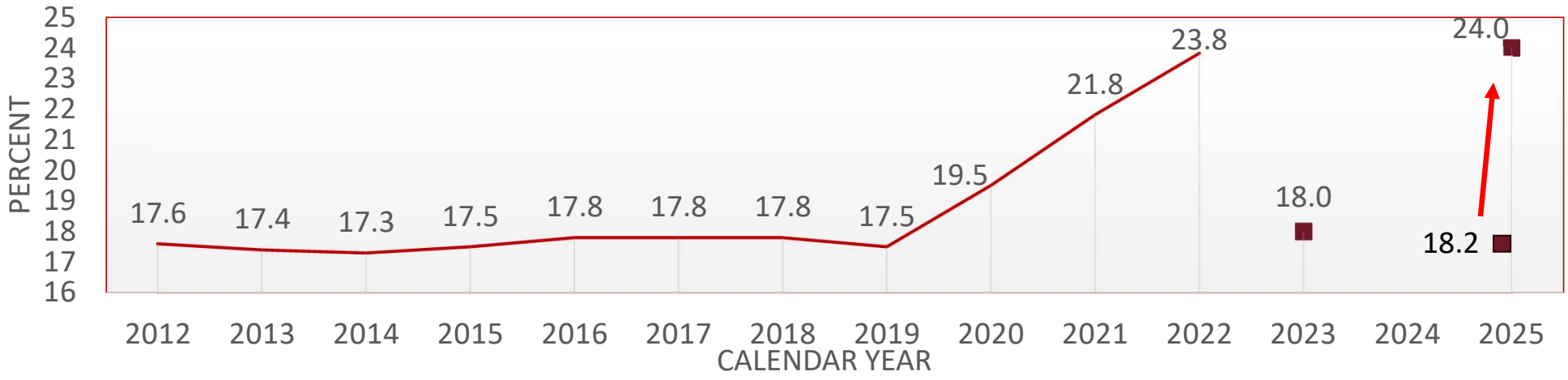
Percent Non-Single Occupancy Vehicle (SOV) Travel

Traffic Congestion measure

- Percentage of “trips” that occur in Non-SOV vehicles or modes, including telecommuting, transit, carpooling, biking, and walking
- American Community Survey (ACS) Data

Desired Trend

Percent Non-SOV Travel Targets



2-Year Target Performance

2023 Target: 18.0%
2022 Actual: 23.8%

Met Target: Yes

4-Year Target

Target

2025: 24.0%
Adjusted

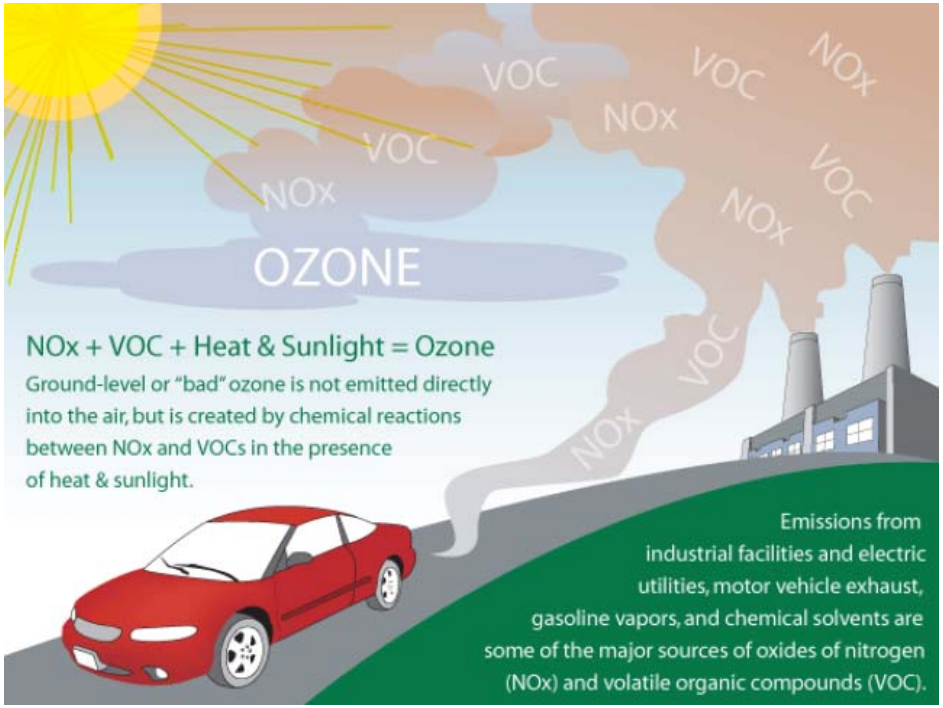
Methodology

Used a hybrid approach studying pre-pandemic trends and increase in bike/ped programming, infrastructure and policy investments.

On-Road Mobile Source Emissions Reduction

Total Emissions Reduction Measure

- Cumulative estimated emission reductions, for all CMAQ funded projects, of each applicable criteria pollutant and precursor
- St. Louis region, the applicable criteria pollutants and precursors are only VOC and NO_x.
- **Units:** kilograms of each emission reduced per day (kg/day).



Emissions Reduction – 2nd Performance Period

Total Emissions Reduction Performance (2-Year Target) - Illinois and Missouri			
Pollutant	2-Year Target (2022-2023) Comparison to actual 2-Year Performance		
	2-Year Target (kg/day)	2-Year Reported (kg/day)	Target Met
Nitrogen Oxides (NOx)	9.671	146.193	**YES**
Volatile Organic Compounds (VOC)	3.308	7.011	**YES**

The Marine Vessel Engine Repower project significantly contributed to these achievements

Missouri			
Pollutant	2-Year Target (2022-2023) Comparison to actual 2-Year Performance		
	2-Year Target (kg/day)	2-Year Reported (kg/day)	Target Met
Nitrogen Oxides (NOx)	8.836	145.943	YES
Volatile Organic Compounds (VOC)	2.940	6.990	YES

Illinois			
Pollutant	-Year Target (2022-2023) Comparison to actual 2-Year Performance		
	2-Year Target (kg/day)	2-Year Reported (kg/day)	Target Met
Nitrogen Oxides (NOx)	0.836	0.250	NO
Volatile Organic Compounds (VOC)	0.368	0.021	NO

Emissions Reduction – 2nd Performance Period Targets

Total Emissions Reduction Target		
Total Emissions Reduction Measure	2- and 4- year Total Emission Reductions for each applicable criteria pollutant and precursor for all projects funded with CMAQ funds	
	2-year Target (kg/day)	4-year Target (kg/day)
Nitrogen Oxides (NOx)	9.671	143.483
Volatile Organic Compounds (VOC)	3.308	8.673

Summary

To summarize, 2025 targets were reviewed based on system performance from 2023. Based on that review the following 2025 4-year targets are recommended.

Performance Measure	2021 Baseline	2023 Performance	2023 2-Year Target	2025 4-Year Target	4-Year Target Adjusted
PHED measure (hours)	6.6	6.7	8.4	**8.3**	**NO**
Non-SOV measure (%)	19.5%*	23.8%***	18.0%	**24.0%**	**YES**
Emissions Reduction for NO_x (kg/day)	96.062**	146.193	9.671	**143.483**	**NO**
Emissions Reduction for VOC (kg/day)	18.359**	7.011	3.308	**8.673**	**NO**

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Applicability Determination

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October 2021 - FHWA released an applicability determination for the 2nd performance period

Applicability for Traffic Congestion Measures

MPO Name	Urbanized area with population > 200K overlapping with MPA	Do the MPA, urbanized area and at least one designated nonattainment or maintenance area overlap? And does that overlap area contain any NHS route segments, according to HPMS?
East-West Gateway Council of Government	St. Louis, MO--IL	Yes- Required to establish targets for the traffic congestion measures for the urbanized area.

Applicability for On-Road Mobile Source Emissions Measures

MPO Name	Applicability Parameter			National Ambient Air Quality Standards (NAAQS)							Precursors	
MPOs subject to On-Road Mobile Source Emissions Measure	Do the MPA; urbanized area with population > 1m; and any one of the designated nonattainment or maintenance Area(s) Overlap?	Name of urbanized area with population > 1m overlapping with MPA	Name of additional urbanized area with population > 1m overlapping with MPA	24- hour PM10	PM2.5 (1997)	PM2.5 (2006)	PM2.5 (2012)	Ozone (2008)	Ozone (2015)	CO	VOC	NOx
East-West Gateway Council of Government	Yes - CMAQ Performance Plan Required	St. Louis, MO-IL						YES	YES		YES	YES

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CH0 don't think we need to include this
Christie Holland, 2024-08-22T19:56:45.394

SK0 0 I agree
Saranya Konala, 2024-08-23T14:52:04.157

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Missouri Target			
Emissions Reduction Measure	2- and 4- year Emission Reductions for each applicable criteria pollutant and precursor for all projects funded with CMAQ funds		
Missouri	FFY 2022-2025 CMAQ Program (kg/day)	2-year (kg/day)	4-year (kg/day)
Nitrogen Oxides (NOx)	142.004	8.836	142.004
Volatile Organic Compounds (VOC)	8.209	2.940	8.209

Illinois Target			
Emissions Reduction Measure	2- and 4- year Emission Reductions for each applicable criteria pollutant and precursor for all projects funded with CMAQ funds		
Illinois	FFY 2022-2025 CMAQ Program (kg/day)	2-year (kg/day)	4-year (kg/day)
Nitrogen Oxides (NOx)	1.479	0.836	1.479
Volatile Organic Compounds (VOC)	0.464	0.368	0.464

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Christie Holland, 2024-08-21T17:29:01.657

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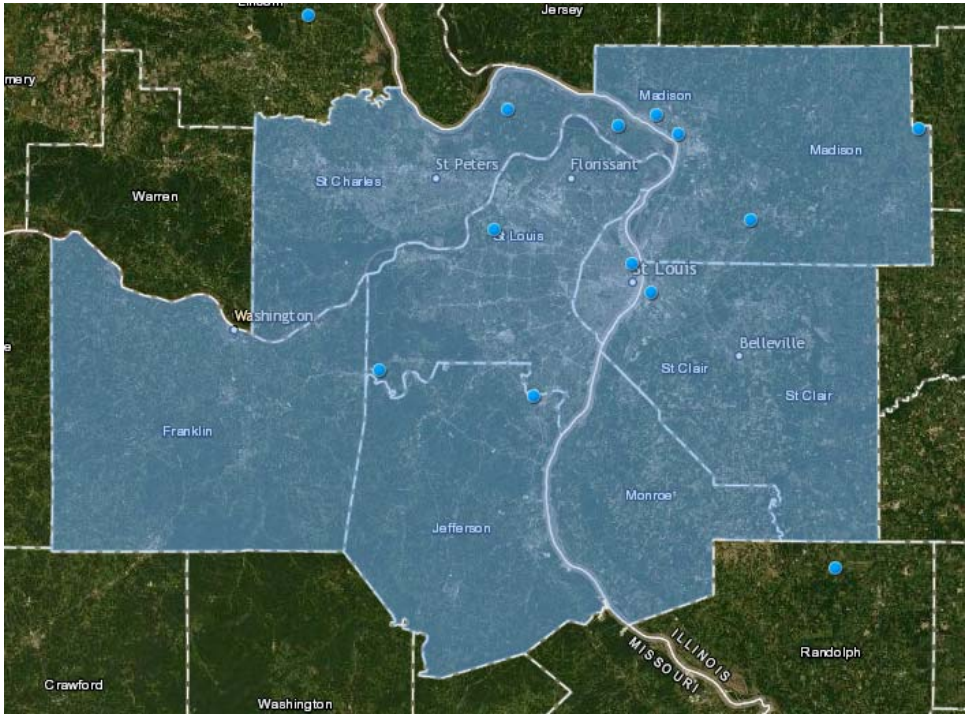
Christie Holland, 2024-08-22T19:52:58.623

Regional Attainment Status

8 hour ozone (2008 Standard)

- Maintenance Area
- “Marginal” Classification



8-hour ozone (2015 standard)

- Nonattainment Area
- “Marginal” Classification