

MEETING NOTICE & AGENDA

AIR QUALITY FORUM

**June 10, 2025
10:00 – 11:30 a.m.
MARC Board Room/Hybrid**

Member and Attendees:

Andy Savastino (MO Co-Chair), City of Kansas City, MO
Rollin Sachs (KS Co-chair), Johnson County DHE
Allison Smith, KDOT
Jodi Gooseman, City of Kansas City, MO
Juan Yin, MoDOT
Kelly Gilbert, Metropolitan Energy Center
Michael Park, City of Lee's Summit, MO
Alicia Daniels, Mo. Department of Natural Resources
Dr. John Neuberger, KU Medical Center

Other Attendees:

Kurt Heine, Mo. Department of Natural Resources
Leena Divakar, Kansas State Pollution Prevention Institute
Will Wetherell, Mo. Department of Natural Resources
Michael Park, City of Lee's Summit
Chris Brame, Weather or Not
Christena R. Beer, Miami County Health Department
Dan Wilkus, City of Kansas City, MO
Sarah Monson, Unified Government of Wyandotte County and Kansas City, KS
Emily Schweiss, Mo. Department of Natural Resources
Taylor Neff, Missouri Department of Conservation

MARC Staff:

Karen Clawson
Tom Jacobs
Doug Norsby
Bridget Koan
Martin Rivarola
Faith Eberhart
Kate Ludwig
Lukas Yanni
Rachel Krause

1. Introductions and Determination of Quorum

2. Approval of January Meeting Summary*

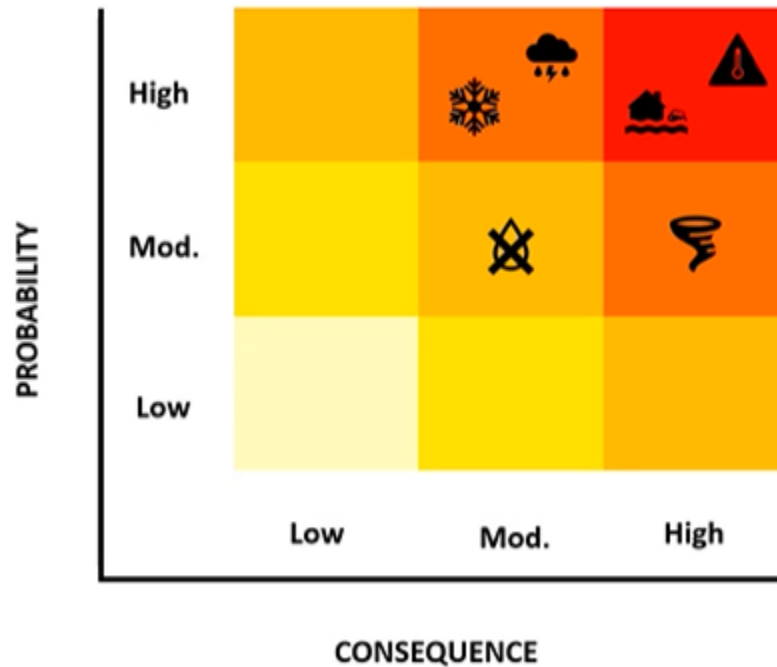
The meeting minutes were APPROVED.

3. Climate Action Plan Update

- ☐ Karen Clawson, MARC, introduced the update of Climate Action Plan, currently in progress. This plan update is made possible by a climate action pollution reduction grant received from the EPA in 2023.
- ☐ Key updates to the Climate Action Plan include:
 - Greenhouse gas inventory
 - Climate risk and vulnerability assessment
 - Climate scenario modeling
 - Mitigation and adaptation measures
 - Benefits analysis
 - Low-income/disadvantaged communities' analysis
 - Workforce planning analysis
- ☐ Current efforts focus on refining strategies through climate scenario modeling process, along with preparing deliverables such as a benefits analysis of co-pollutant reductions, a voluntary low-income and disadvantaged communities' analysis, and a workforce planning analysis ensure implementation capacity.
- ☐ The updated Climate Action Plan is due to EPA on December 1, 2025.
- ☐ Clawson moved on to discuss an update on the draft regional greenhouse gas inventory, which estimates total emissions at just over 27 million metric tons of CO₂ equivalent across buildings, electricity, transportation, waste, industrial processes, and product use.
- ☐ While the results cannot be directly compared to the previous inventory due to differences in included sectors, the overall distribution of emissions is similar, with buildings and electricity accounting for nearly two-thirds and transportation also making up a significant share. Findings suggest transportation emissions have declined somewhat, while industrial process emissions may have increased, and further analysis will be shared as details are refined.
- ☐ The inventory will directly inform mitigation strategies, with emphasis placed on addressing the largest contributing factors.
- ☐ Clawson shared progress on updating the regional climate risk and vulnerability assessment, which examines climate conditions, hazards and risks, community and physical vulnerability assessments, and adaptive capacity.
- ☐ Using climate projections for mid- and late- century under both low (RCP 4.5) and high (RCP8.5) emissions scenarios, findings indicate only slight increases in total precipitation but a rise in dry days and a significant increase in extreme heat days above 95°F. The region ranks in the 81st percentile nationally for heat vulnerability. Conversely, frost days are projected to decrease, suggesting milder winters, though

extreme winter events such as ice and heavy snow remain possible. The region ranks in the 48th percentile for frost days (<32°F).

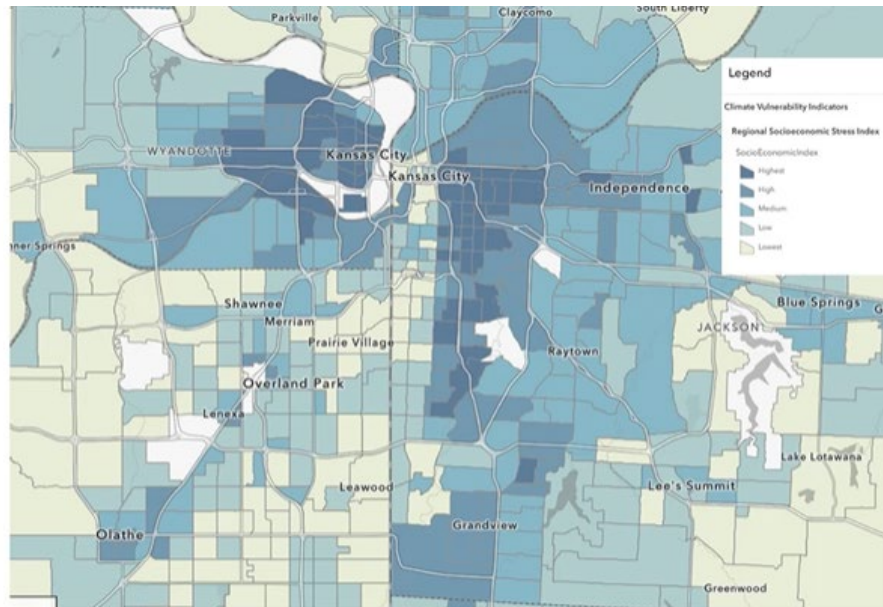
- Hazard analysis is informed by MARC's Emergency Services Department's hazard mitigation planning, and results will guide targeted strategies, including continued focus on urban heat mitigation.
- Clawson discussed the climate risk chart of six key hazards including extreme heat, flooding, severe thunderstorms, tornadoes, severe winter weather, and drought:



- While wildfire risks exist, particularly in the northwest part of the region. It remains relatively low compared to national averages.
- The assessment shows flooding and extreme heat as the greatest concerns, consistent with previous findings, though all six hazards pose potential risks.
- A public survey conducted as part of the Hazard Mitigation Plan revealed that residents perceive severe thunderstorms as the top concern, highlighting the importance of considering both data and community perspectives in planning efforts.
- Clawson also highlighted updates to the socioeconomic stress index map used in the Climate Risk and Vulnerability Assessment, now incorporated into a new public tool, the Kansas City Regional Extreme Weather Map (KCREW):
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Socioeconomic Stress in the KC Region

% of Population Below 200% of Poverty
% of Population Age 65+ that are Living Alone
% of Housing Units Built Prior to 1960
% of Households with No Vehicles
% of Occupied Households with More than 1 Person per Room
% of Population that is Disabled
Unemployment Rate
% of Population that is Uninsured
% of Population Age 25+ with Less than a High School Education
% of Population with a Disability
% of Households with Limited English Proficiency
% of Structures with 10+ Units



Kansas City Regional Extreme Weather Map
<https://tinyurl.com/kcrewmap>

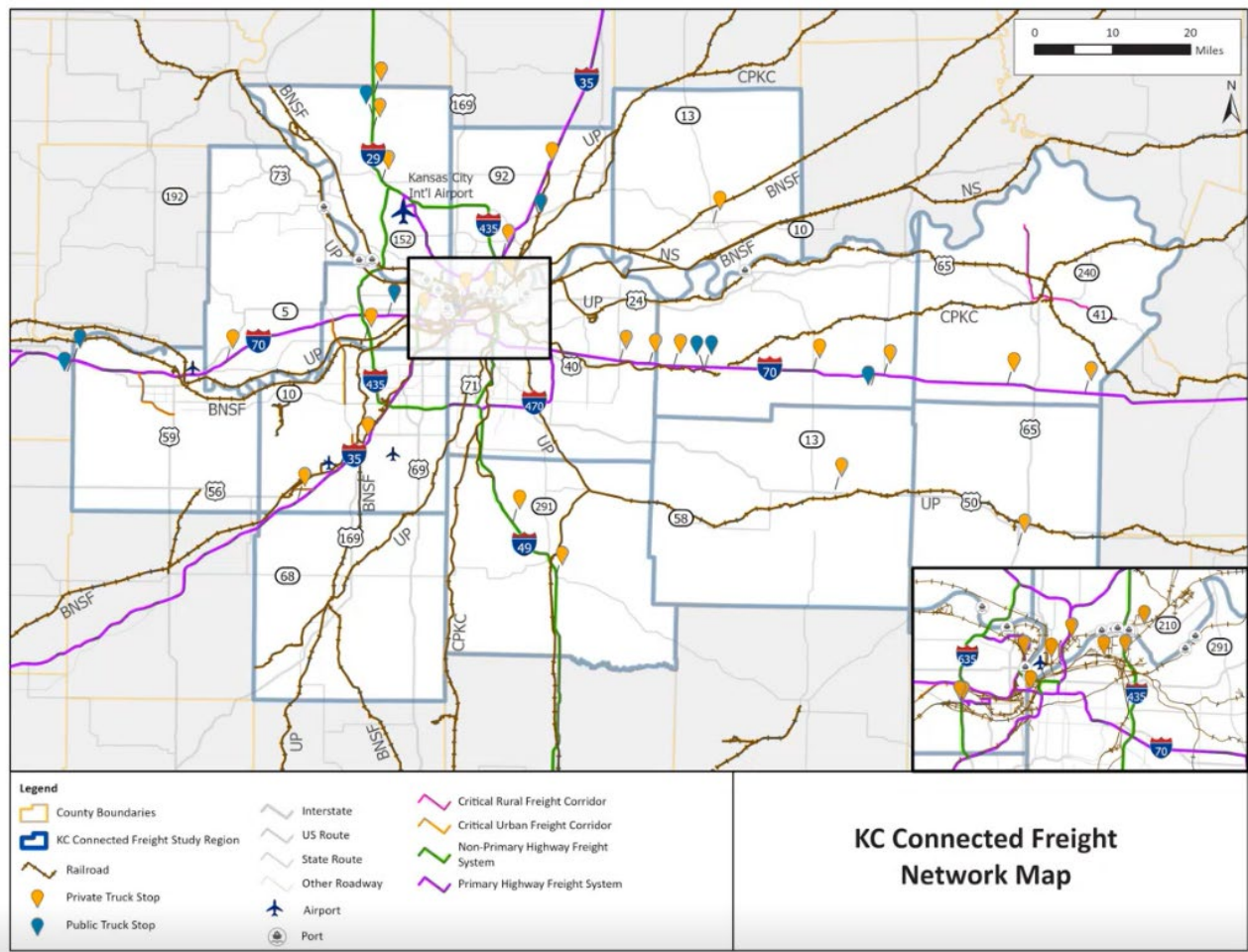
- Clawson outlined the climate scenario planning process being used to refine strategies in the Climate Action Plan. Four scenarios are being used:
 - Business-as-usual with minimal intervention.
 - Business-as-planned based on existing commitments.
 - A market- and technology- driven low-carbon scenario emphasizing electric vehicle adoption and utility-scale renewables.
 - A culture-shift low-carbon scenario emphasizing distributed community renewables, behavior change, sustainable transportation, and energy efficiency.
- The modeling will estimate greenhouse gas and co-pollutant reductions, investment costs, return on investments, and workforce requirements. Results will inform the workforce planning analysis, highlight gaps in needed occupations, and help establish metrics and targets for implementation.
- Six core draft strategy areas were outlined:
 - Renewable energy
 - Buildings/energy efficiency
 - Transportation and Land Use
 - Urban Greening
 - Industry and Resource Management
 - Food and Agriculture
- Under Renewable energy, strategies include promoting utility-scale and distributed renewable energy, advancing community and institutional production and storage, implementing smart grid and grid flexibility and resilience strategies, and partnering with state agencies to ensure regional utility goals are met.
- For buildings and energy efficiency, strategies focus on building performance standards, implementing energy efficiency and renewable energy initiatives at community-based buildings, expanding water-use efficiency, implement energy

efficiency and healthy homes programs for housing, and building health and performance standards, including the National Healthy Housing Standard.

- Transportation strategies emphasize green and complete streets, sustainable land use, vehicle electrification and fleet transition, expansion of the Smart Moves transit and mobility system, and policies to shift toward alternative modes through parking policy. Adaptation strategies include redesigning and upgrading critical and vulnerable infrastructure and using technology to monitor transportation system integrity.
- Agriculture, forestry, and land use strategies highlight preserving urban forests and riparian corridors, heat island mitigation, carbon sequestration at landscape and farm scales, and promoting green development practices. Local food strategies may become their own action area and include food recovery programs, carbon sequestration on farms and ranches, expanding local food markets, scaling up production, and updating zoning and building codes to support urban agriculture.
- Waste strategies focus on reducing waste, expanding recycling, diverting food waste to composting, greening supply chains, and capturing landfill gas.
- Industrial process strategies are still in development, pending input from circular economy work, though renewable energy for industrial processes is included under energy strategies.
- Cross-Sector measures include governance and leadership strategies to build climate leaders across all sectors through training and participation opportunities; Finance and innovation strategies to develop creative funding mechanisms and leverage the local innovation ecosystem; and community resilience strategies to strengthen community connections and ensure accessible communication so residents are informed and engaged.
- Clawson ended the presentation with next steps in the update process which include completing the climate scenario modeling, plan development, and final phases of public engagement.

4. Regional Freight Plan

- Cy Splichal, MARC, presented the Connected Freight KC Plan 2050, which is the fifth update to the regional freight study. The study began last year and is now nearing completion.
- This update differed from past efforts by expanding the study area to include east-west freight connections towards Sedalia and Lawrence, involving collaboration with Lawrence-Douglas County MPO and the Pioneer Trails Regional Planning Commission.



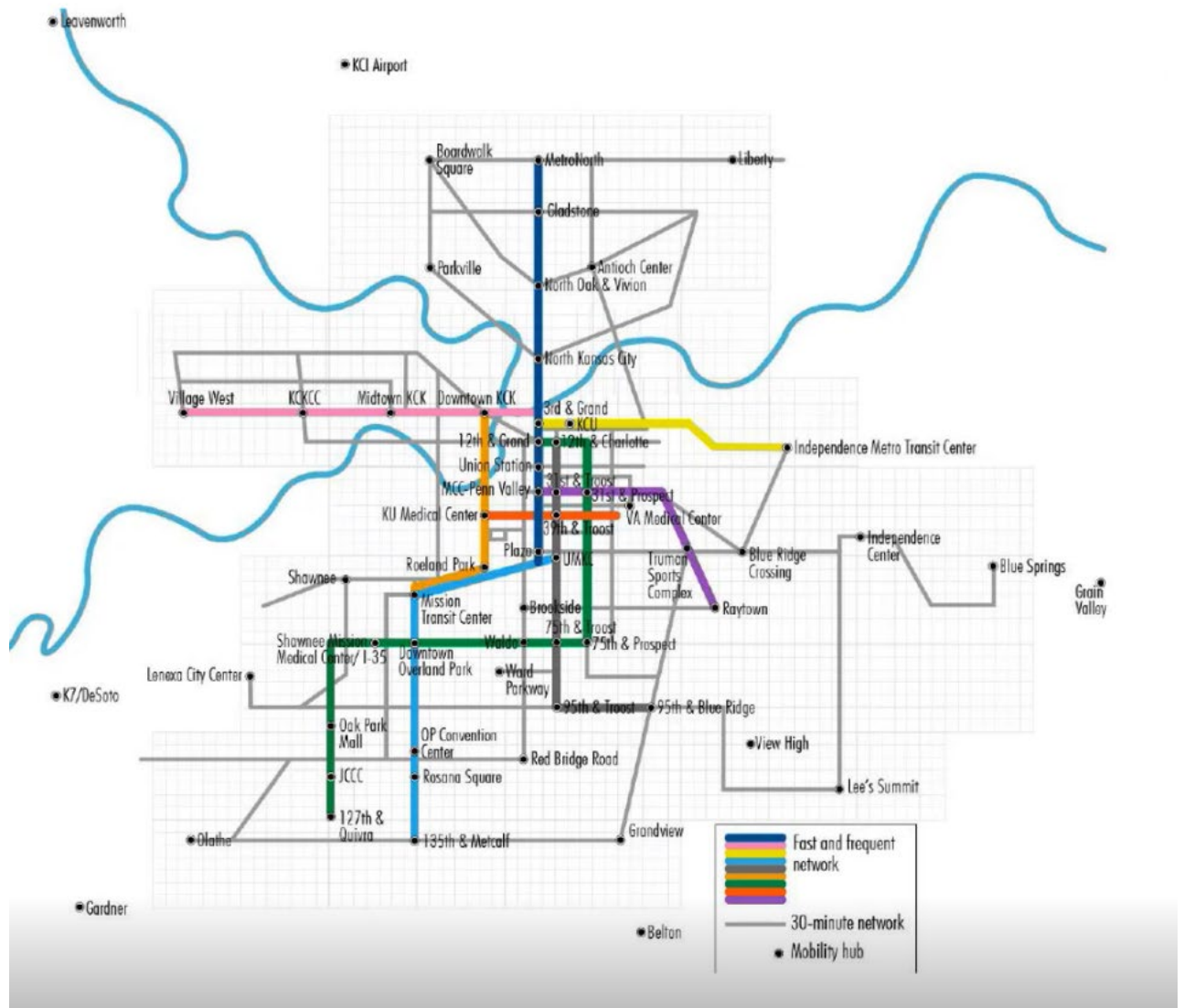
- The plan highlights Kansas City’s critical role as the nation’s second largest rail hub and the largest freight tonnage, emphasizing the importance of regional infrastructure farm-to-market routes and national goods movement. The study focused on defining agency roles, integrating freight into broader planning efforts, and supporting local, state, and federal objectives, with particular attention to resilience and proactive planning.
- The planning process was structured into three phases: assessing the current regional freight picture, evaluating future trends, and considering long-term resilience and system needs. Scenario workshops played a central role with four scenarios explored: a baseline, a “wild wild west” volatile/deregulated future, shifting patterns with reduced decarbonization incentives, and a regional “show me” strategy focused on resilience and capacity building.
- Stakeholder engagement was broad and inclusive, involving industry groups such as PortKC and SmartportKC, as well as less traditional partners like the Lawrence-Douglas County Food Policy Council, which contributed unique insights on the effects of extreme heat on refrigerated freight.
- Final recommendations include developing a responsibility matrix for agency roles during disruptions, workforce development initiatives, expanded truck parking, and integrating freight considerations into MARC’s funding allocation process.
- A key recommendation was to develop a freight resiliency plan aligned with MARC’s natural hazards and transportation risk assessment, ensuring freight is incorporated into resilience planning for critical infrastructure and supply chains. Emerging

technologies such as autonomous vehicles and unmanned aerial systems were also discussed as both opportunities and challenges for future infrastructure and system resilience.

- Splichal closed the presentation by adding the gap in air quality in the current freight plan that will need to be addressed in the future. Splichal emphasized the importance of expanding this focus in upcoming efforts.
- Tom Jacobs, MARC, also added insight in a concurrent Transportation Resiliency Study, which examined how resilient the region's transportation system is to climate change and extreme weather. The study developed a framework and methodology for evaluating critical infrastructure, quantifying risks and vulnerabilities, and supporting future transportation program development. Jacobs emphasized the significant overlap between freight and resilience studies.

5. Smart Moves Transit Plan

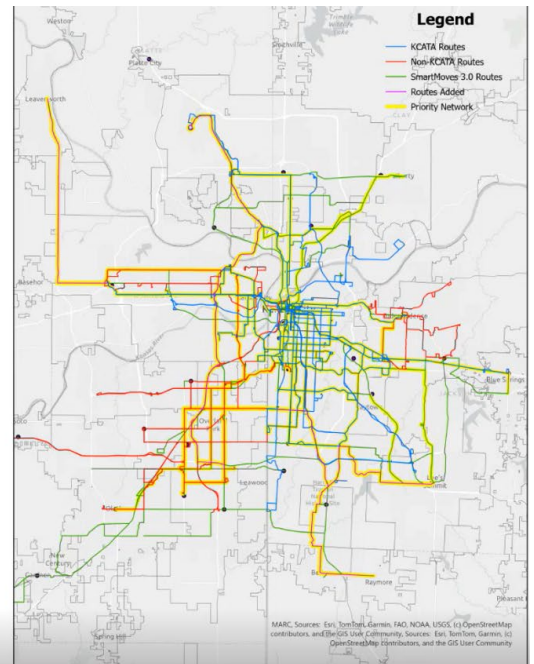
- Lucas Yanni, MARC, presented the Smart Moves Transit Plan 2025 Update. The work completed to-date has focused heavily on stakeholder outreach with elected officials, county representatives, and transit agencies across the region. Efforts have also included updated implementation and operational cost estimates by jurisdiction, accounting for inflation and current prices. In addition, MARC identified priority routes and improvements by jurisdiction, developing a partial build-out scenario to provide flexibility depending on available funding. Another component of the update involves exploring potential funding mechanisms for the plan, alongside analysis of initial revenue estimates and legal constraints by jurisdiction.
- Over the past six months, extensive conversations have been held with key stakeholders including city management, elected leadership, transit agencies, chamber of commerce, and the Regional Transit Alliance.
- MARC also revisited the 2017 Smart Moves 3.0 map, which illustrates the regional network of fast and frequent transit routes, 30-minute frequency routes, and mobility hubs.



- ☐ A scorecard was created to track progress on the strategies of the 2017 plan. Results indicate that since 2017, the region has 19 fewer routes and average route frequency worsened by 11 minutes.
- ☐ Regional stakeholder feedback included the overall agreement that Smart Moves 3.0 remains a solid framework, so rather than overhauling the plan, the focus is on developing a practical implementation strategy. A notable trend is the stronger regional interest in fast and frequent routes. In contrast, there is less enthusiasm for 30-minute or less frequent routes, which are viewed more as a supporting network. Microtransit has gained positive attention, particularly in low-density suburban communities where traditional fixed-route service struggles to achieve ridership.
- ☐ Yanni presented updated materials, including a map illustrating a priority network derived from Smart Moves routes. This reflects a partial build-out scenario, with some routes fully implemented and other partially, helping to reduce costs while still advancing regional priorities.

Priority Services

Existing Routes		New Routes	
Route Name	Improvement	Route Name	Improvement
2-Troost Max	full	SC - Main Street Extension	full
3-Prospect Max	full	SC - Riverfront Extension	full
12-12th Street	full	251-TMC Lakewood	full
24-Independence	full	Blue Springs Exp	partial
28-Blue Ridge	partial	Grandview/Belton Exp	partial
35-35th Street	full	KCI Express	full
39-39th Street	full	Leavenworth-Quindaro	full
47-Broadway	full	Liberty Express	partial
63-63rd Street	full	Raytown-Lee's Summit	full
85-Paseo	full	Roe/18th St./Antioch/College/Olathe	full
101-State Ave	partial	Vivion/Prairie View	partial
104-Argentine	full		
107-7th Street-KU Med	partial		
201-North Oak	full		
401 Metcalf-Plaza	full		
475 Quivira-75th Street	partial		



- ☐ The update also addressed funding and legal considerations, including a review of statutory requirements, governance options, and taxing capacity by county. A tax matrix was developed to assess revenue potential at different rates, though results remain under board review. Updated cost estimates were also prepared, separating capital and operating expenses.
- ☐ Looking ahead, priorities include community outreach, with WAY TO GO gathering rider input, and the selection of a consultant for phase 2, which will feature a benefit-cost analysis of investment packages by jurisdiction. Scheduled for completion by the end of 2025, this work will help communicate transit value and build stakeholder support for Smart Moves.

Questions:

- ☐ Tom Jacobs, MARC, raised a question regarding an earlier metric that aimed to measure the percentage of the community able to reach their destination within 60 minutes by transit, and where the region would stand on that measure if the Smart Moves network were fully implemented.
- ☐ Yanni noted that while he did not have an exact number readily available, a GIS analysis and existing maps could provide an estimate. Yanni also highlighted the challenges of serving sprawling suburban areas, where development patterns inherently limit transit effectiveness regardless of service frequency.
- ☐ Splichal confirmed that the region sits at just under 21% of the UZA population served by fast and frequent transit if the Smart Moves network were fully implemented.

6. Public Transit Storytelling Project

- ☐ Rachel Krause, MARC, provided an overview of the storytelling project on

public transit in the region. Krause explained that WAY TO GO, a MARC program in place for 45 years, promotes green transportation options such as public transit, biking, walking, carpooling, and vanpooling. Storytelling has recently become a central part of the program's work, elevating the experiences of green commuters and employers. With the Smart Moves update underway and growing regional conversations around transit funding and services, Krause noted that now is the right time to capture and share the voices of transit riders.

- ☐ The project's goals include documenting the diverse experiences of transit users, building trust and community with riders and employers, and sharing these stories with the public and decision-makers, particularly those who may influence future funding measures. The effort also aims to increase awareness of WAY TO GO and MARC, while fostering a stronger regional culture around green transportation.
- ☐ The scope of work will include written interviews, videos and audio stories, focus groups in key areas, and field observations at transit hubs and on transit vehicles. These stories will be housed on the Way To Go website, shared through social media, and potentially amplified by local media partnerships.
- ☐ Krause announced that an advisory group of 12 community members will guide the project to ensure strong community involvement. Story collection will focus on riders, operators, and employers across different neighborhoods, with participants compensated for their time.

7. State Rules in Progress & Partner Updates

- ☐ Alicia Daniels, MoDNR, pointed out a main item to note is a rule amendment to construction permit exception which is scheduled for public hearing.
- ☐ Kurt Heine, MoDNR, also added that the Missouri annual monitoring network plan is open for public comment.

8. Other Business

- ☐ Clawson provided an air quality update, noting that smoke from large Canadian wildfires has intermittently affected the region, with PM2.5 levels reaching the yellow range. The MARC Air Quality Program monitors conditions daily and encourages partners to share information to help raise awareness.
- ☐ Clawson also reported one ozone exceedance so far this season on June 1st, with a reading of 72 ppb.

9. Next Meeting – Tuesday, October 14, 2025 at 10:00 a.m.

10. Adjourn

