1) Mayor’s Welcome (Mayor Indya Kincannon, City of Knoxville)
   a) Welcoming Remarks
      i) Today’s meeting will focus on transportation solutions – excited to increase multimodal transportation options and reach sustainability goals

2) Level-setting (Brian Blackmon, City of Knoxville)
   a) Welcome
   b) Recap of process
      i) Council kicked off in May
      ii) Over last 2 months, staff shared surveys with stakeholders and reviewed feedback
      iii) 4 working groups in addition to 15-person Council – a lot of conversations, a lot of opportunities for feedback
      iv) Council is ‘board of directors’ – providing vision and industry/community perspectives – and Working Groups are the staff – providing expertise to tackle strategies. Council participants will evolve as well – technical working groups will grow and change as needs and priorities change.
   c) Transportation Survey: Methodology, Results, and Insights
      i) Council members and members of the technical working groups responded to surveys on technical high-impact practices/strategies, which informs how we move forward – helps us understand local priorities, identify gaps in working groups and technical strategies. But surveys are iterative – this conversation will evolve, the initial survey responses represent baseline understandings and do not commit us to specific language or strategies, and we’ll continue to have in-depth discussions.
      ii) Responses show consensus around broad topics, which will be refined and evaluated by working groups in greater details. Based on rankings:
          1) Highest priority: Improving bicycle/pedestrian facilities and investing in public transit
          2) Mid-priority: focused on electric vehicles
          3) Lowest priority: ranked much lower.
      iii) Explanation of rankings, significant trends, and open-ended feedback

3) Equity Working Group (Erin Rose, Three³)
   a) Three³ is local research nonprofit selected to facilitate Equity Working Group
   b) Asks Council members to ground equity in this process so that end result is equitable access to and benefits from a climate strategy
   c) Equity Working Group has met once, but Erin Rose has had 1:1 conversations with members on their priorities, expectations, suggestions on how to integrate equity into this climate planning process. Main takeaway: equity systems thinking will need to be integrated throughout entire process.
   d) Major focus at this stage of examining participation and decision-making power of frontline communities, and then continuous engagement throughout process
   e) Overview of major equity themes: social / cultural justice, economic / distributive justice, environmental justice, parity in participation, legal protections/provisions. All interconnect – research shows that changing one impacts others – and all affect quality of life.
   f) Incorporating equity in this process: Historic inequities persist – how can we anticipate direct and indirect impacts of different climate strategies on different groups? Climate Council must consider how strategies could cause positive/negative impacts on ability of marginalized groups to participate in transition to a low-carbon, climate-friendly environment.
g) Next steps for Equity Working Group: define equity in Council context; develop equity criteria for evaluating technical strategies; identify unintended consequences of strategies to frontline communities

h) Erin Gill: important that we incorporate this lens into Council processes

4) Panel Presentations (Luke Gebhard, Milepost)
   a) Alternative Fuels / High-Efficiency Vehicles
      i) Kent Minault, Sierra Club – Best practices on EV adoption
         (1) Best practices are incentives & infrastructure because EVs more economical than gasoline vehicles, but upfront cost is higher
         (2) Shared EV reports with Brian to share with Council
         (3) Rebates available to incentivize purchase – LAWPD program for low-income residents
         (4) Infrastructure needs to be available and distributed equitably: chargers on streetlight & power poles are accessible and incentivize use
         (5) Structural racism involved in EV charging station locations – accessibility is more prominent in affluent communities.
      ii) David Greene, UTK – Fuel energy efficiency
          (1) The first step is public education and involvement
          (2) Vehicle energy efficiency must be improved to reduce GHGs – most significant impact to US emissions has been improvements to fuel efficiency over last 40-50 years. Increased fuel economy also generates savings for drivers – more than enough to compensate for increased cost of vehicles.
          (3) Biggest opportunity to reduce GHG emissions from light-duty cars/trucks, transition to the hybrid! 50% improvement in fuel economy, 33% reduction in GHG emissions, and ROI under 4 years. But 40% of public doesn’t understand how hybrids work, how easy they are to use, and are skeptical – so hybrids make up just 2.3% of vehicle market due to loss aversion and people declining risky bets even when the payoff is good. Government can help influence buyer awareness.
      iii) Jonathan Overly, East TN Clean Fuels Coalition – EVs and Alternative Fuels
          (1) We need to focus on vehicles in the community, which means we need to educate public on EVs AND consider role of other alternative-fuel vehicles
          (2) Natural gas, electric, and biodiesel all emit less GHGs than gasoline – but have different “ROIs”.
          (3) Suggestions: transition fleets to renewable natural gas over long-term; encourage EVs and hybrids in short term
   b) Transit / Transportation Demand Management
      i) Chris Cherry, UTK – Emissions from transportation
         (1) Dramatically reducing emissions from transportation will be critical to meet Knoxville’s GHG goals
         (2) Knoxville metro is growing – so more vehicle miles traveled
         (3) For transportation to be sustainable, we need to first reduce trips taken, then shift to lower-carbon transportation modes (walk/bike/transit), and finally improve the efficiency of transportation options
         (4) Overview of GHG emissions by different forms of transportation. Most efficient forms are highly-used transit and “micromobility” (bike/walk etc) – significantly lower emissions than low-occupancy cars.
         (5) Planning for development matters!
      ii) Jeff Welch, Knoxville TPO – The land use / transportation connection
          (1) Zoning over last 70 years historically didn’t consider transportation access – limited connectivity, reliance on personal vehicles, single-use land zoning – resulting in higher use of personal vehicles
          (2) New zoning code in last few years encourages mixed-use design – need to continue
          (3) To increase bike/walk options, must invest in infrastructure – specifically, sidewalks. Many of our major roads and streets don’t have, or they don’t feel safe. City is doing a good job, but county doesn’t require.
      iii) Belinda Woodiel-Brill, KAT – Transit in Knoxville
          (1) KAT overview
             (a) Funded from city, state, federal gov’ts + fares
             (b) Normally ~250,000 rides/month. Have been improving frequency and hours of service. Users are mostly low-income residents traveling to work/school.
          (2) Balancing service frequency vs coverage – example of Atlanta vs Barcelona
          (3) Importance of transit usage
US transportation system is most energy-intensive in the world and transportation is largest contributor to US GHG emissions – and continuing to increase!

EVs are part of solution, but we must consider low-income and non-driving residents

Creating ‘complete streets’ with mixed-use and high density amenities helps transportation systems

c) Bike / Pedestrian Transportation

i) Ellen Zavisca, Knoxville TPO – Land Use & Transportation
   (1) Creating a bikeable/walkable/transit-able community IS possible – many others have done it
   (2) Creating safer streets and changing culture is effective
   (3) Cumberland Ave retrofit resulted in 90% decrease in traffic accidents by bicyclists/pedestrians
   (4) Many low-cost retrofit options – signaled pedestrian crosswalks, islands, curb extensions, etc
   (5) ‘Last mile’ safety is critical – people won’t use transit if they don’t feel safe crossing the street – and we KNOW where the most dangerous streets are

ii) Caroline Cooley, Bike Walk Knoxville – Vision Zero
   (1) It’s 11x more dangerous to walk/bike than drive
   (2) Need to move to Vision Zero approach, which reduces traffic deaths/injuries, miles traveled, GHG emissions, etc

d) Recap (Brian Blackmon, City of Knoxville)
   i) Panels were designed based on feedback from council members & survey responses. Feedback from today’s discussion will inform depth/focus of working group meeting(s).

5) Discussion of High-Impact Practices (Luke Gebhard, Milepost)
a) General Reactions

i) Mayor Kincannon: Interested in no-car transportation options in urban core (limiting core areas to pedestrians, etc); wants to make transit easier so residents don’t have to pay for expensive cars
ii) Jonathan Overly: Happy to see top 2 strategies include bikeable, walkable, accessible transit. But they take a longer time to implement – so also consider mid-ranked strategies.
iii) George Wallace: It’s expensive and not always popular to expand bike facilities/corridors. City is investing in new developments but not providing transportation options. Focus more on mid-ranked strategies – more to gain, less politically challenging, and less expensive than top-ranked. Wants to learn more about technologies.
   (1) Ellen Zavisca: there are a lot of low-cost retrofit options. Physically-separated bike lanes is the most effective way to get people on bikes – and you can do it with flex posts, curbs, signal timing, paint, etc. to avoid rebuilding intersections. The public must be engaged – drivers used to certain styles of driving
iv) Alicia Hemmings: Need to increase public re EVs – car dealers don’t know about incentives to share with customers during the buying process; consider public-private ridesharing options
v) Stephen Smith: Need to quantify carbon reduction and political cost of each strategy
   (1) Brian Blackmon: we’ll do this at working group level. We have access to USDN data and local experts to figure out what strategies will make the most impact.
vi) Stan Johnson: What other cities have studied how these strategies impact GHG emissions? How will low-income residents be educated about / involved in strategies?
   (1) Brian Blackmon: all these strategies are high-impact practices derived from USDN partner communities
   (2) Erin Gill: the technical working groups will address these questions
vii) David Greene: 80% reduction by 2050 is extremely difficult and requires systematic transformation of how we use energy – first step is to engage the public. The studies that quantify GHG impacts shows that energy efficiency is first step but only gets you halfway – you need low-carbon transportation (EVs, hydrogen fuel cells). Building public consensus should be first step.
viii) Brian Hann: Need investment in bike/ped infrastructure – even just paint / signal timing. Need to quantify GHG emissions.

b) Challenges & Barriers

i) Erin Gill: city historically provides infrastructure & transit – for mid ranked categories related to EV charging, do you think that’s a role of the city or more of a public-private partnership?
(1) Kent Minault: EV charging is currently located in wealthy parts of town (west side) but very few on the east side – should be distributed throughout the city more equitably and combine with utility-funded rebates to incentivize adoption in low-income residents. Consider placing EV chargers at the zoo.

(2) Jonathan Overly: city needs an EVSE plan. There will be 2-3 significant funding sources for EV fast chargers installed near major corridors

(3) Stephen Smith: a lot of momentum towards electrifying transportation right now – city should lead working groups, financing, etc. Using Florida’s “Driving on Sunshine” campaign as an example of a city using their megaphone.

(4) David Greene: long-term EVSE plan is important – lots of partners in the region who want to help. We should adopt zero-emission vehicle mandate – Tennesseans can’t buy certain cars because we don’t have that.


(1) Rebecca Tolene: What are the impacts on carbon and how does this align with the Mayor’s climate goals timeline. Has anyone polled the public (Knoxville) related to moving mechanisms and perceptions of EVs? How do we need to tweak language and refine it before we go out? If we could learn what folks are most excited about, we can build community around it.

(a) Brian Blackmon: Discussion getting more technical than we planned. Drive Electric TN has polled on public perceptions regarding transportation generally, but not on these strategies specifically. We may adjust strategies before going to the public for feedback.

(2) George Wallace: we worked with a contractor who converted lawnmowers to propane – a lot of positive publicity, impact, etc. How can we incentivize conversion of delivery vehicles, etc? Preferential treatment on bids, etc?

(3) Jonathan Overly: financial incentives to public fleets, but also for private fleets – could city help push them to convert? Short term = 3-5 years, mid-term = 10-12, long term = 20

(a) Erin Gill: good idea to help community partners convert fleet

iii) Alicia Hemmings: increasing accessibility to EV chargers in lower-income communities must correspond to access to EVs

c) Opportunities

i) Ellen Zavisca: we know which locations are the biggest risk for bicyclists/pedestrians. City has strategic bike plan and is working on pedestrian plan. These are opportunities to move quickly.

ii) David Greene: EVSE plan – we know a lot about EV use, there are funds from VW settlement, and we have lots of regional partners willing to help.

iii) Stephen Smith: EVs have reduced maintenance cost – electrification saves taxpayer dollars. Is there effort to decarbonize City fleet?

6) Close (Brian Blackmon, City of Knoxville)

a) Next steps

i) Transportation technical working group will meet August 11. We’ll discuss today’s priorities in more detail. Optional but encouraged for Climate Council members. TBD if in person or by webinar.

ii) Council members should fill out customer satisfaction survey on meeting format, content, etc.

iii) Resources from this meeting will be posted to City’s Climate Council webpage