

NATIONAL
ACADEMIES

Sciences
Engineering
Medicine

Transportation Research Board

Air Quality & GHG
Mitigation Comm. (AMS10)

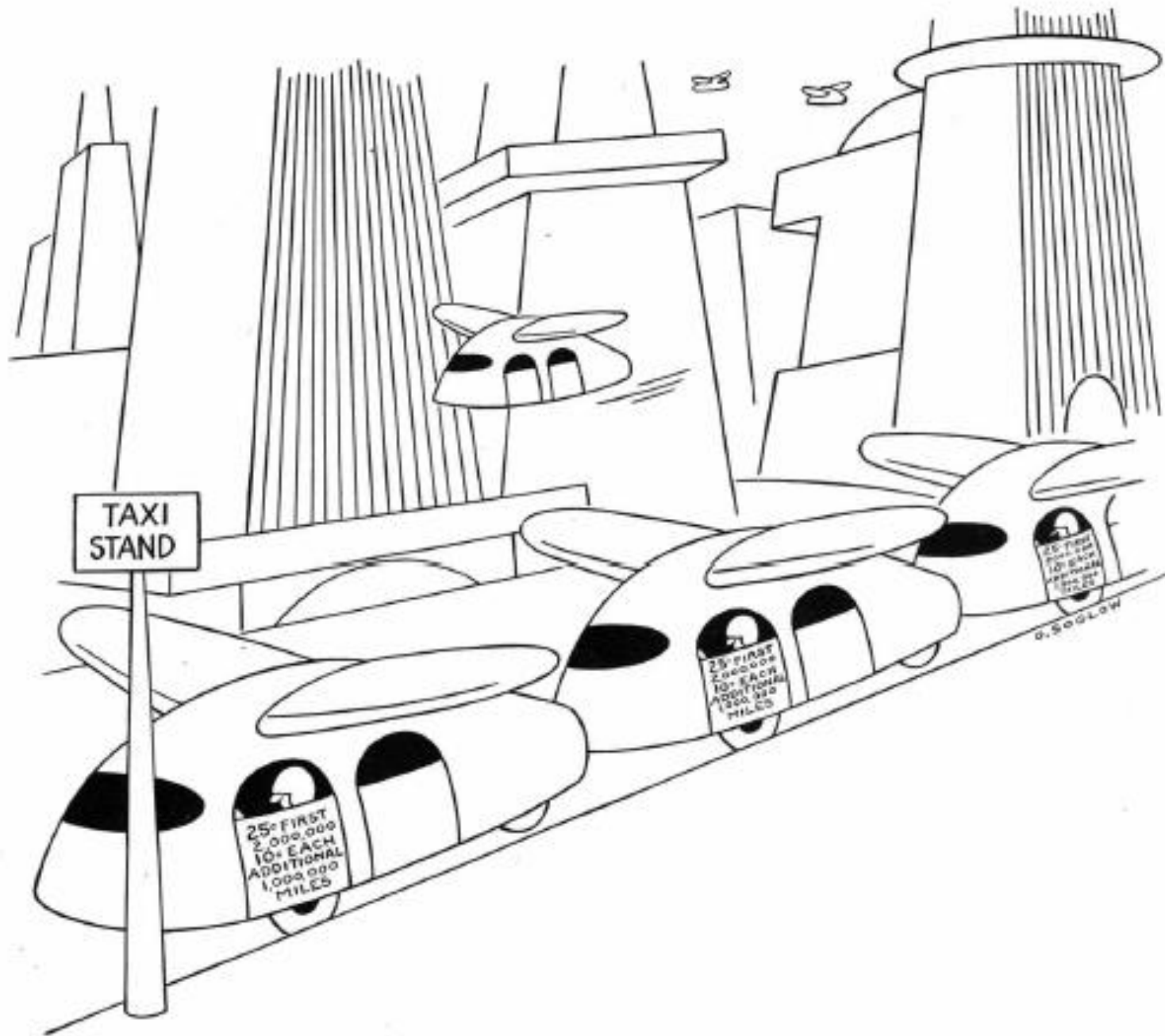
Summer Meeting Welcome

Doug Eisinger, Sonoma Technology, Chair

June 29, 2022



TRBAirQualityGHG.org



The future
of mobility!

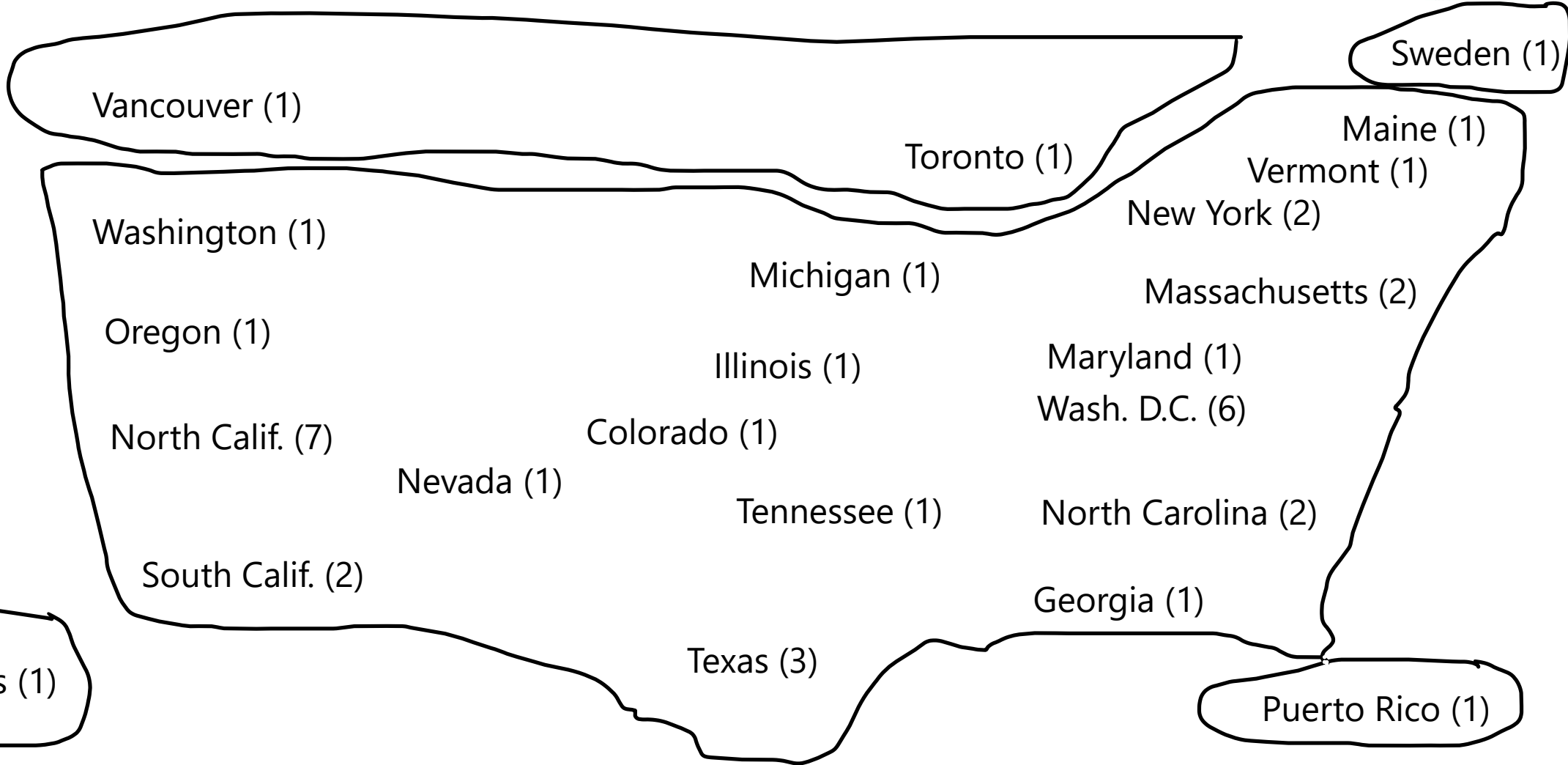
(1958 humor)

Welcome to our summer meeting!



China (1)

Philippines (1)



Whatever your vision of summer is, and wherever you are, welcome!

A few things to get us started...

1. Meeting focus
2. Committee mission
3. New AMS10 structure
4. 2022-2025 strategic plan:
 - Statement of urgency
 - Near term goals



BIG thanks to our organizers!

- Annalisa Schilla, Calif. Air Resources Board
- Ellen Greenberg, Caltrans (Ret.)
- With invaluable support from Christy Gerencher, TRB

Focus for Today

Identify committee actions to:

- address urgent GHG mitigation needs (especially) and
- advance our air quality work



Committee Mission Statement

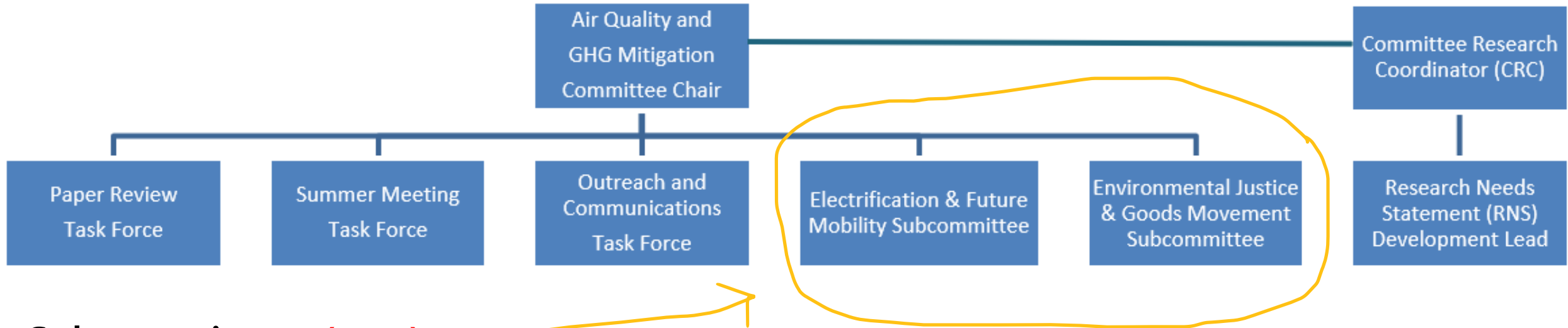
Our Mission is to provide leadership in research initiatives and knowledge sharing in the area of transportation-related air quality and **GHG mitigation** issues. AMS10 does this by ensuring that

- critical issues are addressed in sessions and events
- up-to-date research needs are maintained
- cross-cutting emerging issues are identified
- excellence in research is rewarded, and
- the committee remains relevant and vibrant

Mission and Service



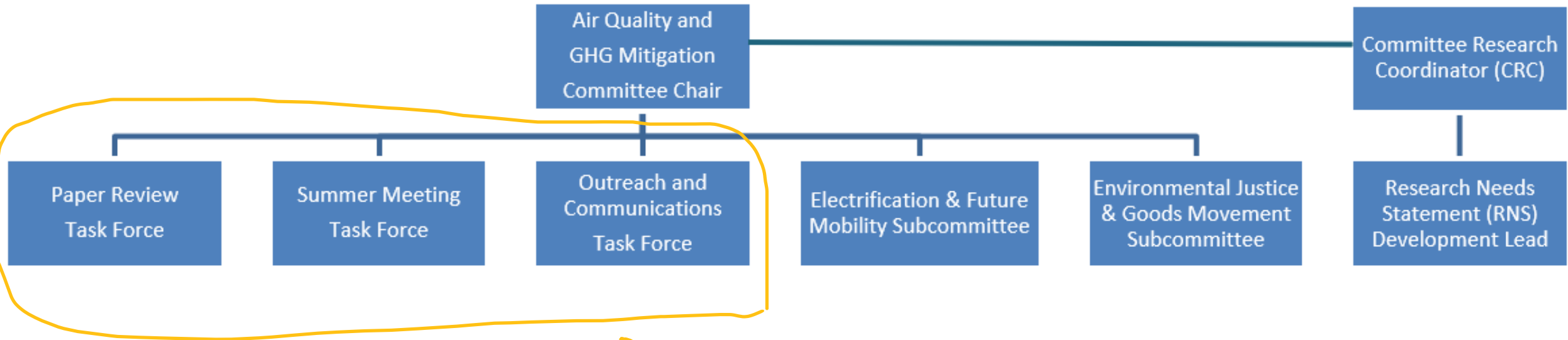
New AMS10 Structure (1 of 3)



Subcommittees (new)

- **Electrification and Future Mobility (John Davies, Alex Bigazzi)**
 - Fleet electrification and lifecycle emissions impacts for **air quality** and **GHG** control
 - Behavior change, pricing, and future mobility: use and electrification of TNCs, CAVs, transit
- **Environmental Justice & Goods Movement (Cindy Copeland, Kanok Boriboonsomsin)**
 - Environmental justice: light, medium, and heavy-duty vehicle impacts and controls
 - Goods movement and diesel-powered vehicle **air quality** and **GHG** impacts and controls

New AMS10 Structure (2 of 3)



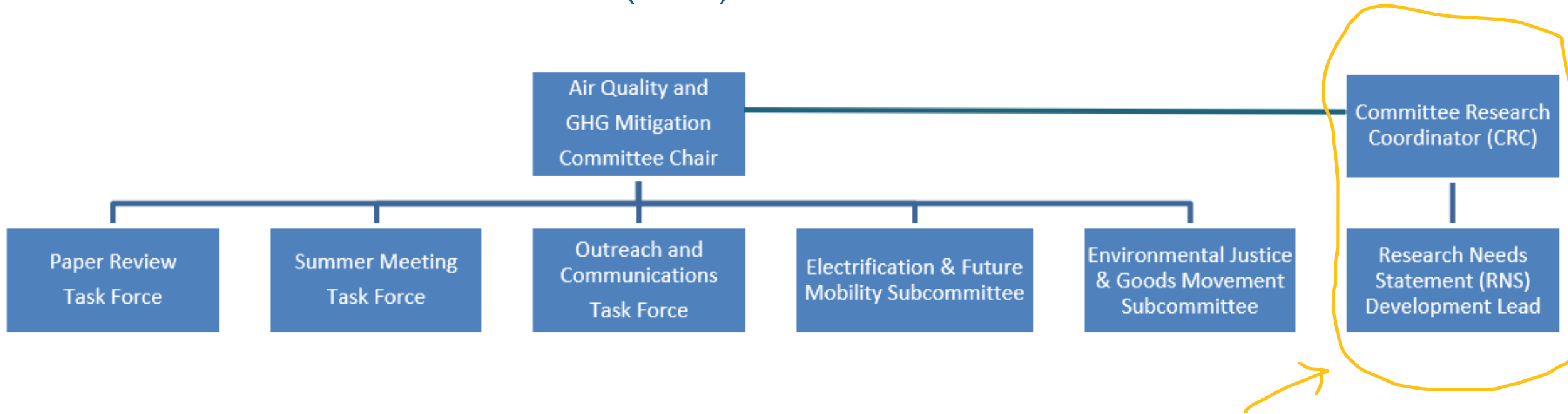
Administrative Task Forces

- Paper Review (Greg Rowangould, Shams Tanvir)
- Summer (Mid-Year) Meeting (Annalisa Schilla, Ellen Greenberg)
- Outreach & Communications (new)

Research Coordination

- Committee Research Coordinator
- Research Needs Statement Development Lead

New AMS10 Structure (3 of 3)



Administrative Task Forces

- Paper Review
- Summer (Mid-Year) Meeting
- Outreach & Communications (new)

Research Coordination

- **Committee Research Coordinator (Marianne Hatzopoulou)**
- **Research Needs Statement Development Lead (Natalie Liljenwall)**

AMS10 2022-2025 Triennial Strategic Plan

Statement of Urgency (Excerpts)

The National Academies has stated, "...to reach net-zero carbon by 2050, the United States **must begin taking action now** [*emphasis added*] to accomplish five main technology goals. Meeting these objectives over the current decade (2021-2030) will be essential to making the net-zero transition possible on a 30-year timeframe, so that long-lived energy infrastructure can be replaced with zero-carbon alternatives." As [noted by the National Academies](#), "A sharp reduction in CO₂ emissions is needed to slow climate change and avoid the most severe impacts on weather extremes, ecosystems, human health, and infrastructure."^{*}

Given the urgent need to address climate change, and the recent focus by the National Academies and TRB on GHG mitigation, there is a short-term need to prioritize resources on GHG issues... AMS10 faces a key challenge: it must rapidly address GHGs and simultaneously maintain and improve upon its ability to address air quality. To meet this challenge, the committee must place special emphasis in the near-term on GHG mitigation, while sustaining its ongoing air quality-related work.

^{*} See goals from [Accelerating Decarbonization of the U.S. Energy System](#): (1) produce carbon-free electricity; (2) electrify energy services in transportation, buildings, and industry; (3) invest in energy efficiency and productivity; (4) plan, permit, and build critical infrastructure; (5) expand the innovation toolkit: triple investment in clean-energy R&D and demonstration.

Near-Term Goals: 2022-2025 Strategic Plan

1. **Connect research to policy:** focus research priorities on policy-relevant actions
 - a. Identify policy community needs, share science-based priorities with practitioners
 - b. Develop findings to inform GHG control efforts in the near-term (two to five years)
2. **Identify, assess, and profile informative GHG mitigation efforts (case studies)**
 - a. What was done? What obstacles were encountered? Were they overcome and how?
 - b. What real-world outcomes were achieved?
 - c. What are the transferrable policy development and implementation lessons?
3. **Improve information sharing on GHG and air quality-related research**
 - a. Develop TRB e-Circulars (key topic research roadmaps – see Subcomm. Research Clusters)
 - b. Improve dissemination of findings to practitioner and research-funding communities
 - c. Leverage web-based communication resources
 - d. Coordinate with AMS30 (Energy) and AMS40 (Alternative Fuels and Technologies)
4. **Continue to improve diversification of committee participants, membership, and leadership**
 - a. Increase involvement by under-represented stakeholders and young professionals
 - b. Address diversification through committee membership rotations
 - c. Promote diversity, equity, and inclusion in research activities (e.g., paper submissions)



Travel
options!