The Future of Transportation Technologies and Regional Mobility in Kansas City
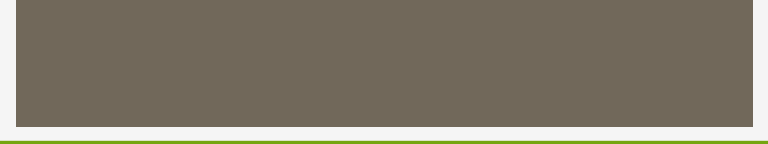
"The development of autonomous vehicle technology has recently shifted into overdrive."

Autonomous Vehicles: A Policy Preparation Guide
(National League of Cities)

"Cities that do nothing face major risks."

Driverless Future:

A Policy Roadmap for City Leaders
(Arcadis, HR&A, Sam Schwartz)

Technology Trends

- Increased widespread data and connectivity
- Advanced vehicle technologies
- Adoption of new technology-enabled mobility options
- Developments in technologies affecting freight movement and logistics
- Advances in transportation system management/operations

Regional Transportation Technology Policy Document: Overview of Trends and Policy Implications
(Atlanta Regional Commission/ICF International)

US DOT Guidance

"NHTSA encourages **collaboration** and **communication** between **Federal, State and local governments and the private sector** as the technology evolves, and the Agency will continue to coordinate dialogue among all stakeholders. **Collaboration is essential** as our Nation embraces the many technological developments affecting our public roadways."

Regional Importance

- How will these technologies impact existing work?
- What regional goals can be met or addressed through deployment of new transportation technologies?
- What capacities need to be developed for successful deployment?
- What local and state policies need to be developed or amended?
- What are priority opportunities for pilot projects and targeted investments in technology and infrastructure?

Areas of Analysis

- Infrastructure, Planning and Investment
- Data Management
- Environment and Land Use
- Travel Demand Management and System Performance
- Economic and Workforce Opportunity
- Equitable Access and Mobility Services
- Certification, Liability and Insurance

Areas of Analysis

Equitable access and mobility services

Consideration and mitigation of digital divide and access to services, opportunities for shared mobility services

Equitable Access and Mobility Services

- App or technology-based solutions may make the transportation system less accessible to those with transportation disadvantages.
- Some percentage of the population will refuse to adopt new technologies regardless of potential impact on them or others.
- Level of human interaction – social needs, level of service needs (door-to-door versus curb-to-curb).
- Potential to move users to more appropriate levels of service to increase access for those with greater level of service needs.
- Great potential to provide higher levels of mobility to transportation disadvantaged populations if implemented thoughtfully and equitably.

Areas of Analysis

Environment and land use

Local policies for environmental impact mitigation and land use decisions

Land Use and Environment

- How autonomous vehicles impact existing goals related to creating quality places, center and corridor planning, density, and mixed-use development.
- Shared versus individual ownership.
- Reclamation of land from the transportation system to green space or other green infrastructure improvements.
- Changes to operations of existing infrastructure – pick up/drop off areas, etc.
- Interaction of autonomous vehicles with the public transit system
- Large potential for safety improvements to users of all modes.

Primary Recommendations

- Ongoing need for regional stakeholder education
- Land use policies – parking, curb-sharing (pick-up/drop-offs)
- Pricing strategies – operational, parking, registration, vehicle use
- Regional and multi-jurisdictional data sharing
- Equitable access to services and the transportation system

Overarching theme of all working groups?

Education, Education, Education.

Where to find it?

- www.MARC.org
    - → Regional Planning
    - → Innovation
    - → Autonomous and Connected Vehicle Framework