# Building a SYSTEMATICS AND EQUITABLE TRANSPORTATION FUTURE

Let's join forces to put your communities at the forefront of equitable change



# RECOGNIZING THE PAST, ACTING NOW, LOOKING TO THE FUTURE

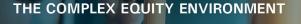
Recognizing the role of transportation in the institutional inequities that have disadvantaged vulnerable communities for generations is the first step. Addressing these systemic barriers is a complex challenge. It requires engaging with the experiences of the people in your communities, understanding your agency's unique context, and recognizing the needs of your community now and how they will evolve over time. That's why Cambridge Systematics' (CS) approach is grounded in distinct principles, a driving sense of purpose, and the experience, capabilities and flexibility to collaborate with you and your stakeholders for real change.



### THE BEST PLACE TO START IS IN THE COMMUNITY

Equity is a powerful idea, in part because it encompasses so much: historically disadvantaged populations, communities and demographics; systemic drivers that create those inequities; and the resulting outcomes of that history. But it is not too big or complex to begin addressing.

We can help you to learn from the people in your communities how they identify and prioritize the barriers to equity. This provides the foundation as we work alongside your agency and your stakeholders to begin realizing a healthier, safer, more economically sustainable future for all.



## DEMOGRAPHIC FACTORS

Age Disability Gender Race and ethnicity

SYSTEMIC DRIVERS OF INEQUITY

Built environment Geography Access/mobility

### OUTCOMES

Health status Economic opportunity Safety Education

### **EQUITY IN ACTION**

With an understanding of the drivers, issues and outcomes you and your community want to address, we get to work. That can involve equity analysis, multimodal planning, travel behavior pattern analysis, future technologies, software mobility solutions and more. We bring the right cross-disciplinary members to the team, with you and your community, and we move forward to tackle your equity needs holistically, systemically, and expertly—grounded in stakeholder engagement.

Here are a few examples of our extensive work that impacts equity in and through transportation:

- CS worked with the San Diego Association of Governments (SANDAG) to streamline and standardize social equity analyses of geographic, socioeconomic and racial factors. By developing a Social Equity Analysis Methodology (SEAM) and a Social Equity Analysis Tool (SEAT) we provided agencies across the state with common processes and a consistent planning framework.
- We conducted a targeted travel behavior pattern analysis of equity populations for Sound Transit, allowing its staff to analyze travel behavior with precision and obtain actionable insights into the movement of equity populations through the city. Using census data, customer satisfaction survey data, origin-destination survey data, and fare card data, we developed the flexible data dashboards that made this possible.

• For several Southern California 211 human services information and referral agencies, CS configured and deployed 211RIDE, an open-source multimodal trip planning solution that helps veterans, low-income families, the elderly and individuals with disabilities to access specialized transportation. 211RIDE considers the rider's unique travel needs such as trip origin and destination, day and time of travel, trip purpose, and characteristics such as age or veteran status that determine eligibility for certain accommodations.

We incorporated input from numerous stakeholder groups, local transit agencies and service providers to make 211Ride more accessible to all users and to more accurately represent the specialized services available for riders.



• The city of Las Vegas is developing GoMed to connect vulnerable populations with its medical district. CS is leading the systems engineering planning and helping the Regional Transportation Commission of Southern Nevada secure over \$5 million in grants to implement GoMed. The project seeks to implement new technologies to enhance safety, mobility and quality of life for Southern Nevada's most vulnerable populations, particularly the elderly and persons with disabilities. ADA-compliant autonomous shuttles will circulate between downtown and the medical district to connect all residents with vital services like healthcare, education and employment. The project also will implement safety technologies that will be vital for elderly and disabled populations, including smart transit shelters and safety devices that connect traffic signals, drivers, passengers and pedestrians.

We held a series of workshops with stakeholder groups to collect information on community needs and desired changes for GoMed. The development of the Concept Of Operations, System Requirements and High-Level Design are all based on and traceable to user needs defined by community feedback.

### **EQUITY IN PRINCIPLE**

Our equity work is grounded in the mission we share with our clients to improve communities now and for future generations, through transportation. As innovators for nearly 50 years, we understand that equity is multifaceted and your needs evolve. We are committed to an equitable future that recognizes past inequities in transportation planning and implementation. We know that each agency and its stakeholders have unique needs. And we fundamentally believe that this work is the right thing to do. While the solutions differ, we are grounded in principles that always guide our approaches.

These are just some of the ways Cambridge Systematics turns our dedication to equity into meaningful change:

- Community outreach and stakeholder engagement are fundamental to our partnership approach with our clients, because the voice and involvement of the people lead to more equitable outcomes.
- In all applications of our LOCUS locationbased services data product, we include equity travel flows even when it goes beyond the project requirements. Every agency should have the tools available to carry out transportation decision-making through an equity lens.

- Our Equity-In-Action in-kind grant program helps nonprofit and grassroots community-based organizations advance their equity goals by providing access to CS' proprietary data and transportation consulting services. The grants can support studies of how disadvantaged communities move and access critical resources, to equitable recovery from COVID-19, research that addresses inequities in the transportation system, and strengthening other equity-focused grant applications.
- We approach planning for the future of transit as an obligation to get our most vulnerable neighbors where they need to go safely, with access to health, economic, educational and social resources. We call this Mobility Forward.
- By developing our trip-planning solutions on open source platforms we provide equity of access, enabling a nationwide community of partners to develop and enhance the mobility software that people with disabilities, the elderly, low-income residents, veterans, and all riders depend on. We also help advance data standards to reduce costs and leverage code, standards and data formats that have industry acceptance and backing, helping various technology and agency functions to work seamlessly together in support of the communities they serve.

- Recognizing the inequitable distribution of the harmful impacts of freight transportation, we developed guidelines for mitigating the environmental and health impacts while leveraging opportunities to improve access to quality jobs and delivery of vital goods such as healthy food options and medical supplies.
- We seek to build project teams that intentionally reflect the diversity of the communities our clients serve. This flows from the work of our Diversity, Equity and Inclusion (DEI) Council, which includes CS staff at all levels and from a broad range of perspectives. The Council developed and leads the ongoing implementation of our comprehensive DEI strategy that considers both our internal experience and our external impact. To validate and inform our actions, we track our progress against qualitative and quantitative data.





# HOW CAN WE PARTNER FOR A MORE EQUITABLE TRANSPORTATION FUTURE?

Let's discuss how our principles, purpose and solutions can help you and your community reach its goals.

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### Why Cambridge Systematics

Cambridge Systematics, Inc. specializes in transportation and is dedicated to ensuring that transportation investments deliver the best possible results and a more equitable future. By providing innovative solutions in planning, modeling, operations and software applications, we help our clients make decisions to meet future transportation needs while enhancing the performance of existing infrastructure. We foster strong relationships with our clients and share with them a commitment to improving transportation for future generations.

