THE CENTER FOR ADVANCED URBAN VISIONING

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Helping Regions Maximize Transportation Outcomes

THE CENTER FOR ADVANCED URBAN VISIONING (CAUV) helps regional planning agencies achieve ambitious transportation goals, even as costs rise, revenues decline, and expectations grow. It does so by guiding these institutions through **Advanced Urban Visioning (AUV)**, an empirical, seven-stage learning process.

The challenge is clear: transit investments are expected to reduce road congestion, improve operating efficiency, expand access to jobs and opportunities—especially for marginalized communities—reduce greenhouse gas emissions and household transportation costs, and accommodate and stimulate growth without adding more cars to crowded roads.

Meanwhile, the costs of building, operating, and maintaining infrastructure continue to rise. When transit falls short, a region's entire plan is imperiled—as is its road network itself.

Yet even when resources were more abundant, conventional regional transportation plans frequently fell short of ambitious goals.

The problem isn't just money. It's the way we plan. It's the gap between what the transportation market *values* and what regions *deliver*. It's how we identify projects and alternatives, the models we use to evaluate them, and the questions we ask—or fail to ask.

These problems can be addressed. Regions can learn to achieve substantially better results with the resources available.

Ask Better Questions. Get Better Results.

CAUV is based on a simple principle: **ask better questions, get better results.** Questions like:

- Where is your next new rider coming from?
- What is the competitive position of your current transit system?
- What do your regional evaluation models actually measure—and don't measure?

By systematically answering these and other questions, regions can learn what transit could achieve, use that potential as a benchmark, and develop strategies to move progressively closer to it.

Advanced Urban Visioning

Rather than selecting projects on the basis of their affordability, AUV begins with desired outcomes and works *backward* to discover how to produce them. It then explores how to achieve those outcomes within budget and only then how to apply what has been learned to other challenges.

The seven stages form a sequential learning process:

1**. Learn where transit is competitive,** where it is not, and what your project evaluation models see and don't see. Use Transit System Effectiveness (TSE) mapping to establish transit's competitive position relative to driving. Stress-test existing regional models to identify what they can and cannot recognize. Using these inputs, identify the questions a targeted market research effort needs to answer.

2**. Learn how the transportation market actually works.** Conduct targeted market research to define how the market for transit services is segmented and why each segment makes its transportation choices. Identify the service attributes that drive choice and the weights people assign to each. Simultaneously, upgrade the model's ability to measure certain key variables using a GIS overlay approach.

3**. Learn how to use upgraded analytical tools** to design more effective transit strategies. Incorporate market research findings into improved regional models and exploratory tools. Use these tools to investigate how different transit configurations and characteristics affect transit's competitive position and ridership.

4. **Learn how to achieve desired outcomes (without worrying at first about costs)**. Identify a region's "Prime Network"—the network configuration and service characteristics that *maximize* the region's ability to attract transit riders, anchor new development, and meet regional goals.

5. **Learn how to produce desired outcomes within budget.** Through an iterative process involving both value engineering and exploratory design, craft a "Target Network" that operationalizes the Prime Network by producing its essential attributes affordably. Use capital investments to engineer time out of the system, lower operating costs, and increase revenues.

6. **Learn how an optimized transit system changes** what the rest of the regional plan needs to accomplish. Determine how improved transit, bicycle, and pedestrian networks reduce or shift the need for road and highway investments. Reassess the broader regional transportation and land-use plan accordingly.

7**. Learn how to leverage transit projects.** Configure projects with bicycle, pedestrian, public space, park, and utilities investments to implement the Target Network and multiply desired regional outcomes.

Throughout this process, the region's own agencies, executives, public officials, and stakeholders develop and apply the knowledge.

The result is a new planning benchmark: **the region's achievable potential, rather than just the aggregate performance of projects already under consideration.**

Turning Potential into Results

Instead of asking only how a proposed project performs, a region can ask how much it advances the transit system toward its potential.

It can assess how planned investments get the region closer to its Prime Network and identify where modifications or complementary improvements can multiply their benefits.

Some investments may serve individual corridors but contribute relatively little to the larger network. Others may create connections that greatly expand the usefulness of existing services. Some may open the door to future improvements; others may close it.

AUV helps regions investigate these relationships and understand the consequences of different investment choices.

The aim isn't to promise that every goal can be achieved. It's to discover what *can* be achieved—and develop strategies that make the most of the resources available.

An Agency-Led Process

Advanced Urban Visioning is designed to be carried out by the organizations responsible for planning a region's future.

Planning agencies and their partners organize and manage the work, investigate the questions, interpret the findings, and decide what to do with them. CAUV supplies the methodology, tools, and guidance.

This approach builds knowledge and capability within the region itself. It also allows transportation agencies, metropolitan planning organizations, civic and business leaders, research institutions, and other partners to participate in a shared investigation of what their transportation system could accomplish.

An initial engagement with CAUV begins with presentations to senior leadership and partners, as well as the Stage 1 work: mapping transit's competitive position, stress-testing regional models, and developing a market research brief. Each task may also be undertaken on its own.

About the Founder

Alan Hoffman founded the Center for Advanced Urban Visioning following a career in transportation planning, market research, regional mobility strategy, and innovative transit system development in the United States and internationally. Among other major planning efforts, he developed the adopted long-range transit plan for the Las Vegas region. His work on innovative transportation strategies was specifically highlighted at the *International Competition for Sustainable Urban Design* in Tokyo.

Alan holds master's degrees from both MIT and Harvard University. He has taught City Planning and Public Administration at the graduate level, has consulted to international organizations such as the World Bank, and has been a keynote speaker at major conferences around the world. He also authored the Federal Transit Administration study, *Advanced Network Planning for Bus Rapid Transit*.

Want to learn more? *Download our article, "When the Money Is Never Enough," from our website.*

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