Book Review: Mobility First: A New Vision for Transportation in a Globally Competitive Twenty-First Century
Book Author(s): Samuel R. Staley and Adrian T. Moore
Review Author(s): Marcus Bowman
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Book Review


Mobility First

by Marcus Bowman

Sam Staley and Adrian Moore put forward a revolutionary perspective in their 2009 transportation vision, Mobility First. This book was not an instant best seller, neither is it a destined classic. However, it is a mind-expanding, idea-generating presentation of challenges and solutions to modern transportation problems. It may read just as well 30 years from now.

Transportation intellectuals who are comfortable with today’s conventional wisdom are likely to throw this book against the wall in the first chapter. Come to this book prepared to hear a radical departure from the typical language and code the authors say has “bogged down” transportation discussions. For example, Mobility First includes a chapter entitled “Seven Steps to Expanding Current Road Capacity,” and Sam Staley opens the book with a quote: “If cars get us to where we want to go faster, that’s not a problem.” The authors point out that “we have yet to begin a serious discussion” about reformulating our transportation system. The ideas and concepts in their book have largely been left out of many policy debates.

Mobility First may not be your cup of tea, but it can be the spoon for your cream and sugar—providing a fresh, different perspective to spur new thinking. The ideas in the book might not be the solutions, but with a full read you may agree they sweeten the pot and move us toward a better future.

The authors state that government decisions have, for a generation, focused primarily on reducing mobility – managing travel demand in ways that planners hope will steer people out of their cars. In this respect, many Americans may not realize the extent to which current transportation decision makers were treating road congestion as if it were a good thing.

Thus one key message of the book is simply to reframe the debate about transportation’s future around mobility. The path forward should simply be to increase the speed of travel. Improved economic competitiveness and a better quality of life are the results of decisions that reduce congestion and increase transport speeds.

Staley and Moore formulate their vision first by analyzing new trends such as the non-traditional commute. Commuting is no longer as simple as people heading to and from a city center. Moreover, focusing only on commutes misses much of the story. Throughout the book, these types of points are backed up with statistics. For example, over three-quarters, 83%, of all trips are non-work. The notion that transportation is patterned along fixed lines is outdated. Thus, a revolution is needed to upend the hub-and-spoke model of cities.

The book hits its heights of visionary and revolutionary transportation thinking in Chapter 5, “A New Approach to Congestion and Road Networks.” In one figure in the chapter, Staley and Moore break new ground in advocating for a “3-D spider web approach” to transportation networks. The two-dimensional transport networks should look more like the mesh of a spider web instead of hub-and-spoke. The spider web transportation network is more capable of quickly getting people from all points of origin to all destinations. Staley and Moore then advocate for “new types of roads” to meet these modern travel patterns. The new “3-D transportation infrastructure” perspective layers roads above ground and below ground. Connectors from our current roads would provide access to
tunnels, elevated roads, and flyovers. Featured examples include the A86 tunnel in France, which is a two-tier tunnel, doubling traffic throughput along a portion of this Paris beltway. The Crosstown Expressway in Tampa is an elevated, three-lane expressway positioned above the pre-existing Interstate. The lanes are reversible to speed the flow of traffic in the direction it is needed.

Privatization and pricing are two additional concepts not likely to be a surprise in a book by Sam Staley and Adrian Moore. Technology-based solutions, such as fully electronic tolling systems, have eliminated tollbooths, allowing drivers to flow through at highway speeds while the road operator still collects tolls. This innovation already saves time though, more importantly, will provide the incentive for private road operators to build new capacity in the form of additional tolled lanes and roads that otherwise would not be built. Express toll lanes and truck-only toll lanes are explored. High-occupancy toll (HOT) lanes open up the free space in underutilized HOV lanes so that drivers willing to pay a price can travel alongside cars filled with carpoolers. HOT lane prices are calculated by algorithm to ensure that the toll is high enough to only attract enough drivers to still keep cars moving. Another congestion solution which has yet to gain much momentum is tolled flyovers, known as "queue jumps." These short elevated routes would pass over, say, a busy intersection giving those drivers willing to pay the toll a quick ride straight through a typically bottlenecked situation.

The congestion problem calls for big and innovative solutions. Over the next 20 years, the cost of congestion could close in on $1 trillion (actually estimated at $890.5 billion), representing 4.3% of the entire U.S. economy. As one urban example, in Minneapolis congestion was basically nonexistent in the early 1980s. By 2001, residents wasted an average 28 hours per year in congestion, and the number is rising. Much of the book focuses on large urban areas. Staley and Moore devote a full chapter to the bottleneck that is New York City, noting the surprisingly high level of automobile travel in a metro area usually associated with transit ridership.

Yes, transit advocates will find some cream in the book, though not sweetened in the customary way. In a chapter entitled "Transitioning Transit," Staley and Moore advocate for privatization approaches that could spur transit agencies in a more customer-oriented direction. An easy path forward would be to start simply with experiments. Competitive bidding and concession agreements could be used "to unleash competition, innovation and entrepreneurship" in transit agencies. Currently, advocates for increasing transit ridership push largely for ways to force people out of their automobiles. Staley and Moore are essentially saying that if you build a better product, improve speeds, and provide a better service, people will want to ride transit.

Still, the transit chapter ends up back on the road. Buses and bus rapid transit (BRT) in particular, can take advantage of the spider web mesh network as well as flexibly reroute to accommodate changing travel patterns. The authors also point out that in 27 major metropolitan areas, telecommuters outnumber public transit riders. Among them: Orlando, FL, Austin, TX, Denver, CO, San Diego, CA, St. Louis, MO, and Charlotte, NC.

The book closes with a typical refrain familiar to Washington, DC, transportation lobbyists—asking for more money. The pitch has a twist, focused on a call for a direct user fee system that would more clearly link "what people pay to what they use." This concept expanded and combined with private investment would provide the sustainable funding necessary for the long-term commitment needed to implement the envisioned dramatic overalls.

Mobility First preaches solutions aimed toward getting people around. Travelers value mobility because it saves time. The many thoughts and ideas built around discussions of supply are a welcome contrast to the more typical reframes seeking to change behavior and "manage" demand. The book envisions the U.S. transportation network upgraded to reflect the dynamic patterns and complexities of modern day travel. Staley and Moore state that "our transportation system is becoming harder and harder to use." Commutes are less important to the layout of an effective transportation system. "We’re not willing to think big enough" and "no one is thinking about the dramatic redesign of our
transportation networks necessary to ensure that mobility continues to be a cornerstone of the U.S. economy’s competitive advantage.”

*Mobility First* is written for a professional audience with data, visuals and bold ideas to keep the most astute transportation minds fully engaged. Thorough knowledge and extensive experience are demonstrated as the book broadly and innovatively covers our complex, interconnected transportation system. Fans may wish for more. Critics will surely be challenged to pull through many parts. Still, readers are likely to be glad they read *Mobility First.*

**Marcus Bowman** manages corporate compliance and intellectual property at Standard Furniture Manufacturing, Mobile, Alabama. He is also founder of 3G Mobility, LLC, which does strategic consulting and publishing in promoting, designing, and building into the next generation of transportation. From August 2008 to October 2012, Bowman was director of research at Japan International Transport Institute, an independent research think tank coordinating and sharing transportation policy approaches between Japan and the United States. He served as director at International Access Corporation from December 2004 to October 2012 and as research analyst at ChangeWave Research from June 2004 to February 2006, where he developed surveys for business executives to assess industry trends and new technology developments; then correlated the responses with secondary research of supply chains to develop targeted lists of successful companies. He has a master’s in public policy from George Mason University (2005) and a B.S. from Iowa State University in finance and economics (1996). He is currently on the TRF Washington Chapter Council.