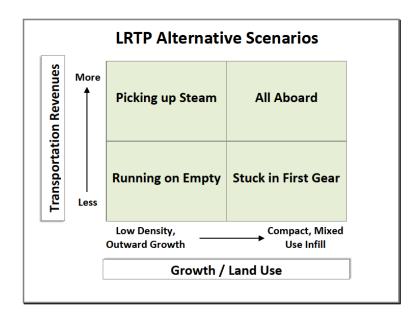


LRTP Scenario Development

Part of the exercise of developing a Long Range Transportation Plan is to predict what demands will be placed on the transportation system 25 or more years in the future so that public officials today can put in place policies, programs and investments that improve the chances for future success. Of course, planners don't have a crystal ball that actually lets them see the future so instead we develop alternative visions or scenarios for what that future holds so that deliberate choices can be made and policies adopted to lead us in the preferred direction. The following four scenarios have been compiled to illustrate how today's decisions can produce dramatically different outcomes tomorrow. The scenarios assume that CMAP's population and jobs forecasts for Cook County—1.1 million additional residents and 562,000 new jobs—are achievable, but optimistic, estimates that will only materialize if the trajectory of the last 20 years can be changed.

These four scenarios represent the four combinations that result from pairing more/less transportation revenues with more/less efficient forms of land development. The Running on Empty Scenario depicts the outcomes that result from teaming declining resources with land use decisions that perpetuate the region's outward growth. Stuck in First Gear describes what can be expected to happen when low-level transportation funding is combined with more compact, infill development. Picking Up Steam reflects the consequences of linking more money with more dispersed, low-density growth and All Aboard portrays the results of matching higher levels of funding with denser, mixed-use development around existing communities and transportation nodes.



Scenario 1: Running on Empty

This baseline or business as usual scenario assumes that Cook County's transportation system, economy and communities continue to be undermined by: (1) diversions of transportation revenues, (2) the 55/45 split that awards

the bulk of state transportation resources downstate, (3) declining resources for transportation improvements given that no new sources of revenue are enacted, (4) municipalities and regional governments that act unilaterally and in their own self-interest, and (5) low-density, outward growth that largely bypasses infill development opportunities in Cook County. The way in which the State allocates capital disregards performance measures such as the fact that 84% of Illinois' Gross Domestic Product originates in the metropolitan Chicago region. Within the Chicago region, Cook County accounts for more than half the population (55%), jobs (58%) and businesses (54%). Although northeastern Illinois functions as the state's economic engine, it has consistently lagged peer regions when it comes to job creation, per capita income and unemployment rates over the last two decades. Under the Running on Empty scenario, the metro area falls even further behind.

Commercial growth in Cook County falls far short of CMAP projections because infrastructure is insufficient to support it and auto-oriented, low-density development continues to spread outward in the region. Increasingly, headlines focus on the most recent employer to decamp the region entirely to other parts of the US. Public officials, residents and business people often bemoan the missed opportunities associated with earlier policy and program decisions. Population growth of 1.1 million new residents fails to materialize because employment opportunities and quality of life have declined, communities are poorly connected to jobs and key destinations, and congestion, which was already taking a \$7 billion dollar bite out of the region's economy, becomes worse. Cook County's transportation system, economy and communities deteriorate because, with declining tax and transportation revenues, sufficient resources do not exist to maintain facilities, much less modernize them.

Scenario 2: Stuck In First Gear

The Stuck in First Gear scenario assumes that Cook County incrementally grows its transportation revenues by pursuing project-based, federal and state infrastructure improvement grants that generate community and/or economic benefits. On a very limited basis, Cook County lends its engineering expertise and participates in financing projects not under its jurisdiction recognizing that its own self-interest is tied to that of other local governments. This approach places a further strain on the maintenance of County facilities.

The obvious long-term negative impacts of doing little or nothing spur business leaders, residents and elected and appointed public officials to think collaboratively about ways to achieve benefits at a larger than municipal or neighborhood scale. Under a Stuck in First Gear scenario, population and jobs countywide grow on an infill basis as a result of better coordination and improved policies. The traffic generated by this development yields increased use of some underutilized transportation facilities and further taxes other parts of the system that are already oversubscribed because resources do not exist for comparable transportation enhancements. The average rate of growth masks the fact that jobs in Cook County continue to be concentrated in Chicago's downtown and around O'Hare; yet infrastructure improvements to support these job centers are lacking. Business retention and job creation in the Southland and west Cook improve marginally, however, because the County targets its limited federal and state grant awards to retain private businesses in historically underserved municipalities where the condition of area infrastructure has declined and where local governments are least able to pay for such improvements.

The region still lags well behind its peers as it relates to transportation standards, quality of life and business climate. Manufacturers reshoring to the US dismiss Cook County as a possible company location despite its historic strength as an industrial center and a renewed focus on Cargo Oriented Development because its

status as the nation's premier freight-handling hub is waning as other regions build competing intermodal facilities that capture a larger market share of the growing Transportation, Distribution and Logistics sectors. Communities with public transportation stations and frequent transit service recognize that increasing fuel prices make car ownership unaffordable for many residents and plan/rezone for more compact, mixed use communities around train stations and high ridership corridors. A decline in the quality of mass transportation and the lack of funding for transportation retrofits make such developments difficult to finance and lease.

Scenario 3: Picking Up Steam

Under the Picking Up Steam scenario a greater share of existing State of Illinois and Cook County transportation revenues are reinvested in transportation capital improvements as all diversions from Motor Fuel Tax (MFT) and County sales tax on gas and diesel fuel are stopped. Cook County leads by example in ending diversions and uses its influence to persuade State government to abandon the practice of using transportation funds for related purposes rather than infrastructure investment. Just as important, more resources flow to northeastern Illinois because the Illinois Department of Transportation (IDOT) begins to award statewide transportation funds based upon performance indicators rather than a legacy formula that ignores the merits of different projects and their returns on investment. While no new transportation revenues are enacted, sufficient additional funding flows to Cook County to allow it to begin addressing the backlog of State of Good Repair (SOGR) projects and to diversify its investment portfolio by including lower cost pedestrian, bicycle and limited public transportation enhancement projects in its Multi Year Program (MYP).

Despite the infusion of significant additional revenues into the transportation system, key opportunities for growth, affordability and improved quality of life are squandered because development fails to capitalize on investments in existing transportation assets. Segments of the freight and public transportation systems continue to be underutilized in spite of being brought to a state of good repair because new residential, commercial and industrial development occurs far from these facilities in areas without the infrastructure to support it. This mismatch between public and private sector investments produces suboptimal regional outcomes as measured by fiscal impacts, business retention/attraction, job creation, innovation, gross regional product, congestion and income.

Scenario 4: All Aboard

The All Aboard scenario adds significant new revenues for transportation purposes: the state gas tax is increased by eight cents per gallon and pegged to inflation, significant new regional revenues are enacted to pay for the modernization and expansion of public transportation, and congestion pricing is broadly adopted as a way to reduce driving and generate new funds for alternative modes of travel. Strategic, long term planning creates consensus on priority policies and projects that need to be put in place for the County to realize its full growth potential. Public policy focuses on getting more out of the transportation assets that already exist by conditioning the use of County transportation resources on: directing more compact, mixed use development to infill locations, bolstering existing communities and employment strongholds, making operational improvements, instituting variable pricing and non-peak work hour and delivery conventions, and adopting technological innovations. New capital revenues are dedicated to a published list of

infrastructure investments that provides greater balance between modal improvements with particular emphasis on public transportation and freight facilities and smaller scale pedestrian, bicycle and station-area improvements essential to preserving transportation affordability for residents and businesses alike as well as projects of regional or national significance. Analysis of projects using performance metrics, and a multifaceted Return on Investment (ROI) approach (economic benefits, fiscal impacts, environmental measures, as well as revenue paybacks) results in stronger backing for increased investment or funding support from the State and Federal government.

The broad consensus around regional priorities has translated into near-unanimous support for strategic expansions to public transportation to reach underserved destinations and system expansions to meet the travel needs of forecasted population and business increases. Projects are selected to maximize regional economic growth and expand access and transportation choice where growth is straining existing resources. Strategic improvements focused on long-term economic growth highlights Cook County as a competitive choice in intermodal facilities. The County's road and rail network provide unparalleled access to Chicago and the Class I railroads facilities, and complement other regional facilities that keep congestion-producing through-movements out of our economic hub.

Under the All Aboard scenario, 1.1 million new residents are absorbed by municipalities that, with support from other levels of government, pursue a concerted countywide strategy to prepare vacant and underutilized properties and all station areas for infill development—adding density to strong-market communities and returning population density in once-abandoned communities to historic highs. The business community joins government officials in this redevelopment effort by locating offices, industry and retail centers within walking distance of the expanded public transportation network so that residents choose transit at twice the rate that they did in 2014 for running every day errands and getting to work. As a result, areas of the County that had historically lost resident population as well as jobs and businesses stabilize and begin to rise as new residents and employers are attracted to available land with newly improved transportation access. The improvement in economic conditions result in better fiscal conditions for these communities, who now have more capacity to invest in local facilities, schools and parks, which begins a virtuous cycle of broad-based community revitalization.

The Benefits of Transportation Investment

As Scenario 1 makes clear, recent development trends along with low levels of transportation investment are insufficient to grow our economy at the same rate as peer regions that are reaping a bigger payoff from growing more efficiently and maintaining and expanding their infrastructure. Only by adopting more compact, infill forms of development and reinvesting in the transportation network at higher levels can Cook County, and the region, hope to grow its commercial sector and improve the quality of life in local communities to the point that they generate sufficient new revenues in the form of new jobs, increased personal income, greater Gross Domestic Product and higher tax revenue collections to pay for a sustainable transportation reinvestment program.

Investing in a range of multimodal solutions, and implementing strong land use policy, has the potential to have significant economic benefits for Cook County, and the region. Transportation infrastructure improvements across the Country have demonstrated positive impacts on job creation (construction and

permanent) and personal income. The economic and fiscal impacts associated with the higher spending scenarios provide a tangible justification of the need for additional revenue. The following examples illustrate the positive benefits of investing in transportation improvements:

- Jobs: \$1 million spent on public transit generates 30-60 construction jobs while road projects generate 7.8 jobs/million. Similarly, \$1 billion spent on transit operation typically creates 41,000 jobs.
- Personal Income: \$1 billion in capital spending on public transportation produces \$1.1 billion in worker income; \$1 billion in operations spending produces \$1.8 billion in worker income.
- Property Value: Studies over two decades show average housing value premiums associated with being within a half mile of a station are 6.4% in Philadelphia, 6.7% in Boston, 10.6% in Portland, 17% in San Diego, 20% in Chicago.
- Business Productivity: Every \$1 invested in public transportation returns up to \$3 in business sales.
- Aggregate benefit-cost ratio of financing public transit systems: The average benefit-cost ratio in 81 urbanized
 areas is 1.34, although Chicago demonstrated a range of 1.19 to 1.96, depending on certain assumptions
 regarding congestion savings, operating cost to capital cost ratios, and consumer surplus that effectively adds to
 household's disposable income.
- Cost of Congestion: American commuters lost 5.5 billion hours in traffic congestion and consumed 2.9 billion extra gallons of fuel, representing \$120 billion in lost productivity and wasted fuel. This highlights the need to improve mobility and reduce travel delay to reverse this trend and have a positive impact on the economy. Expanding highway capacity has not been shown to reduce congestion; instead it generates more traffic. Once the main roadway/system exists, the marginal benefits of expanding it decline. Thus the majority of the profitable (cost effective) highway and road construction projects were completed in the 1950s and 1960s when they were just being established as a national network of roads.
- Location Efficiency: As the number of urban beltways increase (highways that stimulate outward growth), they tend to de-concentrate people and businesses to levels that reduce industrial agglomeration efficiencies. Thus sprawl enhances economic inefficiencies.