Executive Summary

Transportation Outlook 2040 is the metropolitan transportation plan for Greater Kansas City. It provides a policy framework for the investment of anticipated federal, state and local funds, based on anticipated needs and regional goals and objectives, through the year 2040. This plan updates the 2010 policy framework; forecasts less growth in state and federal funds and higher costs to operate and maintain regional transportation systems; strengthens the role of Complete Streets; and projects moderate growth in regional population and employment, while continuing to support growth and redevelopment in activity centers and along locally identified corridors.

What's new

This update:

- Refreshes the 2010 policy framework.
- Forecasts eroding purchasing power in state and federal funds.
- Estimates higher costs to operate and maintain the regional transportation system.
- Anticipates greater reliance on local resources.
- Strengthens the strategic role of Complete Streets.
- Reinforces development and redevelopment along corridors and activity centers.
- Projects moderate growth in regional population and employment over the life of the plan.
- Incorporates recommendations from regional studies completed since 2010.

Policy framework

As part of the update process, key stakeholders, committees and staff reinforced the plan's original nine goals, added a new goal, and introduced categories that align with those used in the Creating Sustainable Places initiative — vibrant, connected and green.

Transportation Outlook 2040

Regional vision:

Greater Kansas City is a sustainable region that increases the vitality of our society, economy, and environment for current residents and future generations.

Transportation vision:

A safe, balanced, regional, multimodal transportation system that is coordinated with land-use planning, supports equitable access to opportunities, and protects the environment.

VIBRANT
Economic vitality
Placemaking
Equity
CONNECTED
Transportation choices
Safety and security
System condition
System performance
GREEN
Public health
Environment
Climate change and energy use

Additional policy framework information available in Chapter 2.0.

A changing region

Greater Kansas City is a region that continues to change. The population is growing older and becoming more racially diverse. The residents of the region are looking for more choices for transportation, housing and employment.

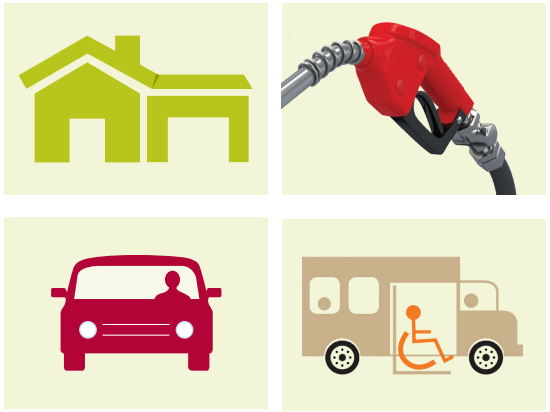
Currently, the region is home to 1.9 million people — and that number is expected to grow by 31 percent over the coming decades, to roughly 2.5 million residents in 2040.

In addition, employment will grow by more than 320,000 jobs, an increase of 30 percent.

As the region's population increases and changes, infrastructure needs will also change. *Transportation Outlook 2040's* policy framework is designed to help meet the needs of area residents in the coming years. The plan's goal is to make smart decisions — strategic investments with high impact — for the best use of limited funds.

Local, national and global dynamics require a clear, forward-leaning vision for the region that better integrates transportation planning with social, environmental and economic factors.

The Kansas City region covers a large geographic area. Its historic development patterns have created an infrastructure network that makes it more difficult to provide active transportation choices and efficiently connect people to jobs, services and neighborhoods.

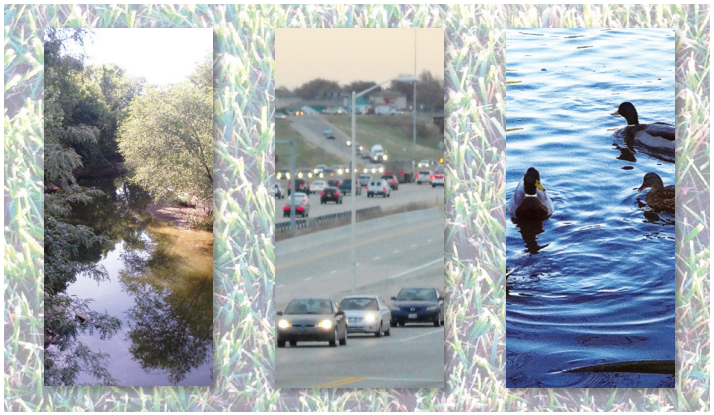


Area residents primarily depend on single passenger vehicles, which means:

- High household costs for transportation.
- Vulnerability to fluctuations in gas and energy costs.
- More emissions from cars and trucks.
- Mobility issues for older adults, persons with disabilities and residents living in poverty.

The region faces environmental challenges that include:

- Public health issues related to air quality.
- Climate change impacts.
- Vulnerability of critical natural habitats and sensitive lands.



Performance measure details can be found in Chapter 3.0. The complete plan reviews streets and highways; public transportation; active transportation; transportation management; land use; goods movement; environmental integration; air quality; safety; security; equity; public health; intercity travel and aviation in the Kansas City region. Each chapter ties into multiple policy goals for the region.

Measuring performance

An integral part of the plan is an annual review of the region's progress in achieving transportation goals. As part of Moving Ahead for Progress in the 21st Century (MAP-21) requirements, *Transportation Outlook 2040* measures performance using a series of indicators that help MARC and regional stakeholders evaluate how well the region is doing.

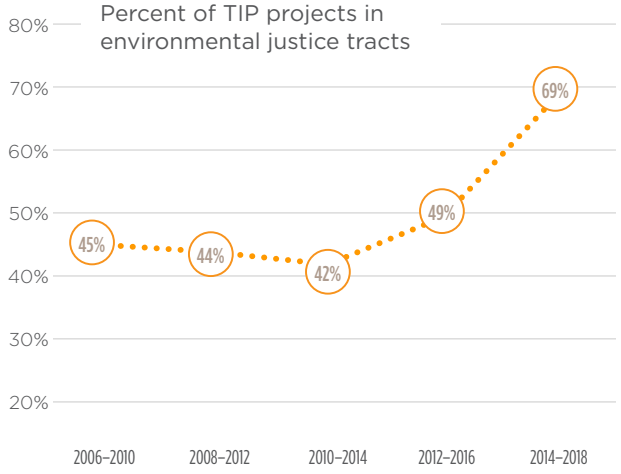
Find detailed performance measures in Chapter 3.0 and Appendix F. Here's a snapshot:

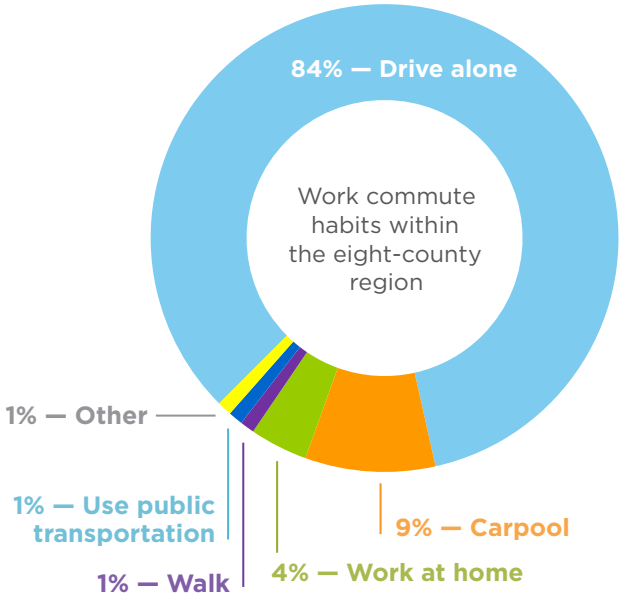
What the region is doing right:

- More transportation investments in environmental justice areas.
- Fewer roadway fatalities and serious injuries over the past several years.
- Low rates of congestion on the Congestion Management Network.

Opportunities for the region to improve:

- Transportation costs.
- Mode diversity.
- Access to jobs for disadvantaged populations.
- Bicycle and pedestrian facilities.





Strategies for the region's transportation system

Transportation Outlook 2040 includes a comprehensive set of strategies to help preserve existing transportation assets, improve system performance, enhance residents' quality of life, provide more transportation choices and protect the environment.

Overarching strategic direction

Maintain existing system and services

Preserve the existing transportation system by focusing investments on the maintenance of existing services and facilities.

Foster Complete Streets

Promote and encourage context-sensitive solutions in transportation planning, project development and project selection.

Improve safety

Use Destination Safe's *Regional Transportation Safety Blueprint* to help reduce fatalities and serious injury crashes in the region.

Expand public transit

Plan, develop and identify opportunities to support the expansion of regional transit and enhanced mobility to help people connect to work and other locations.

Plan for mixed uses

Create quality places that support a range of lifestyle and transportation choices, promote increased density through mixed-use development, and use a centers-and-corridors strategy in planning efforts.

Protect and improve environmental resources

Continue to implement the MetroGreen plan to connect trails and greenways to key corridors. Decrease the use of fossil fuels and improve air quality by reducing travel demand.

Increase data collection

Compile and analyze more data about the transportation system — such as usage rates for roadways and bicycle facilities, population and employment densities, freight movement and more — to better manage system performance.

Financial outlook

The region's financial outlook

Today's funding reality indicates the region will need to identify new or additional funding streams for transportation projects, including more local funding.

Financial constraint

The Kansas City region has consistently placed a high priority on preserving and maintaining the transportation infrastructure it has developed over time. Public and stakeholder input consistently reinforces the strategy of system preservation. In the adopted policy framework, the system condition goal seeks to ensure that the regional transportation system is maintained in good condition.

Financial constraint guidelines require taking the cost to operate, maintain and preserve the transportation system in the eight-county region off the top, with remaining revenues available for other transportation investments. The process is unique to highway and transit funding, but the equation is consistent. The cost of projects in the MTP cannot exceed the financial resources available after accounting for operations and maintenance.

Strategies

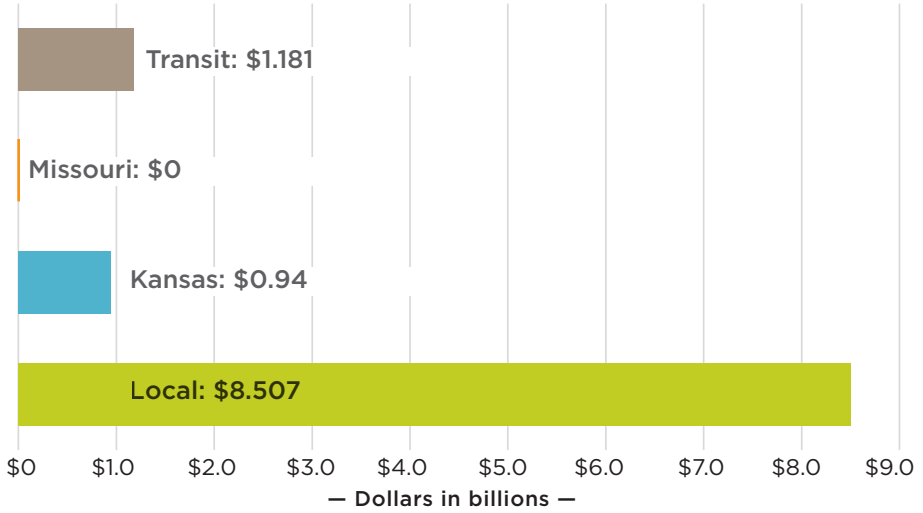
In the coming years, the region may need to use more local resources to complete regional projects. States will need to implement new funding strategies that support regional, state and national priorities. Leaders and stakeholders in the Kansas City region will need to make tough decisions about the best way to balance priorities, needs and expectations based on limited funding opportunities.

Operations and maintenance

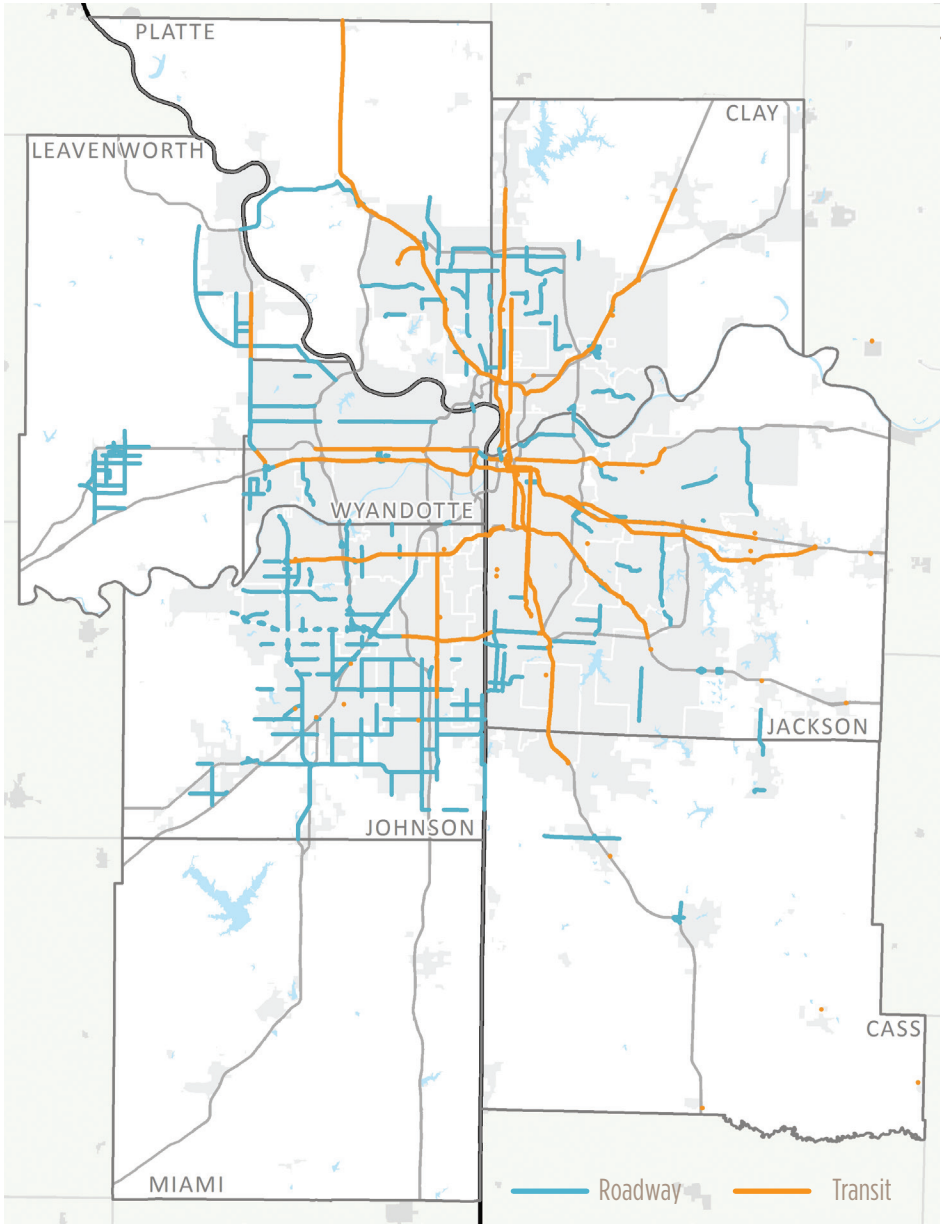
As illustrated, the majority of funds expected to be available over the life of the plan, $33.1 billion, will be used for O&M.

Financial constraint

After accounting for O&M costs, a breakdown of the remaining funding leaves very little for projects on the state system — just under $1 billion for Kansas and zero for Missouri. More than 75 percent of funding available for projects in the plan will come from local governments.



Financially constrained projects identified in the plan



MARC's role in transportation planning

The Mid-America Regional Council is a nonprofit association of city and county governments and the Metropolitan Planning Organization (MPO) for Greater Kansas City. MARC works with state departments of transportation, transit agencies, local governments, private stakeholders, aviation professionals and the region's residents to plan coordinated transportation systems that move people and goods affordably, efficiently and safely.

As an MPO, MARC is required to maintain a Metropolitan Transportation Plan to guide decision-making and investments for the region.

Future and emerging trends

As this plan is updated, several issues are emerging that may prove to be significant in impacting future strategies and investments, but are new enough that consensus has not emerged about how to fully assess and address them. MARC will monitor these and other issues, and may need to update future regional planning assumptions as their impacts become apparent.

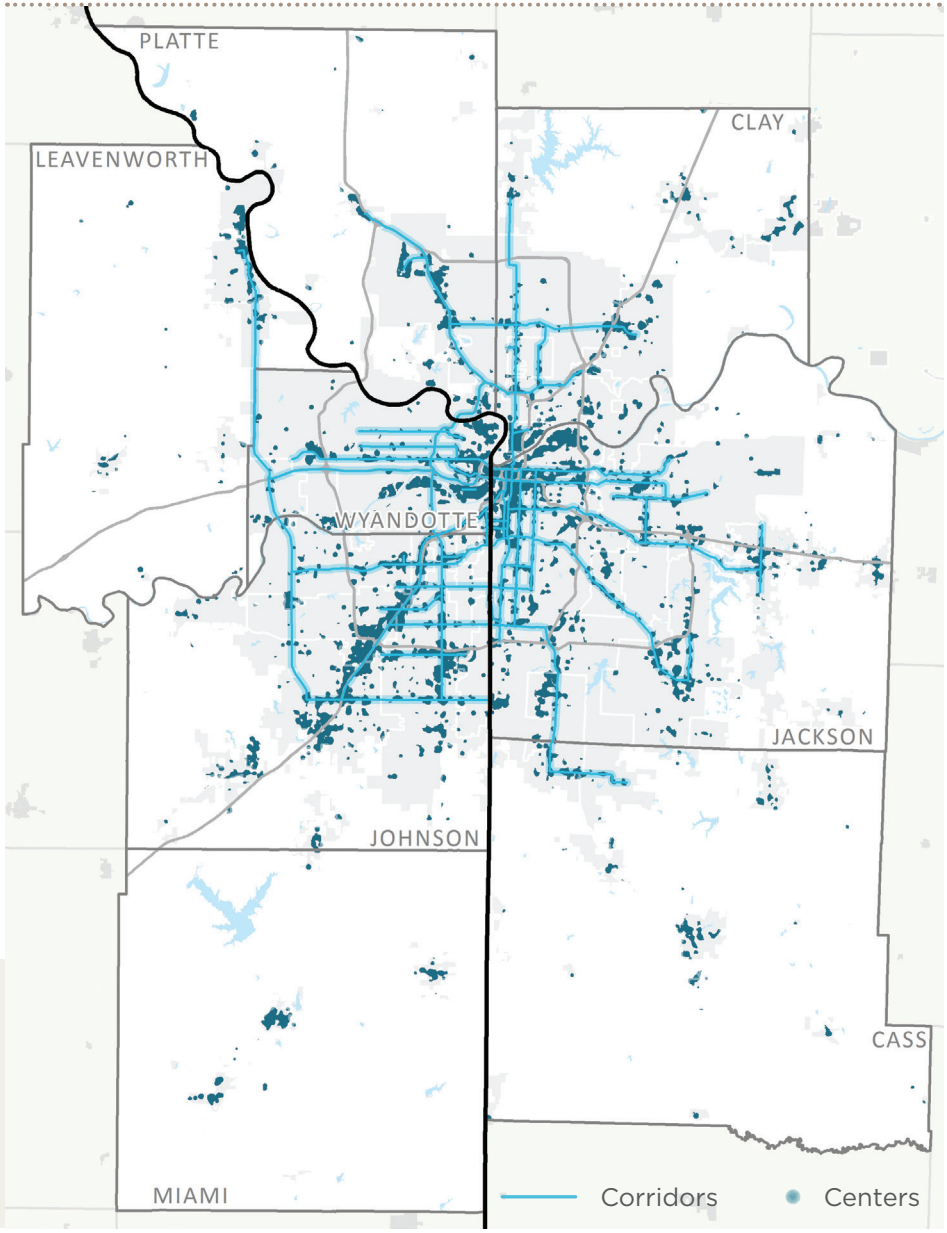
- **Travel preferences and behaviors of the millennial generation.** Born between the early 1980s and the early 2000s, this population has been somewhat slower than its predecessors to acquire drivers' licenses, buy cars and live in single-family housing. Some evidence suggests that this generation prefers mobile technology to auto-mobility. Millennials began entering the workforce during a deep economic recession, which may have temporarily impacted their travel options and choices, or these preferences may be more permanent. If these preferences persist as the economy continues to recover, changes to assumptions about regional travel behavior may be required.
- **Connected and automated vehicle technologies** are becoming more prevalent in the automotive and trucking industries. Assistive

technologies such as adaptive cruise control, lane departure warning systems and crash-avoidance systems have entered the mainstream passenger car market. In addition, academic institutions and private industry have completed numerous research and pilot programs for fully automated vehicles. As these technologies reach consumers, they may create significant changes in vehicle performance that may impact planning assumptions for factors such as safety and roadway capacity. They may also impact residents' travel behavior, location decisions and mode choices, as well as the economics of trucking and freight transportation. The pace of change and rate of adoption of these technologies is uncertain, as their access will be influenced by cost, regulation and other factors.

- **Increased fuel economy, fuel price volatility, alternative fuels and vehicle electrification** may have a range of impacts such as emissions reductions, increases or decreases in vehicle operating costs, or additional stress on traditional funding sources for transportation (such as motor fuel taxes).
- **Ride-hailing services** provided by Lyft, Uber and other firms may continue to grow in popularity and could provide significant competition for traditional taxi and limousine services, ride-sharing, public transportation and private auto-ownership, in a way that impacts future travel behavior and land-use decisions. These services, in combination with automated vehicle technologies, could create many unpredictable positive or negative impacts to the regional transportation system.

A development strategy focused on activity centers and corridors emphasizes a network of livable, attractive places connected by transportation corridors and complete streets. This will provide more choices for how residents and visitors live, work, play and travel. Achieving this vision will require careful effort over the next 25 years to advance policies and investments that support it.

Activity centers and corridors in the region



Impact of recent activities on the transportation system

Complete Streets policies

In 2012, the MARC Board of Directors adopted a Regional Complete Streets Policy, which seeks to increase mobility and access to resources and services for residents of all ages and abilities.

Both Kansas and Missouri have adopted Complete Streets policy resolutions, as have 10 counties and cities in the Kansas City region. MARC will continue to work with additional area communities to adopt Complete Streets policies.

Planning Sustainable Places initiative

The PSP initiative is a competitive project selection process that encourages local governments to invest in projects that advance sustainable local planning and project development activities. The program builds on the principles established by the Creating Sustainable Places initiative to create a more vibrant, connected and green region.

Freight and logistics

The Kansas City region is one of the nation's leading freight hubs, with infrastructure that supports movement of goods by truck, rail, air and water for domestic and international trade. In 2014, the transportation system handled an estimated 264 million tons of freight with an estimated total value of $357 billion. MARC engages this industry through a standing Goods Movement Committee and in partnership with Kansas City SmartPort, an organization focused on promoting regional freight and logistics.

Transportation management

The KC Scout system uses cameras, sensors and electronic message boards to detect and solve problems and incidents on regional roadways. Operation Green Light is a multi-jurisdictional network that manages more than 700 traffic signals. Both programs work to reduce congestion, leading to fewer CO_2 emissions and roadway delays for the traveling public.

Travel demand modeling

MARC uses a travel demand model to analyze the impacts of specific policies and investments on the regional transportation network.

Greater Kansas City Regional Bikeway Plan

In 2015, the MARC Board adopted the Greater Kansas City Regional Bikeway Plan, which proposes a network of more than 2,000 miles of on- and off-road bike facilities, connecting multiple cities and counties across the region.

MARC will use the bikeway plan as a guide to work with local governments and area stakeholders on the plan's recommendations to create a prioritized network of regional bikeways; enhance regional planning and coordination; improve data collection and technical capacities; support education and encouragement campaigns; strengthen safety enforcement efforts; and encourage walk-friendly and bicycle-friendly designations for area communities.

Ridesharing, transit and enhanced mobility

MARC partners with several area organizations to promote the use of alternative transportation. MARC co-sponsors the Regional Transit Coordinating Council (RTCC) and the Mobility Advisory Committee along with the Kansas City Area Transportation Authority. These committees work to extend the impact of public transportation and enhanced mobility services across the region.

MARC administers RideShare, a ridesharing program for the Kansas City region that promotes alternative commuting methods, offers carpool matching services, provides Guaranteed Ride Home services (an emergency ride home for commuters) and raises awareness of alternative transportation with an annual Green Commute Challenge.

Other transportation plans

This plan update incorporates recommendations from other recently completed planning studies, including *I-35 Moving Forward*, the *Five-County Regional Transportation Study*, the *Johnson County Gateway Study* and the *Southwest Johnson County Area Plan* in Kansas, and the *I-70 Second Tier Environmental Impact Study* in Missouri.

Transportation Outlook 2040

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