VI. Defining the Smart Moves 3.0 System

The Smart Moves 3.0 plan calls for strategic deployment of fixed-route transit and mobility services supported by a framework of mobility hubs. These hubs facilitate connections between modes and are places where the region can focus mixed-use development and redevelopment. The major components of the plan, which together comprise the Smart Moves 3.0 system, are explained here in detail. Specifically, this section discusses those elements that constitute significant capital investments.

Smart Moves 3.0 System Elements

- Mobility Hubs
- Fixed-Route Transit Network
- Mobility Services
- Biking and Walking
- Technology
- Economic Development
- Performance Measures

Mobility Hubs and Services

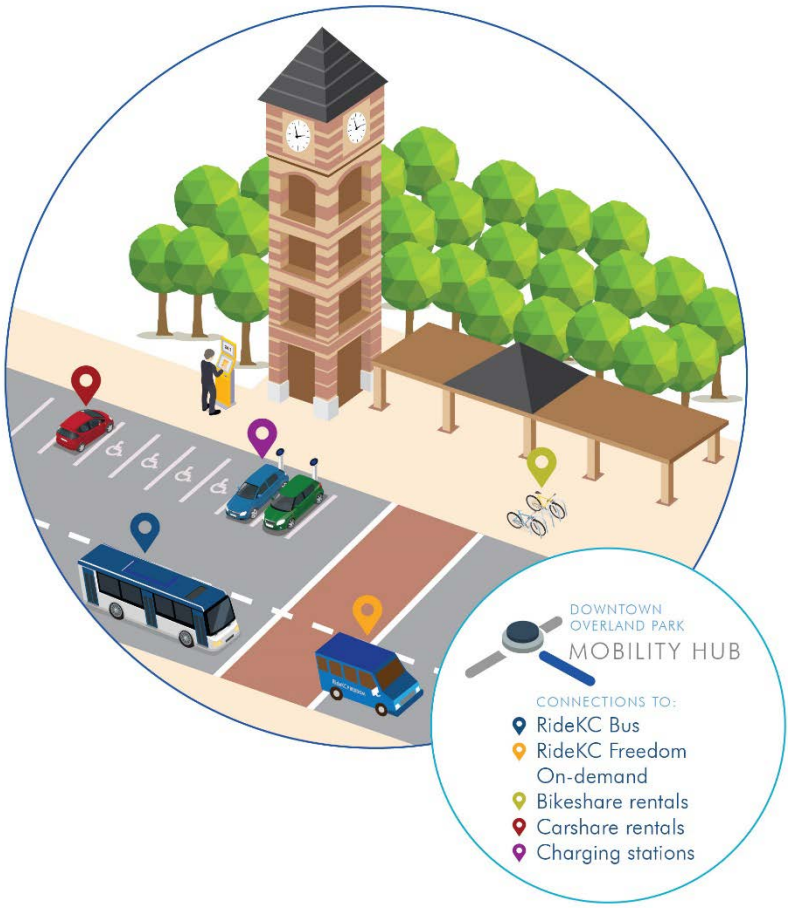
Under the Smart Moves 3.0 planning effort, the notion of activity nodes and transit centers has transformed into a more integrated concept that serves as a foundational component of the region's transportation network — mobility hubs.

Mobility hubs are central places or districts that act as converging points for public transit and an integrated suite of mobility services, scaled for their respective environments and functions. Mobility hubs are also areas where there is an intensive concentration of working, living, shopping and/or playing in the form of mixed-use development. Mobility hubs serve three critical roles in the new Smart Moves 3.0 system: origin, destination and transfer point.

The Smart Moves plan includes more than 65 potential locations for mobility hubs dispersed throughout the region. The development of each hub will be driven by a local process and will align with the vision and goals of the community where it is located. Mobility hubs are proposed along current and future transit lines, based on the mobility hub categories generally defined below. In conjunction with the underlying network of transit services, these hubs can provide opportunities to complement, organize and strengthen the region's long-term economic development and community growth ideals through focused local land-use planning and eventual increased residential and job densities in the areas surrounding these locations, i.e. Transit-Oriented Development (TOD).

Kansas City Mobility Hub Typologies and Conceptual Locations

Planning and implementing mobility hubs will require input and involvement of numerous municipalities, agencies and stakeholders across the Kansas City metropolitan area, as well as in-depth analysis and development of a program specifically tailored to community needs and goals.



Broadly, Smart Moves 3.0 recommendations are intended to provide a starting point in the planning of mobility hubs. Example typologies, characteristics and criteria for how mobility hubs might function, and their anticipated role in the Kansas City metropolitan area, are provided below. Each of the following four typologies of mobility hubs serves a slightly different purpose:

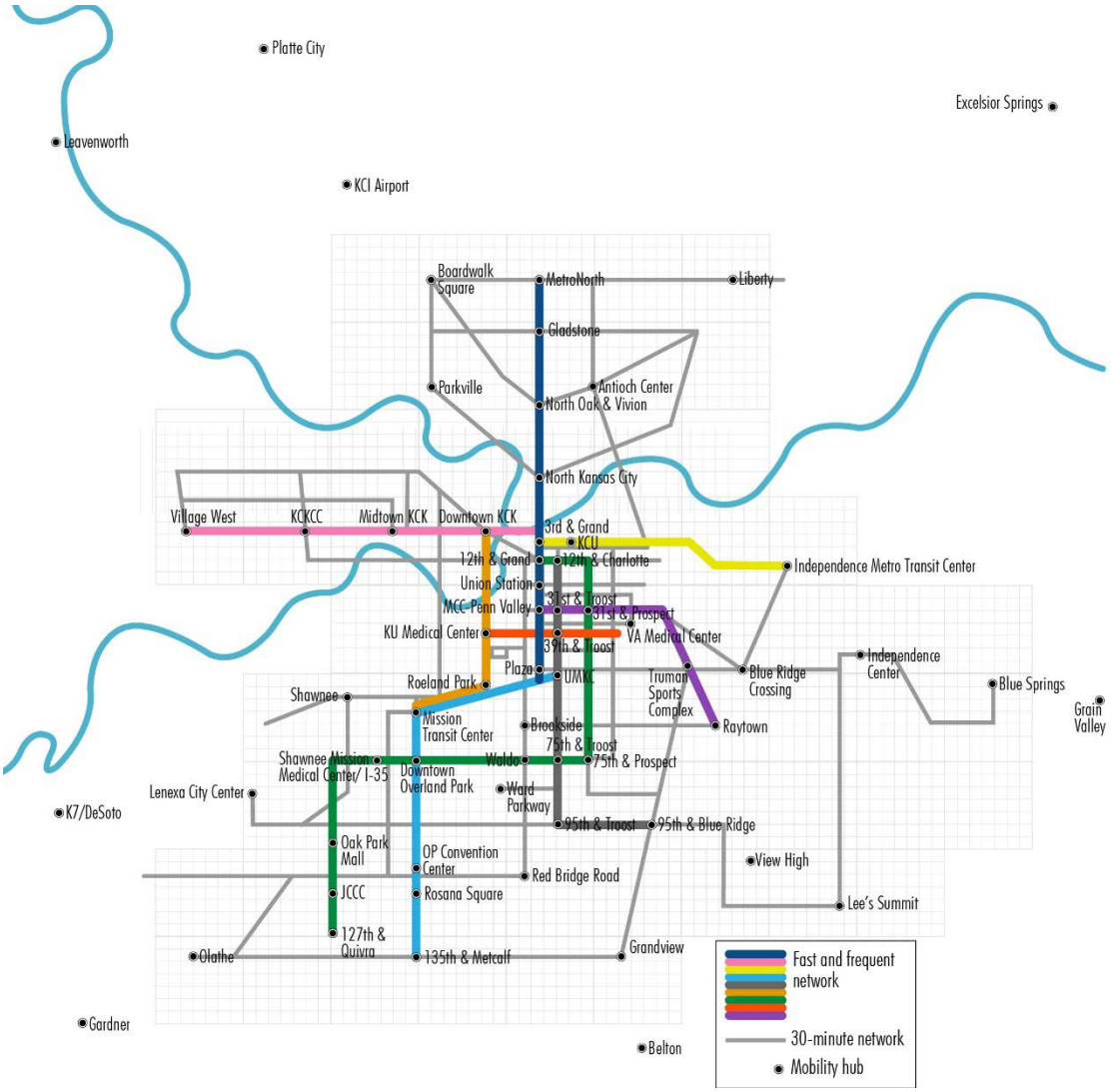
- **Destinations —** A Destination mobility hub will typically have the most transit routes, service choices and amenities available. This type should be placed along existing or proposed high-frequency transit routes, and will most likely be located in densely populated locations within the Kansas City metropolitan area and along major transportation spines. These locations are also most likely to be integrated into a transit-supportive or transit-oriented development pattern, where a mixture of uses is available either directly surrounding the hub location or in the immediate vicinity. *Example: Union Station.*
- **Junctions —** A Junction mobility hub will typically be placed at connections between two or more transit routes. Some of these are likely to be at locations where high-frequency transit service connects with lower-frequency service routes, while others may be located where lower-frequency transit routes intersect. These locations can provide opportunities for riders to make direct connections between transit routes or switch to other modes to complete their trips. Junctions can be integrated into transit-supportive or transit-oriented development patterns where existing densities and development interest warrant them. *Example: Johnson County Community College.*
- **Gateways —** A Gateway mobility hub is typically located near the end of a higher-frequency transit route, furthest away from the urban core. These hubs are classified by their ability to serve as gateways for riders to enter the regional transportation system. These locations may be located in suburban or rural areas with lower densities, but will still incorporate transit-supportive design

elements to facilitate mode transfers and create activity centers that are appropriately scaled for their particular context. These hubs are expected to offer a different, less-intensive package of amenities than more centrally-located mobility hubs, including park-and-ride lots. *Example: Lenexa City Center.*

- **Local —** Local mobility hubs will provide opportunities for areas located on the outer fringes of the metropolitan area that are not specifically served by the regional transportation plan's proposed transit routes. These hubs can serve several functions, including as a portal into the regional transit system (like a Gateway Hub), albeit not necessarily connected to a transit route. In this case, the hub can become a convenient gathering place for carpool or vanpool riders, or can provide a meeting place for those sharing rides via shuttles or other on-demand services. *Example: Downtown Gardner, Kansas.*

Using these four typologies, the following maps show conceptual locations that illustrate this potential network of mobility hubs.

Figure 15: Conceptual Locations of Mobility Hubs



Mobility Hub Amenities and Services

Mobility hubs can provide a range of amenities and features. These can vary from location to location based on factors such as the types of transit routes and services being offered, the anticipated ridership and length of stay for users, adjacent services, relationships with surrounding land uses, and the types of connections being provided. Mobility hubs are customizable, and do not necessarily require major property acquisition or infrastructure investment.

A preliminary list of amenities and services that could be considered at a mobility hub includes:

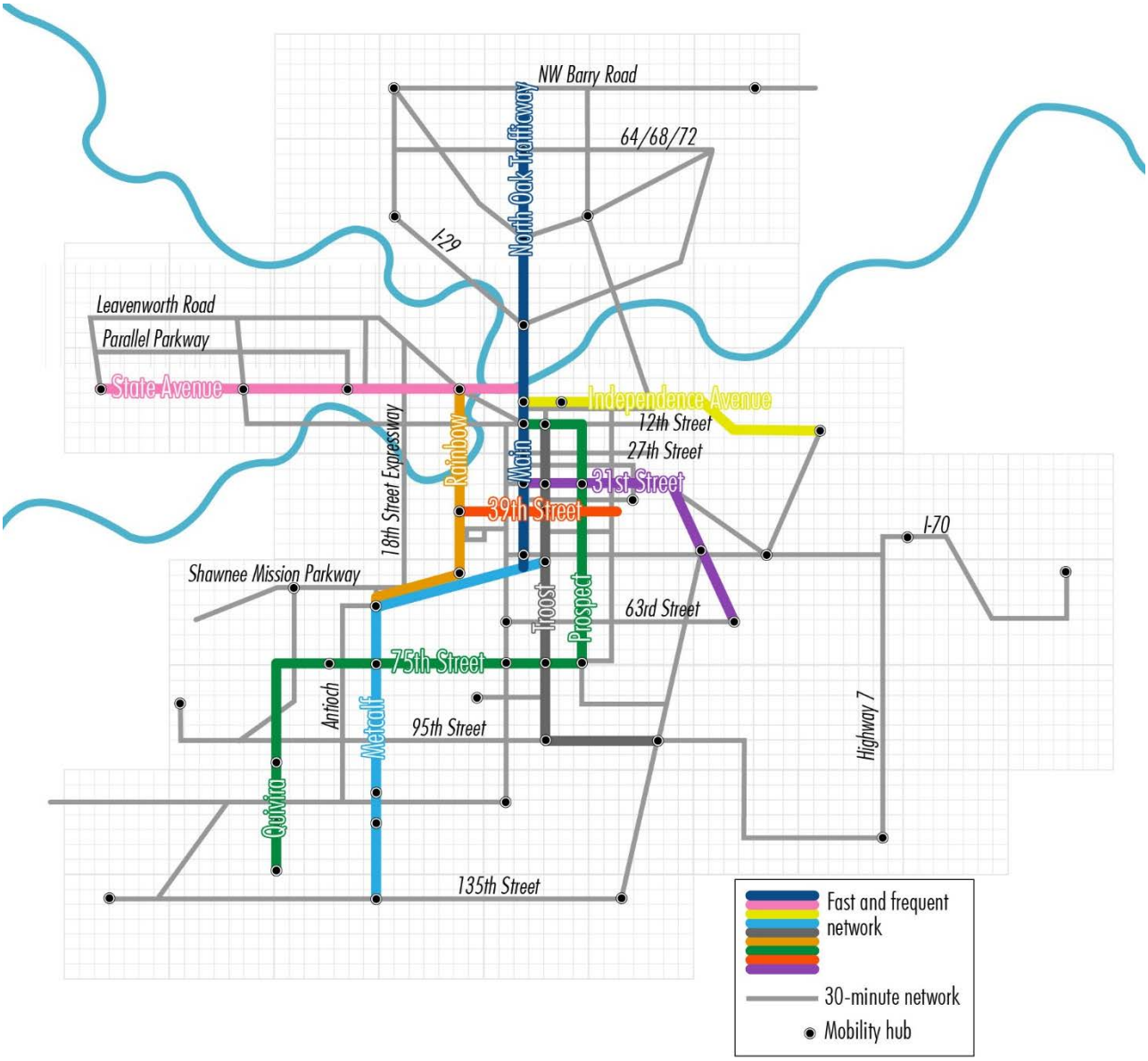
- Wi-Fi / technology connections
- Interactive kiosks / transportation service information
- Surrounding area information + map
- Transit branding signage / station + route identification
- Real-time arrival signage
- Area + pedestrian lighting
- Transit shelter
- Fare collection system
- Bicycle amenities (bike-share, bike racks/lockers, bike repair station)
- Pedestrian sidewalk and trail connections
- Pedestrian amenities (seating, trash receptacle, power outlets)
- Parking area (park and ride)
- Electric vehicle charging station
- Vehicular drop-off / pick-up area (carpool, vanpool, on-demand, park and ride, taxi stands)
- Integrated services (retail, child care facility, post office)
- Lighting and safety measures
- Nearby community amenities (area park, amphitheater, farmer's market)

Mobility hubs offer great opportunities to connect various transit services. For example, one hurdle to carpooling is the passenger expectation that the driver will provide door-to-door service. Passengers who are willing to use another mode of travel for a segment of their trip may be more likely to find a carpool match. Mobility Hubs, especially Destination Hubs with fast and frequent transit connections and bike-share stations are an excellent place to begin or end a carpool (or vanpool) trip. As hubs are developed they will be added to the RideshareKC website along with available amenities.

As pointed out above, analysis will be needed to determine the range of amenities and services to be provided at each mobility hub location. However, as new mobility hubs are developed, providing accessibility for all should be considered as a primary concern. Providing ADA-accessible facilities and amenities, including but not limited to ADA-compliant ramps, shaded waiting areas, and wayfinding signage that can be understood by vision-impaired individuals, should be integrated into all new mobility hubs. As funding allows, existing mobility hubs should be retrofitted to provide these amenities as well.

Fixed-Route Transit Services

Figure 16: Fast and Frequent and 30-Minute Service Map



Fixed-route transit remains the primary feature of Kansas City's mobility network under Smart Moves 3.0. Routes will be categorized into one of four groups, depending on service frequency, service hours, operating characteristics, and capital amenities: fast and frequent, 30-minute, other local and express. In general, the principle motivating these recommendations is to make public transit time and cost competitive with the personal automobile, while also increasing the areas accessible by transit.

Fast and Frequent Network

The spine of the fixed-route network is focused in areas with robust existing ridership and high propensity for future ridership. Transit propensity is defined by high-density development, access to current and future jobs and socioeconomic characteristics (e.g., family size, household income, car ownership). These fast and frequent routes will provide the majority of the trips in the region and will connect riders to other services in the fixed-route and mobility service network.

Figure 17: Fast and Frequent Network Characteristics

Service Frequency	At full implementation, typical service on the Fast and Frequent Network will operate at a minimum 15-minute frequency interval. Night and weekend service will likely have lower frequency based on demand, to be determined on a route-by-route basis. This approach will bring more choice riders to the system by reducing wait and travel times.
Service Hours	Consistent with the level of demand, the Fast and Frequent Network will have expanded service hours, with at least 18 hours of service daily (5 a.m. to 11 p.m.) at full implementation.
Operating Characteristics	To meet the demands of Fast and Frequent service, these routes will be optimized based on corridor conditions. Lines operating on high-demand corridors may require fixed guideways, dedicated rights-of-way, or traffic signal priority to maintain schedule adherence. In moderate-demand corridors, more passive approaches to signal priority and peak-hour guideways (such as the current approach to the Main Street MAX) will accommodate schedule adherence. In low-demand corridors, mixed-traffic operations will accommodate schedule adherence and provide times that are competitive with automobiles. In some cases, transit stops will be further apart than they are for less-frequent routes, which will allow the system to operate more quickly.
Capital Amenities	With the majority of transit trips in the region occurring on the Fast and Frequent Network, capital budgets should be focused on these routes. Amenities could include low-floor transit vehicles, higher capacity transit stops, interactive kiosks, enhanced lighting and public art.
Operation Mode	Streetcar, BRT

30-Minute Network

The SmartMoves 3.0 plan proposes investing in transit lines throughout the region that connect with the Fast and Frequent network, and fill in the gaps of that network. These lines serve as cross-regional routes, providing regional mobility and opportunities for job access. Typically, transit propensity along these routes is lower than along the Fast and Frequent network, and the recommended service is adjusted accordingly.

Figure 18: 30-Minute Network Characteristics	
Service Frequency	At full implementation, lines will operate with 30-minute headways all day, providing connections at mobility hubs with the Fast and Frequent Network and Express Network. This frequency will create benchmarks for transition into the Fast and Frequent Network. Frequency may be reduced in off-peak periods based on demand.
Service Hours	To meet the needs of regional transit users, this network will provide at least 18 hours of service daily (5 a.m. to 11 p.m.) at full implementation.
Operating Characteristics	Lines will operate in mixed traffic conditions, with no signal priority or other technology enhancements to support schedule adherence. Stops will be spaced according to KCATA's service guidelines, consistent with an urban line-haul transit line to allow users to arrive close to their end destination.
Capital Amenities	Transit stop amenities should be consistent with KCATA's adopted bus stop guidelines. Amenities such as benches and shelters will be provided at key locations based on ridership.
Operation Mode	Enhanced bus

Local Network

While the focus of Smart Moves 3.0 is interjurisdictional transit, local-serving community-based transit plays an important role in connecting riders with the regional network, as well as providing access to local amenities. Acknowledging local funding limitations, *Smart Moves 3.0* recommends that existing local networks be expanded to serve the needs of residents, including enhanced service frequencies, duration, and supporting infrastructure as determined by local communities. Establishing new Local Network mobility options, likely to be limited to fixed-route transit and demand response, should be considered by communities that are unlikely to receive high levels of fixed-route transit from KCATA due to their location in the region. Communities interested in new Local Network services should consider efficient ways to connect to the regional network.

Service Frequency	Frequency, hours of operation, operating characteristics and level of capital investment to be determined by local jurisdictions on a case-by-case basis.
Service Hours	
Operating Characteristics	
Capital Amenities	
Operation Mode	Fixed-route transit and demand response

Express Network

The Smart Moves 3.0 plan proposes expanding the existing commuter-based long distance network to provide more opportunities for connecting travelers throughout the region. This express network will expand the regional reach of the RideKC Transit network and bring more users into the family of services.

Figure 19: Express Network Map

Figure 20: Express Network Characteristics	
Service Frequency	The Express Network will focus on peak-hour service, with a long-term goal of 30-minute headways during peak hours, where demand exists. During off-peak hours, including lower-demand reverse commute services, the frequency will be reduced to meet demand — in most corridors, the frequency will be 60 minutes.
Service Hours	To open the Express Network to those who work non-peak schedules, this service will have expanded service hours, with 18 hours of service daily (5 a.m. to 11 p.m.) at full implementation, where demand exists.
Operating Characteristics	To meet the demands of the Express Network, these lines will be optimized based on their corridor conditions. Lines operating on heavily traveled corridors may require fixed guideways, dedicated rights-of-way, or traffic signal priority to facilitate service operation and to maintain schedule adherence. This approach may include commuter rail or other rail options, bus-on-shoulder or bus-plus-high-occupancy-vehicle lanes. Highway amenities that allow transit vehicles to easily access transit stops, such as slip ramps, will be considered. In moderately traveled corridors, more passive approaches to signal preference and priority and peak-hour guideways will be considered. In lower-demand corridors, mixed traffic operations will still allow for time competitiveness with automobiles and schedule adherence. Transit stops will be spaced at greater distances to allow for express service, with some intermediate stops to allow users to connect with the remainder of the network.
Capital Amenities	Capital amenities may include vehicles that provide more rider comfort, as well as park-and-ride lots.
Operation Mode	Enhanced Bus, over-the-road coaches, commuter rail

RideKC Freedom and Other Paratransit

RideKC Freedom is the umbrella name for the ADA-complementary and non-ADA paratransit services offered by KCTATA in the Kansas City metropolitan area. RideKC Freedom seeks to provide services to each of those two service categories while also subsidizing those trips through the usage of the Freedom On-Demand service by the general public.

As transit service evolves and expands in the Kansas City region, *Smart Moves 3.0* recommends that the needs of older adults, veterans, individuals with disabilities, and low-income individuals and families should be prioritized in the transportation planning process. While special transportation services tend to be more expensive to provide than standard transportation services, new models should continue to be explored to bring costs down and enable more service provision.

These models may include regional mobility management strategies that facilitate coordination between partners or service providers to expand the usability of regional services. Information referral services and streamlined trip reservation processes can greatly advantage ADA and non-ADA paratransit users. Additionally, new paratransit services that go above and beyond the requirements of ADA to provide service beyond three-quarters of a mile of a transit line, or across jurisdictional boundaries, should be pursued. Projects that fill in gaps in the service network, both in terms of geographical coverage and hours of availability, should also be undertaken.

Mobility Services

A critical component of the *SmartMoves 3.0* plan is an integrated, supportive system of mobility options that will facilitate first- and last-mile travel, as well as travel in places which, for reasons of population or geographic density, cannot support traditional fixed-route transit services. This is especially important in those areas where development is at a low-to-medium density, or lack of transit destinations makes fixed-route service inefficient. These services offer more flexibility than buses for both the end-user and for funders, and can expand the "reach" of traditional fixed-route services.

Mobility Services integrate directly with mobility hubs. Individuals may use mobility hub amenities such as park and rides as rendezvous points for group trips in carpools, vanpools, or employer shuttles. Individuals who use transit to access mobility hubs can then, upon arrival, use other services such as transportation network companies, carsharing, bikesharing, taxis, or microtransit as a first or last mile connection to work or home. By encouraging this kind of activity at mobility hubs, mobility services can achieve economies of scale in places that may not have previously been able to supply adequate demand, and businesses and residents located at mobility hubs benefit from the enhanced activity levels and mobility options.

Carpool

Carpooling will support users who either cannot access the transit network, or simply prefer the flexibility and benefits of carpooling. This strategy can potentially reduce the number of single-occupancy vehicles (SOVs) on the road, particularly during peak hours, and reduce commuting costs for participants by filling the latent capacity in existing SOVs.

Successful ride-matching is aided by a robust database of users such as the one maintained and operated by the MARC-administered RideShareKC program. Carpooling can be encouraged by employer incentives, commuter challenges, HOV/HOT lanes, and parking policies that encourage ridesharing and

other alternatives and discourage SOV driving. Communication strategies that direct potential users to regional carpool and vanpool websites will continue to be developed to build the critical mass of participants needed to ensure successful matches.

Vanpool

Vanpooling is similar to carpooling in its purpose, but it is slightly more structured in its delivery. KCATA, through the RideKC Van service, links groups of workers with vanpool services. Vanpool members pay an affordable, monthly fare, based on the cost of operating the van. Vehicles include 7, 8 and 12-passenger vans. Additionally, the service provides a driver approval process to ensure safe commuting. MARC and KCATA will work with employers and municipal partners to facilitate the expansion of vanpooling throughout the Kansas City region.

Carshare

The growth of car-share opportunities in the region will allow more individuals and families to consider exploring a "car-light" lifestyle, relying on transit, walking or biking for the majority of their needs while knowing they can easily access a car if needed. Car-sharing facilitates affordable midday travel for transit users who may need to complete trips too long for biking or walking, but don't have a personal vehicle. These types of services can increase transit usage by providing solutions for those transportation problems. Smart Moves 3.0 recommends that municipal governments adopt car-share-friendly policies as an important step toward encouraging multimodal lifestyles. Partnering with private carshare providers may provide opportunities to leverage these opportunities.

Employer Shuttles

In addition to carpooling and vanpooling, the Smart Moves 3.0 plan calls for programming that supports employers who choose to transport employees via employer shuttles. In general, employer shuttles should be implemented wherever congestion or capacity prevents easy access to large institutions such as hospitals, schools, events centers and other large employers. Employees benefit from shuttle service because they do not need to use their cars each time they need to take short trips from place to place within their neighborhood or campus; employer shuttles facilitate the "park once" model. Employer shuttles are frequently organized independent of transit agencies, but future integration with those systems, at mobility hubs or elsewhere, could be advantageous for everyone involved.

Transportation Management Associations

The principles behind Transportation Management Associations (TMAs) are similar to the principles behind Employer Shuttles, but with a service population beyond a single employer. TMAs enable a concentration of businesses, such as hotels and event centers, to provide transportation services to clients, visitors and employees. As a draw for tourism, and as a way to bring workers to employment areas that may be difficult to access, TMAs can offer effective and reliable solutions in relatively quick time frames. MARC staff will work with local groups to provide support for establishing TMAs when they are deemed appropriate by market and demographic research, particularly in proximity to mobility hubs.

Transit Pass Programs

Smart Moves 3.0 recommends the continued expansion of transit pass programs in the Kansas City region, replicating, tailoring, and improving upon best practices being undertaken by peer transit agencies such as RTD in Denver and MetroTransit in Minneapolis. In particular, transit passes should be pursued as a way to provide affordable transportation for students, low-income employees,

neighborhood organizations (particularly in environmental justice areas), and human services providers. Because transit passes can increase convenience and affordability for riders, it can be an effective strategy for bringing new riders into the transit system.

Ride-hailing / Demand Responsive Services

Ride-hailing and Demand Responsive Services will provide private market support — potentially through public/private partnerships (PPP) where appropriate — for the publicly funded fixed-route transit services outlined previously in this section, as well as the Smart Moves 3.0 system at large. Ride-hailing and demand responsive services are diverse in their delivery, but share certain characteristics that make them unique from other types of mobility services. Generally, these services provide one-way trips to users who summon or "hail" the service via phone or mobile app to their present location, in contrast with the car-share or bike-share models (described below) whose service delivery platforms and characteristics are quite different.

Transportation Network Companies

Transportation Network Companies (TNCs) such as Uber, Lyft and SilverRides will continue to operate throughout the region, connecting users to destinations and connection points, such as those at mobility hubs. Around the country, transit agencies are partnering with these technology companies to provide connections to and from transit lines. Centennial, Colorado, for example, has partnered with Lyft to provide free trips to and from a light rail station area for city residents, a program that seeks to address the community's first-mile/last-mile connection problem.[1] This model could easily be adapted to supplement the mobility hub model. As local agencies begin to see benefits from the Fast and Frequent and Express networks in particular, they may seek similar arrangements to facilitate access to these amenities.

RideKC Freedom On-demand

While the focus of the RideKC Freedom program is to provide ADA and non-ADA paratransit services to individuals with disabilities and older adults, it now also encompasses non-ADA on-demand services available for the general public.

RideKC Freedom On-Demand provides an opportunity for community members to support ADA and non-ADA paratransit by choosing to subsidize those trips with their fare. As the fixed-route network expands in length and service hours, providing consistent ADA-paratransit services will need to be evaluated and addressed, as required by the FTA. In addition, the non-ADA paratransit network provides an essential service to those in need of enhanced mobility and special transit services in the Kansas City metropolitan area. Continued investment and expansion, where needed, through the use of community transit providers, KCATA and social services entities, is recommended.

Flex

The Flex service, operated by KCATA, will continue to be implemented in communities with relatively low levels of local transit service, to provide baseline mobility options. Beyond partnering with private-sector mobility providers, such as TNCs, Flex service can provide affordable levels of connectivity for older adults and individuals with disabilities, and even the general public depending on the eligibility determinations and funding of each program.

[1] http://www.denverpost.com/2016/08/15/lyft-centennial-team-up-for-free-rides-light-rail-station/

Taxis

Private taxi services are unique in their flexibility and reliability. *Smart Moves 3.0* takes the unique approach of partnering with these services (instead of competing with them) to provide the best service possible for all users, regardless of mode preference. To the extent that these partnerships may be used to enhance mobility for older adults, individuals with disabilities, veterans, students, and low-income individuals and families, or to provide first/last-mile connections for all users, necessary steps should be taken to do so.

Microtransit

In 2016, KCATA piloted microtransit services in partnership with Bridj and gleaned invaluable experience from that process. While this service was not adopted into the full KCATA program of services upon completion of the pilot project, future iterations of microtransit in Kansas City will benefit from its undertaking, and the lessons learned from the process in general.

Microtransit may be used to connect high-activity centers or mobility hubs, and enable users to travel easily between them on more flexible schedules (and pick-up/drop-off locations) than traditional transit. Vehicles are typically equipped with Wi-Fi devices, and other amenities, which may be appealing to those who need or want more on-board amenities than what traditional transit offers.

Biking and Walking

The *Smart Moves 3.0* plan recommends making transit more accessible in more areas throughout the Kansas City area, so it is important to ensure that riders can make their way safely and efficiently to and from transit stops and mobility hubs using active modes of transportation. Biking and walking are cheaper, healthier and more widely accessible than some of the other more technology-intensive mobility options detailed in this section. By making active transportation an easy choice for users, the *Smart Moves 3.0* network becomes all the more accessible, efficient, and effective.

Bikeshare and Bike Infrastructure

The *Smart Moves 3.0* plan recommends that the regional bike-share program grow to include more stations throughout the region. Bike-share stations should also be considered at first/last-mile locations close to major employers as a method of making the final connection from transit routes. This plan also recommends addressing structural barriers to bicycling by constructing additional bike racks, protected bicycle lanes, multi-purpose trails, and other amenities that encourage and facilitate bicycle use as a first- and last-mile connection where bike-share is infeasible or inappropriate.

Pedestrian

Trails, sidewalks and other infrastructure and amenities that support walking as a healthy and active form of transportation and recreation should continue to be planned and built throughout the region. In particular, mobility hubs and surrounding areas should be particularly robust in their provisions for pedestrians and their safety. MARC staff will aid communities in updating public works standards and capital improvement plans to support the development of this critical infrastructure.

Technology

Mobile Software Applications (Apps)

Apps that enable mobile ticketing (an app-based payment for trips that requires no direct currency exchange between the passenger and driver) have the potential to accelerate the boarding/alighting process, which is particularly appealing for mass transit. Apps of this variety are already being implemented in large metro areas such as Chicago, Los Angeles and New York, and the costs of adopting this technology in wholesale fashion are fairly substantial. However, the rewards are significant as well, and the *Smart Moves 3.0* plan recommends pursuing these options and other options that enhance mobility wherever possible. The RideKC App, for example, provides a platform to integrate different services under a single application, and should continue to be developed to provide these services.

Informational Kiosks

One way to address the digital divide is by providing interactive, informational kiosks at critical junction points (e.g., mobility hubs). These digital kiosks currently enable users to track the real-time location of their ride and access information about destinations in the vicinity of the transit stop, which boosts economic activity. However, these kiosks are capable of much more.

There are currently 25 interactive kiosks in use along the RideKC Streetcar Line in Downtown Kansas City. These kiosks provide real-time arrival information, information about adjacent mobility options, and advertising for local businesses. Headphone jacks on each kiosk enable visually-impaired individuals to utilize the kiosks as well. Additionally, 311 services are accessible through these kiosks.

Potentially, these kiosks could enable a user to hail a cab/TNC, and pay for it at the kiosk while waiting for the ride to arrive. Kiosks could also track a wider range of mobility services, provide locations for adjacent bikeshare and carshare stations, and enable payment via a range of options (e.g., cash, credit, PayPal).

Informational kiosks could potentially become critical components of mobility hubs throughout the region by facilitating access to critical connections. The *Smart Moves 3.0* plan recommends the integration of these kiosks wherever users are expected to transfer between multiple modes for first/last mile connections, or otherwise as needed.

Economic Development and Land Use

Transit can be used as an effective tool for leveraging economic benefits. For instance, when economic incentives are provided for transit-oriented development, communities can create vibrant places with inviting public spaces and a mix of commercial and residential uses. Increasing density around transit stops and stations (including mobility hubs) has the potential to have an even larger impact on jobs accessibility than investment in new transit service alone. Attractive development around transit and mobility hubs will drive more businesses to these

Regional Local governments and transit agencies in the region can plan play an important role in encouraging employers to support the transportation of choices for their employees. The San Francisco Bay Area has a robust 511 program that includes road conditions, carpool, vanpool, transit, biking, walking and employer outreach. The 511 program works with employers to evaluate employee travel patterns, identify commuter options that would work best for their employees, market the opportunities to the entire workforce, and assist help the employer and employees with getting tax benefits. The program is extremely successful at long-lasting mode shifts.

For more information: http://511.org/employers/services/overview

areas, increasing the number of jobs in close proximity to transit and mobility services. This plan strives to attract employers and residential development to transit routes, especially to the areas around the fast and frequent transit network.

The Kansas City region has already seen how transit can generate economic benefits for a community. Bus Rapid Transit (BRT) has yielded increased private sector investment along Main Street and Troost Avenue as well as providing other community benefits such as placemaking and increased public safety. The Downtown Streetcar has also fostered substantial private sector investment in areas within close proximity to the route and its stations. Since April 2016, over 40 new development projects have been undertaken within the Transportation Development District (TDD) surrounding the existing streetcar line. This new development equates to over $1.7 billion in value thus far.[2]

Partnering with the local business community through Chambers of Commerce and Economic Development Councils will enable MARC and local community partners to guide development in ways that benefit both transit services and local communities. Strategies such as creating taxing districts such as Community Improvement Districts (CIDs) and Transportation Development Districts (TDDs) can generate funding for transit and mobility services on the local level. Additionally, development incentives like direct subsidies, density bonuses, property tax abatements, permit fee waivers, expedited project reviews, public infrastructure investments, and tax credits can incentivize particular kinds of development.

Targeted Development at Mobility Hubs and Along Key Corridors

Mobility hubs will offer opportunities for future transit-supportive development. These opportunities will vary among the four hub types (as outlined earlier) with those located in densely populated areas providing the best opportunities for new ancillary economic development benefits. The Destination and Junction mobility hub types will generally lend themselves to more opportunities for integrated land use strategies.

Transit and mobility services perform best when supported by sufficient employment and population density. One way to facilitate these levels of support is to focus development energy along existing and planned transit routes and mobility hubs, or, in areas where this is not possible, enabling quick and reliable first- and last-mile connections to transit lines or mobility hubs from places of employment or residences. *SmartMoves 3.0* offers planning, design and economic development strategies to support this concept.

Planning and Design

Planning and design entails the process by which decisions are made about the form of the urban environment, and how different pieces within that environment are meant to interact with each other. It may seem that making recommendations about the forms of buildings is beyond the scope of a transit plan, but it is in fact a critical component. A building that promotes active transportation and transit usage offers more choices than one that facilitates only the use of the personal automobile. Beyond just buildings, however, the planning and design of the entire built environment, including elements such as streetscapes, parks, lighting, signage and drainage, are critical to creating safe and vibrant communities.

[2] RideKC Streetcar website – Economic Development: http://kcstreetcar.org/route/economic-development-2

Determinations for urban form and design will inevitably vary from one community to another and from one mobility hub to another, and should be determined in part through a robust public engagement process. Impending transit expansion is not in of itself a necessary precondition for a community to pursue "transit-ready" planning and design elements. Communities can expand transportation options for their residents by reviewing existing land use plans within a half-mile radius of transit routes and one-mile radius around existing or proposed mobility hubs and, where appropriate update planning documents and public works standards to include corridor-centric, mixed-use development policies. Additionally, Complete Streets principles should be implemented to accommodate all modes of transportation and beautify the public realm, creating safe and sustainable social and economic activity.

Zoning

Zoning is a process by which state-authorized entities (municipalities and counties) formalize land-use principles for specific geographies, including densities, usage types (e.g., industrial, residential, commercial), access requirements and regulations pertaining to buildings, including numbers, types, heights, and forms. City and county planning staff review all development proposals according for compliance with adopted zoning codes, which reflect the community's perception of acceptable use for each particular property.

The SmartMoves 3.0 plan recommends that local communities develop transit-oriented overlay districts or zones in a half-mile radius around existing and planned mobility hubs and other major activity centers along transit corridors to allow for higher densities and a mix of uses. This will allow communities to consider, during the development process, how well proposed projects accommodate transit. Where feasible, form-based codes should be implemented to retain community character while achieving desired, transit-supportive built-environment outcomes.

Parking

In general, parking policies are meant to provide space for the maximum amount of single-occupancy vehicles that might be expected to use a certain property at any given time. Land that is paved and striped for a parked vehicle which is not there for a majority of the time (e.g., at the edges of a mall or grocery store parking lot) cannot be used for other revenue-producing purposes.

SmartMoves 3.0 recommends a host of strategies to reduce parking requirements, particularly around transit-oriented and transit-supportive developments, such as reducing parking requirements within a half-mile radius of transit routes and within a one-mile radius around mobility hubs, and implementing parking "maximums" around transit-oriented development and transit routes. The focus is to drive development, not cars, toward transit routes in order to bolster the success of those routes, and reduce the amount of space dedicated to personal vehicles as a proportion of all land use.

Housing

While traditional zoning often separated the places where we live from where we work, there has been a strong shift toward mixed-use development in recent years. Places where people can live and work in relatively close proximity tend to be more active and vibrant than those with more homogenous land-uses. With that in mind, SmartMoves 3.0 recommends promoting housing density near transit routes and mobility hubs with a mix of market-rate and affordable housing units. Increased choices in housing and transportation will increase transit ridership, improve job access and reduce the need for personal vehicles.

Performance Measures

To measure progress in implementing the Smart Moves 3.0 system, MARC will be responsible for tracking the degree to which this plan's goals have been fulfilled. All of the components described in this section, and all of the strategies and recommendations outlined in the following section, are designed to further the Smart Moves 3.0 vision: "Smart Moves imagines a Kansas City region with viable mobility solutions for empowered residents, successful businesses and vibrant communities."

Jobs Accessibility

Metrics:

- Number of jobs accessible by transit by the average worker in the MARC urbanized area.
- Employment within a half-mile of mobility hubs and quarter-mile of transit routes

Improving jobs accessibility is a primary objective of this plan. Travel models will be repeated periodically to measure progress, and MARC will also monitor public perception of jobs accessibility to evaluate how changes in fixed-route transit and mobility services have impacted accessibility to employment. Geographic Information Systems (GIS) will also be used to track employment coverage of the transit and mobility hub system. Additionally, land use changes (such as the development of a mobility hub) will be reviewed for their impact on jobs accessibility.

Ridership

Metric:

- Annual transit and mobility service ridership

Although access to jobs by transit may increase, this does not necessarily ensure that more people will ride transit. MARC will monitor changes in ridership, taking into account externalities such as shifting gas prices and other economic factors. Increased ridership – both on traditional fixed-route transit and other mobility services – may suggest that the increased coverage of transit services has succeeded in filling a missing gap in the transportation network.

Land Use

Metric:

- Population and employment density within a half-mile of mobility hubs and quarter-mile of routes, changes in property values, number and value of permits pulled.

This plan calls for strategic land use investment to drive activity towards the transit network. Using GIS and other sources, MARC will track development changes within a quarter-mile of fast and frequent and supporting transit routes as well as within a half-mile of mobility hubs.

Technology

Metric:

- New technology systems implemented
- Number of locations impacted
- Number of new users per year

Changes in technology used to access and provide information about transit and mobility services will be tracked; their impacts may be difficult to quantify, but MARC will gather available data on usage. New

technology systems to be tracked may include off-board payment options, transit vehicle tracking technology, and the addition of smart kiosks at mobility hubs.

Funding

Metric:

- Annual amount of private sector funding supporting transit and mobility services.
- Annual amount of public funding supporting transit and mobility service.

Additional funding is critical to implement many of the recommendations in this plan. MARC will document any changes to how the region funds transit as well as any new funding sources or additional funding that transit agencies, mobility service providers and local governments are able to obtain to provide service upgrades and investments in and around transit corridors and mobility hubs.

Greenhouse Gas Emissions

Metric:

- Change in volatile organic compounds (VOCs) and nitrogen oxide emissions
- Change in vehicle miles traveled.

Along with increasing jobs access via transit and focusing development along transit corridors and at mobility hubs, this plan has the potential added benefit of decreasing vehicle miles traveled (VMT), and therefore reducing greenhouse gas emissions. The region's Congestion Mitigation and Air Quality (CMAQ) program will closely monitor changes in these emissions.