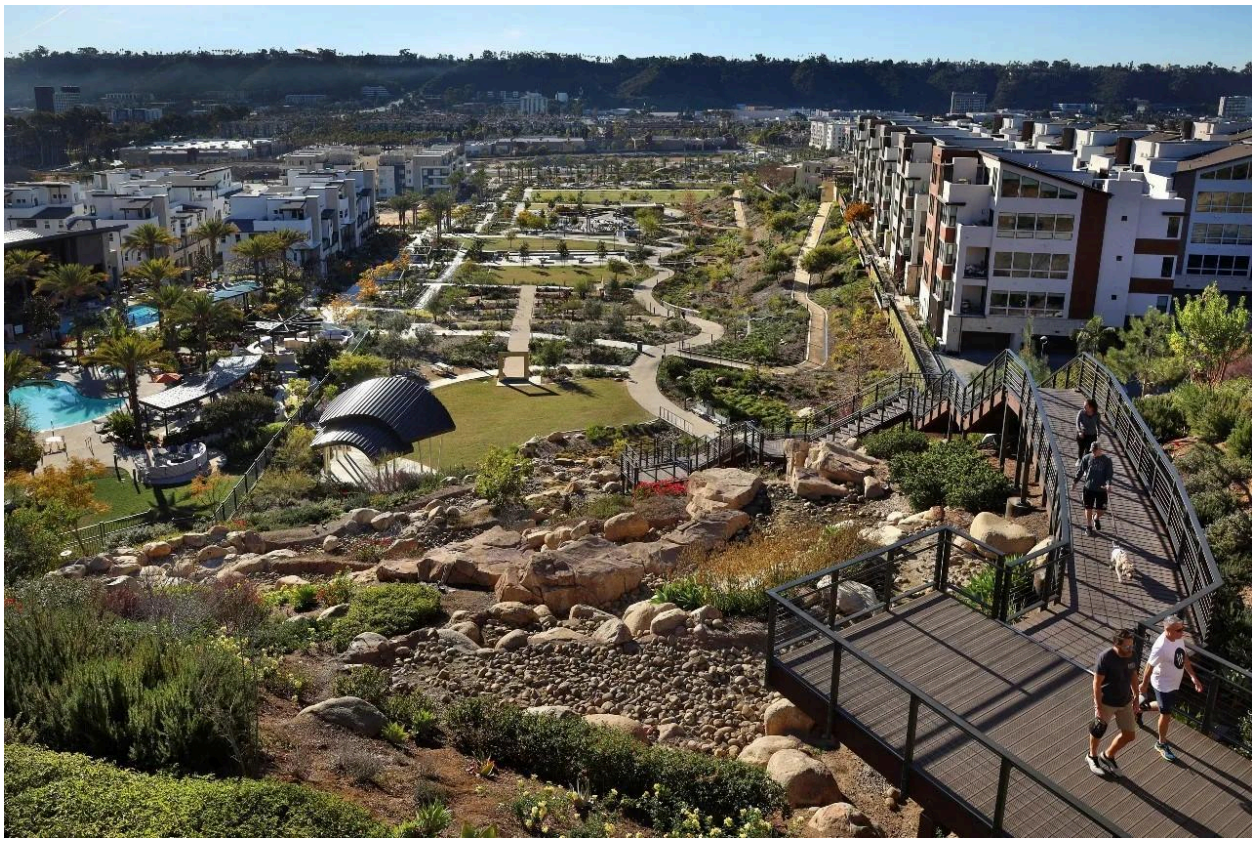

DRAFT - Civita Sustainable Mobility Plan

April 2, 2024

Confidential

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Executive Summary

TESIAC is a Next-gen Infrastructure Development and Investment Company at the nexus of Mobility, Energy, Technology, and Capital Markets. TESIAC along with a coalition of partners, including Beep, Kittelson, and Balfour Beatty were selected by SANDAG's Board of Directors under a Request for Innovative Concepts (RFIC) to advance the region's transformative plan for a Connector service of Smart Mobility Clusters (SMCs)™ and EV/AV Shuttles across the county's individual jurisdictions, as well as private commercial enterprises.

Over the past several months the coalition, led by TESIAC, has put forth an initial effort to design and implement a Sustainable Mobility Plan for Civita. TESIAC, on behalf of the coalition, welcomes the opportunity to present Civita with this draft plan to provide a phased approach to expand Civita's mobility and sustainability ambitions for its residents, commercial businesses, and the broader community.

The proposed Civita Sustainable Mobility Plan (CSMP) seeks to:

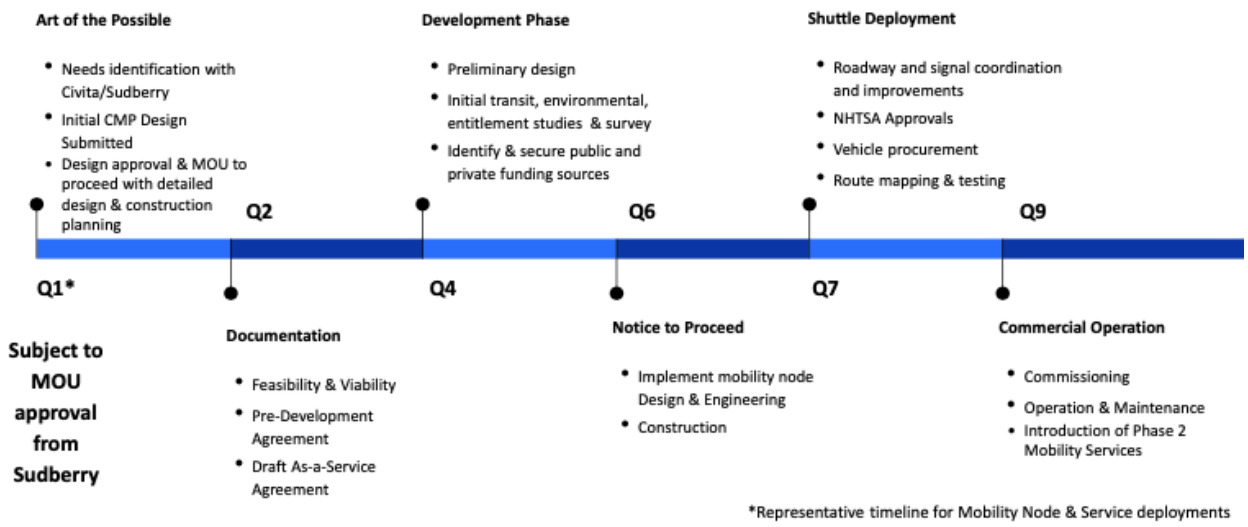
- improve local on-site mobility and regional connectivity,
- incentivize the adoption of electric-powered forms of shared mobility,
- provide a phased execution plan to adopt integrated resilient renewable energy, ev charging, and zero emission mobility choices to improve the quality of life for Civita residents, increase the value of the property, and enable local economic development as a beacon for the broader community,
- where appropriate provide 3rd party innovative capital financing solutions, shifting CAPEX ⟶ OPEX, and
- create a foundation to support regional growth and sustainably through providing alternative mobility choices and sustainable infrastructure development.

Phase 1:

Focus on establishing initial mobility services, through zero-emission shuttles and E-Bike Share service. Provide charging infrastructure for multiple forms of shared mobility to optimize connectivity with regional transportation networks, adjacent Sudberry Properties, Key Points of Interest, and maximize opportunities for investments in the communities they serve. In order to facilitate these the team will develop Smart Mobility Clusters (SMCs) ™. SMCs™ provide modular, multi-purpose solutions to address mobility infrastructure gaps, provide connectivity, and enable sustainable economic growth. Included in the SMC™ locations will be a community hub at Civita Park, Shuttle Charging & Storage, and smaller pick up and drop off locations with co-located E-Bike service. SMCs™ will feature integrated Solar Canopy EV charging infrastructure for personal owned vehicles (POVs), Civita Fleets, and all associated mobility services.

Initial Fixed Route Shuttle Services will consist of 1 (one) AV shuttle route and 2 (two) EV shuttle routes. The AV shuttle will serve as a circulator on the property to connect residents living up the hill on Franklin Ridge Rd. and Via Alta Ave. with Civita Park, retail choices, and the EV shuttle services. EV Shuttles will connect the property to key external nodes including Fashion Valley Mall, Rio Vista Transit Center, and Fenton Valley Transit Center.

Phase 1 DRAFT Project Timeline



Phase 1 DRAFT Asset Allocation Map

Phase 2: Deploy a fleet of fully autonomous AV shuttles to provide point-to-point on-demand service between on-site and off-site SMCs™. Beep shuttles will provide community-level

transportation between key locations, as well as providing first-mile/last-mile connections to existing and planned transit investments. The introduction of Level 4 automated vehicles (estimated to be available in Q1 2026) will allow for a cost-effective way of extending public transit services into the Civita community. Details of the Phase 2 mobility expansion are included in: *Phase 2: AV Shuttle Transition (Page #8).* Expand charging infrastructure to meet the forecasted growth of electrification.

Phase 3: Leverage the CSMP network to further expand resilient energy, mobility and integrated technology solutions to the benefit of Sudberry, Civita residents, and the broader community. Data driven information and analysis from Phases 1 and 2 will inform how best to expand capabilities to include timely and robust solutions going forward. Creating an integrated mobility ecosystem, starting with Civita, will better inform Sudberry in the development of its other properties to deliver sustainable communities and closely align with Sandag's regional connectivity plan.

Value Creation

TESIAC will take an active role for the length of the project, alongside Sudberry, to identify potential value creation and economic, social, and environmental impacts of delivering a set of integrated next-generation infrastructure solutions to the Civita community and additional Sudberry Properties locations. This Master Plan will create the initial design for community focused services to potentially benefit the property value of Civita's residential, commercial, and office units. Through our Phase 1 deployment we will integrate marketing and data collection capabilities from throughout the coalition to deliver refined community outreach and promotional activities.

All of the technology included in this proposal can be integrated into local business outreach and marketing efforts as well as Civita branded assets to drive attention to available rental and leasing opportunities during community event days (i.e. farmers markets).

<u>Representative Value Creation Opportunities:</u>

- Support Civita, city of San Diego, and county's goal around electrification and decarbonization, reducing carbon emissions from transportation and improving societal equity through shared mobility services
- Contribute to economic growth by deploying advanced technology and increase community access to job centers and local businesses
- Minimize potential adverse economic impact from power grid outage through on-site, off-grid generation implementation, supporting charging needs of the community and local businesses during extraordinary events
- Attract additional foot traffic to the retail sites, and potentially increase store revenues, through connectivity to public transit centers
- Increase value to apartments and residential leases through the introduction of zero-emission shared mobility services; limiting the amount of personal owned vehicles required by Civita residents to make common trips.

The Summary Proposal

EV/AV Shuttle Services

Phase 1

Phase 1 Routes for EV/AV Shuttles will include various use-cases to connect residents to key locations around Civita and access regional public transportation infrastructure. The team will look to replace the existing shuttle services with a fleet of Electric Transit Vans and Level 3 Autonomous Vehicles (AVs). Initial deployment will call for 3 routes supported by 7 different vehicles. These routes will aim to directly service the most immediate needs of Civita residents while also providing data collection capabilities for the Beep team to design Phase 2 full autonomous deployments.

Route 1**:** The First Route will introduce AVs to Civita with an internal circulator. This connects communities on the top of the hill with retail opportunities and connections to external mobility options without the need for driving their own vehicle or walking steep grades. This will also allow residents at the bottom of the hill to reach the Dog Park and access micro-mobility options at the top of the hill, especially once the new road connection is completed. The route will include a 1.68 Mile counterclockwise loop with two (2) AV shuttles servicing the route during operational hours, with a 3rd included to supplement charging times. With 2 vehicles operating the route the approximate headway of the route will be ~7 minutes between vehicle arrival times at each stop with it taking ~13 minutes to complete the full route.

Immediate demand for the route will have to be identified through community outreach events and surveys. Demand will be dependent on serviceable operational hours and frequency of use.

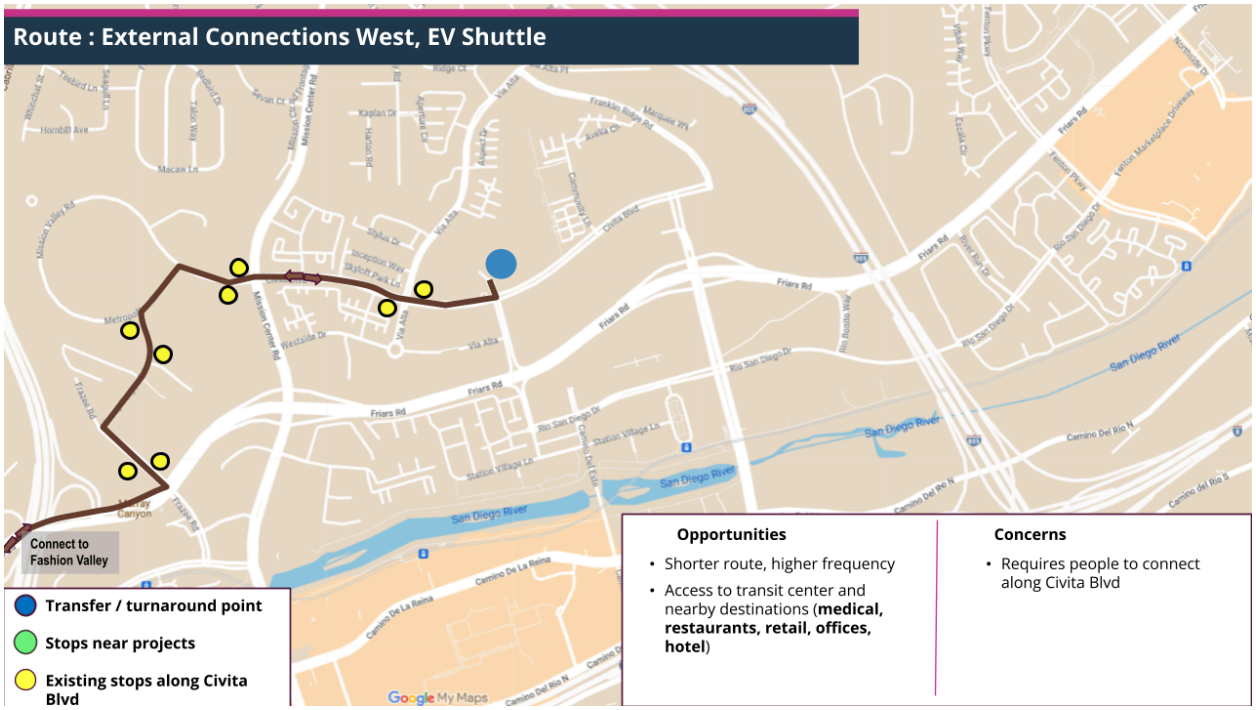
See Route 1 Illustration below.

**Stops identified at the top of the route servicing Promontory, Apex, Frame/Focus, and Lucent may need curb enhancements or minor grade leveling to support ADA accessibility. These upgrades will benefit Phase 2 services allowing for point-to-point service to be ordered to each HOA development.

Route 1: AV Circulator

Route 2: will utilize two (2) Ford E-Transit Vans to create a direct connection between Civita and the Fashion Valley Mall / Transit Center. Key features of this route include expanded service hours and reduced headways from the previous shuttle connection to Fashion Valley, making round trips and longer stays more feasible for riders. Additional stops off Civita property at nearby medical, retail, hotels, and office spaces provide the opportunity to create additional connections on route. The team will engage with MTS and the City of San Diego to obtain permissions to leverage already existing transit stops on route at desired locations following pre-development community outreach efforts.

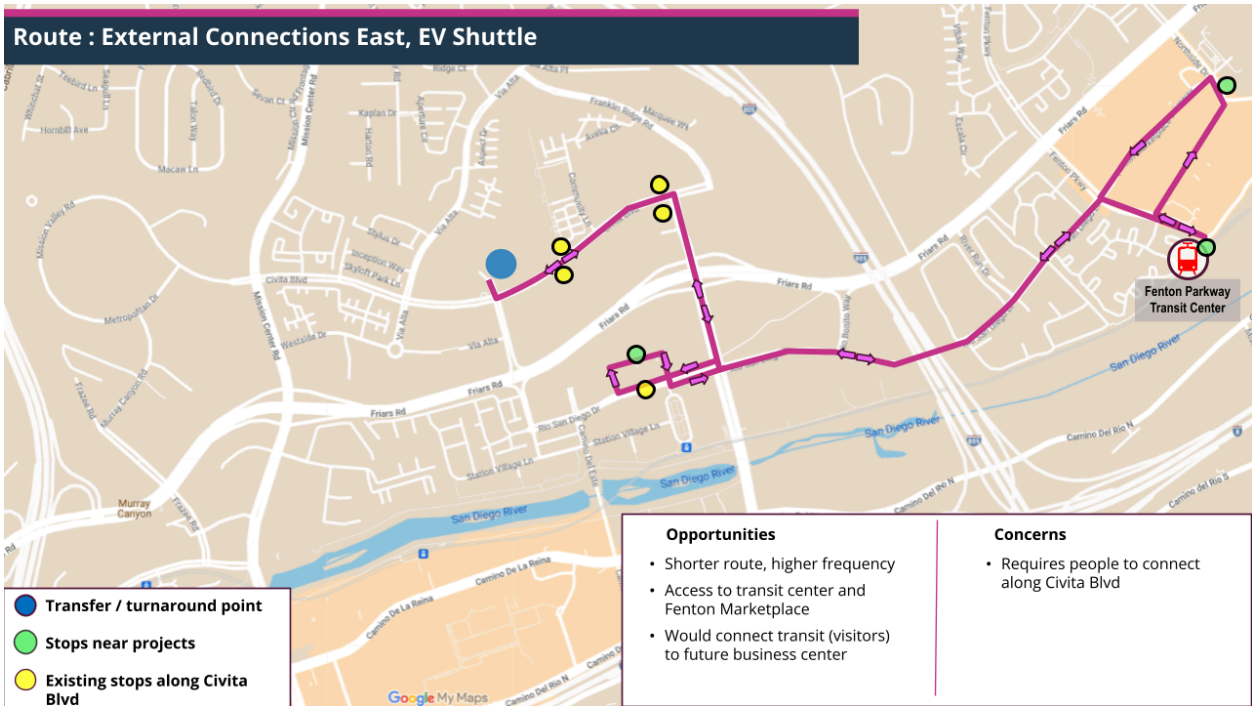
The team will work with Civita residents, Fashion Valley staff, and other local transit schedules to optimize schedules for riders. See Route 2 Illustration below.



Route 2: EV Fashion Valley Connection

Route 3: will utilize two (2) Ford E-Transit Vans to create a direct connection between Civita and the Fenton Parkway Shopping Center / Transit Center. Key features of this route include expanded service hours and reduced headways from the previous shuttle connection to Fenton Parkway, making round trips and longer stays more feasible for riders. Additional stops off Civita property include the Rio Vista shopping center and the eastern end of Fenton Parkway which is walking distance to Snapdragon Stadium. The team will engage with MTS and the City of San Diego to obtain permissions to leverage already existing transit stops on route at desired locations following pre-development community outreach efforts.

The team will work with Civita residents, Sudberry staff at the shopping centers, and other local transit schedules to optimize schedules for riders. See Route 3 Illustration below.



Route 3: EV Fenton Parkway

Phase 1 Route Headways

Route	Fleet	Route Type	Route Type Multiplier	Alignment Distance	Route Distance (Round Trip)	Number of Stops	Max Slope	Assumed Vehicle Speed (mph)	Miles per Minute	Route Completion Time (Mins)	Route + 1 min per stop (Mins)	Headway with 2 vehs (Mins)
Internal Circulator - Counterclockwise ONLY	AV	Loop	1	1.68	1.68	7	62.0%	15	0.25	6.7	13.7	6.86
West	EV	Straight	2	2.35	4.7	10		35	0.5833333333	8.1	18.1	9.03
East	EV	Straight	2	2.45	4.9	9	55.5%	35	0.5833333333	8.4	17.4	8.70

Phase 1 Options Table

	Option A - Full Deployment	Option B - Delayed AVs	Option C - Delayed AV w/ EV Supplement
Route 1 (AV)	X	Yes - EV	No - Phase 2
Grade Leveling	X	X	Phase 2
Route 2 + 3 (EVs)	X	X	X

Phase 2: AV Shuttle Transition

Point-to-Point On-Demand service, provided by Level 4 AV Shuttles, will be deployed in Phase 2 (Expected ~2026). This service will allow the community to choose a range of key destinations within a set geographical radius where they can begin and end their trips. Shuttle will pick up selected passengers for distinct trips, allowing for improved access and more bespoke services. Data collected in Phase 1 shuttle and E-Bike deployments will allow for highly targeted selection

of key sites for on-demand service connections. Initial considerations for point-to-point connections could include the following locations:

- VA clinic – Aero Drive: 3.5 miles
- VA Mission Valley: 1 mile
- Two Scripps Hospital Clinics: 1 mile
- Kaiser Locations: Vandever (5 Miles)
- Sharp Memorial Medical Center/Hospital: 4 Miles
- Balboa Park/San Diego Zoo: 4 miles
- Snapdragon Stadium: 3 miles

The team will continue to work with SANDAG to identify opportunities for sponsorships or direct participation in the program from local healthcare providers including the ones listed above.

The existing fleet of EV shuttles can be repurposed for special event rentals and can continue fixed route services at high volume destinations during key times of day. Shuttles can also be transferred to other Sudberry properties as the regional network grows to connect key developments.

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EV Charging

The Objective

Leviton, with a rich history spanning over 115 years, develops thoughtful solutions that streamline processes, elevate safety standards, increase efficiency, and enhance productivity, supporting TESIAC with EV Charging recommendations for the Civita property. We are quoting our Level 2 EV Series charging offering paired with AmpUp, a comprehensive EV Software Solution provider.

The Opportunity

We have identified three immediate opportunities to establish new EV Charging infrastructure at and around the Civita properties. Those opportunities are listed below in priority order:

- **Civita Park (1):** A bank of chargers to be installed in a set location by the Civita Park. This location will provide a charging option for EV Drivers spending time at the park.
- **EV Shuttle Location (2):** A bank of chargers to be installed in a set location, specifically for the e-mobility Shuttle Services. These chargers will provide overnight charging to each shuttle to ensure it can take Civita owners/renters around the property & to offsite locations. These charging stations will also provide the ability to charge throughout the day if a shuttle is low on battery. Charging stations can be prioritized for additional Civita EV vehicles during the day when shuttles are on route.
- **Offsite Location for EV Drivers (3):** We will be selecting a popular location off property, preferably a property Civita or Sudberry have a relationship with, to install a bank of EV Chargers for EV Drivers in the area. This will provide Civita owners/renters the ability to charge off property while shopping.

The Solution

- **Civita Park (1):** Leviton to provide (14) EV Series 48A single port chargers with AmpUp Pro software
- **EV Shuttle Location (2):** Leviton to provide (7) EV Series 80A single port chargers with AmpUp PRO software, (3) EBASE EV Foundations.
- **Offsite Location for EV Drivers (3):** Leviton to provide (10) EV Series 48A single port chargers with AmpUp Pro software at nearby Sudberry Properties Locations

Execution Strategy

We are provided three options and have priced out each accordingly.

1. **All in option:** covers full installation of the EV Charging infrastructure for the Civita property, including: Civita Park, EV Shuttle location, and the off-site location. This option also includes an option to replace the existing ChargePoint chargers that are on site. Allowing Civita to have ONE network for all chargers on property.
2. **Short Term option:** focuses on the same areas but reduces the number of chargers per area. Allowing for charging in all locations, but you are not maximizing chargers per parking spaces/locations. This option also eliminates the off-site location & reduces the recommended ChargePoint replacements.
3. **Starter option:** focuses on the Civita Park and EV Shuttle locations ONLY and reduces the number of chargers per location.

Integrated Canopy Solar

In order to optimize charging solutions and ensure a seamless integration with Civita's existing electrical grid, TESIAC has developed a relationship with Paired Power. Paired Power (https://pairedpower.com/) is a manufacturer of solar-powered electric vehicle charging facilities (EVCF) and microgrid systems.

Paired Power's flagship product is PairTree™, a solar powered off-grid EV charger that pairs a 4.6kW solar array with a Battery Energy Storage System (BESS) to provide Level 2 EV charging for up to two vehicles day or night. PairTree has designed its solar EVCF product to lead the field of solar powered EV charging, providing dependable off-grid or microgrid power with no moving parts that require ongoing maintenance.

The Opportunity

The Canopy Solar Solution includes 3 main components in Phase 1, each or which may be considered independent of one another:

1) Solar Enhanced Public EV Charging will provide Level 2 publicly accessible EV charging at the Civita Park entrance. This system will consist of either up to 8 PairTree solar canopies or a custom engineered solar canopy. Either option will utilize solar, battery energy storage, and an available grid connection to create a microgrid energy node that will enable solar EV charging even in the event of a grid disruption or outage.

2) Solar Enhanced EV Charging for shuttle operations. Curbside charging under a custom engineered solar canopy will provide high power Level 2 EV charging
    i. Shuttle Charging Hub will be located at (32°46'47.7"N 117°08'43.6"W) at the intersection of Community Lane and a small parking lot that provides access to the park.
    b. Alternative solution is to find an alternate location for Beep Shuttle Charging Hub which has more space to allow the PairTree solution (no permanent

build required) which has ~9 Parking Spaces worth of space for Shuttles & Maintenance components.

3) A PairTree solar canopy will provide 120VAC power for a micromobility hub enabling up to between 20 and 40 E-bikes to charge.

The Solution

PairTree System

1) Civita Park Parking

Project 1:

For this option, we propose 8 modular PairTrees configured in three sub-arrays as indicated in the illustration to the left. This option provides the fastest set up and least disruption of the existing parking lot.

PairTrees install in the space of one 9’x18’ parking space and the solar array overhangs half of each parking space. PairTrees are installed in every other parking space.

Lighting under the canopies will supplement existing parking lot lights at these locations. Additionally, the parking lot lighting wiring connections will be utilized for supplemental power for the PairTree system. The amount of supplemental grid power availability is to be reviewed and determined at a later time.

To facilitate the program for Civita, Paired Power proposes to deliver and install an initial order of up to 8 of our PairTree solar powered microgrid EV chargers. This would be followed by the expansion of the system with site built solar canopies for the shuttle stop (Project 2) and optionally for the park parking lot. (Project 1 option 2). The original 8 PairTrees can be relocated to additional sites within the community at a later date to provide additional power resources.

2) Beep Shuttle Hub

For this option, we propose a permanent single cantilever solar canopy that will be installed using site engineered foundations and a custom steel structure. Canopy design would provide height clearance for emergency medical vehicles (~14’)

The 6 shuttles anticipated are e-Transit vans or vehicles of equivalent or better efficiency. These shuttles are expected to perform an internal community loop and/or external routes to local transit and shopping. Assuming a 2-mile round trip on the internal loop at 20-minute cycles as well as a 5-mile round trips based on a 30-minute interval for the external routes with a split 8-hour daily cycle, the annual vehicle miles for the entire fleet is estimated at 152,000 miles.

3) Project 3: E-Bike/Micromobility Hubs

PairTrees would be used in a 120VAC configuration to provide electricity to an e-bike hub. An off-grid PairTree configuration will provide charging for e-bikes and other micromobility vehicles. A typical e-scooter battery is in the 300 to 500wh range, while e-bikes are typically 750 to 900wh. Given these capacity requirements and the average daily solar resource of 20kWh/day, between 20-40 vehicles can be charged on an average given day.

E-Bikes and Supporting Infrastructure

The Opportunity

In order to enable and support the associated shuttle services, TESIAC and the coalition have engaged with Kuhmute to develop an integrated E-Bike solution as a part of the CSMP. KUHMUTE's Mission is to design and manufacture cutting-edge charging infrastructure that prioritizes safety, security, and ease of use. **

** → Detailed design of E-Bike program & infrastructure pending information request from Sudberry Properties (including total # of E-Bikes and Distribution of E-Bikes in Ph1).

The Solution:

E-Bikes

As a part of the E-Bike service delivery KUHMUTE would source all E-Bike orders in Phase 1 for the Civita E-Bike share program. For the initial fleet of E-Bikes Kuhmute has recommended 2 potential vendors, Okai and Acton. Both of these bikes feature integrated adaptors to integrate with Kuhmute's locking and charging infrastructure, as well as being UL Certified. Both bikes feature similar battery specifications, as well as safety features, and a cargo basket on the front of the bike. When the bikes are ordered TESIAC can work with Kuhmute to identify local "wrapping" capabilities to get Civita branded designs or local sponsorship on the bikes. The proposed bikes for the initial deployment are included below.

OEM: Okai
Model: EB100

Features:
- UL Certified
- Max speed 15mph
- 400W motor, rear drive
- 36V, 551Wh battery
- Dual Mechanical brake
- Headlight, rear brake light, side stem lights, blinkers and bell
- Onboard geofencing
- Vehicle Alert System
- IPX5 waterproof rating

OEM: Acton
Model: Nexus

Features:
- UL Certified
- Max speed 15mph
- 400W motor, rear drive
- 36V, 551Wh battery
- Dual Mechanical brake
- Headlight, rear brake light, side stem lights, blinkers and bell
- Onboard geofencing
- Vehicle Alert System
- IPX5 waterproof rating

Kuhmute Docking / Locking Infrastructure

A key feature of the E-Bike program design for Civita includes KUHMUTE's feature locking, docking, and charging infrastructure. Individual charging stations are distributed throughout the KUHMUTE hub with the ability to have 2, 4, or 6 charging stations per hub.

KUHMUTE E-Bike Locking & Charging Infrastructure

Joyride Software Application

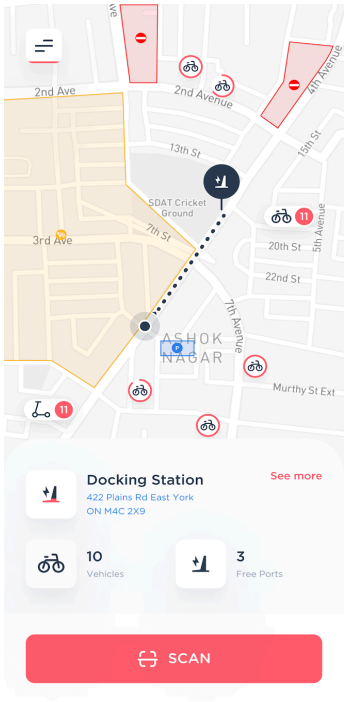
To support KUHMUTE's E-Bike deployment and related infrastructure will be the Joyride Software Package. Joyride software includes the capability to designate charging & parking zones, No-Wheel Zones, and integrates all required maintenance In-App. Civita's software will include a powerful data and insights dashboard that will bring automatic measurement and vitals to electric vehicle behavior in the community. Joyride will also feature as the full customer-facing application to allow residents and visitors to reserve, monitor, and pay for their E-Bike rides.

Leadership will have real-time access to analytics such as the number of residents using the program by HOA, the number of rides taken daily/weekly/monthly (et cetera), the number of vehicles actively riding vs. parked in a KUHMUTE hub, the battery life of e-bikes, and more.

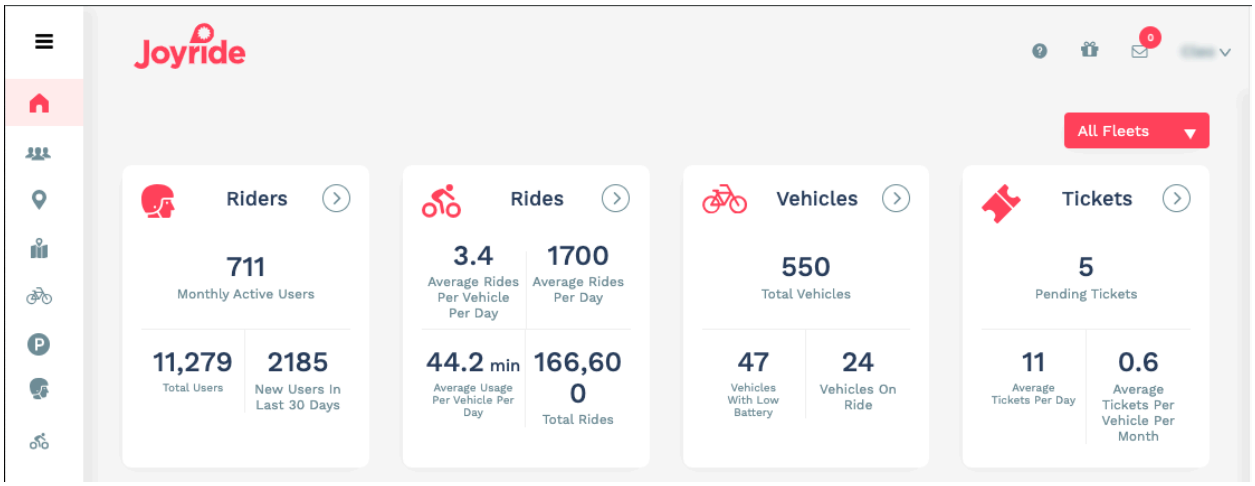
Everything Community Residents Need in Civita's Mobile App:

- Civita White-Labeled and branded Rider App with all the functionality residents need.
- Quick, easy, and effortless tap-and-go riding.
- All KUHMUTE parking stations at Civita are mapped in-app, making it easy for community members to find parking zones.
- Geofencing helps residents ride their e-bikes on designated pathways and prevents riding in buildings or on greenspace.

Joyride User Smartphone Application



Joyride Operator Dashboard



Marketing and Community Outreach

TESIAC intends to canvas the Civita residents and businesses with regards to expected usage of micro mobility on and off property. Our plan incorporates collaborating with local organizations across disciplines including a cross-section of local businesses and social economic organizations manufacturing, technical, and social development firms to form group wide support to ensure Civita's mobility and sustainability goals are achieved.

As part of a more robust program, the work proposed here can produce phased results much faster than traditional methods currently in place by aligning public and private sectors through partnership interests. TESIAC intends to collaborate with Sudberry, Sandag, and others to establish an incentive based, data supported, profitable, sustainable and scalable community based reinvestment plan.

TESIAC intends to conduct mobility surveys with Civita residents, businesses, and local communities, as well as visitors to the broader Civita property. With Civita's support, we would like to engage Civita residents with regards to estimated usage of mobility assets being proposed for the Civita development, nearby shopping districts, and potentially, local healthcare facilities. Our outreach activities are to include community surveys, sponsorship opportunities with local businesses, and community engagement at several Farmer Markets. This effort will drive data assumptions on the estimated usage of mobility alternatives, the potential to charge reasonable rider fares for shuttles and e-bikes, and potential for local business sponsorships including advertising, rider shopping discounts, and other revenue generating actions.

Concluding Remarks

The Civita project solution can address infrastructure gaps, provide enhanced connectivity for communities, accelerate environmental objectives, and enable sustainable economic development. The integrated approach to Next-gen infrastructure development enables a new kind of investment that bundles financial and ESG outcomes. Through this collaborative model we can deliver a broad set of benefits to the Civita property, more specifically to its residents, commercial businesses, and the community at large:

- As-a-Service Mobility - Upfront Capital, Risk Transfer, Long-Term Certainty
- Economic and Intrinsic Value Capture – Increased Property Value, Workforce Development, and Community Reinvestment
- Social Equity via Integrated Infrastructure - Transit Access, Energy Security
- Climate Friendly & Energy Resilience - Decarbonized Mobility Services, Accelerate Climate Action Plans

The Capital Plan and Budget for Initial Outreach and Phase 1 Project Delivery is pending completion of cost estimates and feedback from Sudberry on proposed draft CSMP.