XOS

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POWERING THE GAMES

A Fleet Charging Solution for LA 2028

PREPARED BY

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DISTRIBUTED TO

- LA28 Organizing Committee
- LA Metro
- City of Los Angeles
- Highland Electric Fleets
- Blue Bird Corporation
- Uber
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Executive Summary

The 2028 Olympic and Paralympic Games arrive in Los Angeles with a specific operational commitment: zero-emission transportation across every venue, every day of competition. Delivering on that commitment requires charging more than 3,200 electric buses each night, distributed across nine geographic zones and more than 40 venues, over 17 competition days in peak Southern California summer. LA Metro projects approximately one million additional transit trips per day at Games peak.[2] Xos models total daily charging demand across the full transportation ecosystem at approximately 588 MWh (see Section 1.3); the LACI Going for Gold Blueprint, developed with LA28 and the California Energy Commission, independently estimates that fully electrifying Games transportation could require more than 1 GWh per day.[3]

The time available to install conventional fast charging infrastructure at LA28's temporary venues has run out. In California, the electrical interconnection process for a DCFC site averages 38 weeks after construction is complete, according to the California Public Utilities Commission,[4] and the full cycle from permitting to energization runs between 11 and 24 months under favorable conditions. For venues including Sepulveda Basin, the Malibu coastal zone, and the Long Beach sailing venue, that timeline is incompatible with an opening date of July 14, 2028. Permanent infrastructure also creates stranded assets at sites that return to public use when competition ends, an outcome the LACI Blueprint explicitly recommends against.[3]

The Xos Hub addresses that gap directly. It is a mobile battery energy storage and EV charging system that deploys wherever an existing electric fleet stages, charges, or operates, in under one week, without utility upgrades, permanent permits, or civil construction. Each unit stores between 200 and 600 kWh of energy, pre-charged during off-peak overnight hours, and delivers up to 80 kW per port across four simultaneous connections. Units scale from a single trailer to 16 daisy-chained at one site, and redeploy between venues in hours. Xos is not entering this process as an outside vendor: the Los Angeles Department of Water and Power currently operates eight Xos Hub units in active service.[6] Highland Electric Fleets, LA28's official school bus provider, is a Xos customer.[1] Blue Bird Corporation, a Xos powertrain customer, is one of the largest electric school bus suppliers in California and operates a 180-unit fleet at LAUSD.9

Introduction

Los Angeles 2028 will be the first Olympic Games in which zero-emission transportation is not a goal but a governing operational constraint. The organizing committee has committed publicly and specifically: no spectator parking at most venues, no new permanent construction, and a Games Enhanced Transit System running entirely on zero- or near-zero-emission buses. These are not aspirational parameters. They are the framework within which every transportation decision for the next two years will be evaluated.

That framework creates a charging infrastructure challenge that is unlike anything a host city has faced before, not because the technology does not exist, but because the combination of scale, geographic distribution, timeline, and venue temporality makes conventional infrastructure approaches unworkable. The venues are spread across nine geographic zones. Many of them are temporary. Most of them have no existing high-power electrical capacity. And the time available to build it has passed.

This document lays out the case for a different approach: mobile, modular charging infrastructure that can be deployed at any venue in any zone, scaled as demand shifts, and fully transitioned into the Southern California fleet electrification ecosystem the moment the closing ceremony ends. It is addressed to the organizations that will make this commitment real, and it is specific about what each of them is being asked to do.

Section 1: The Scale of the Challenge

1.1 The Games and Their Transportation Commitments

The LA28 Olympic Games run from July 14 through July 30, 2028, with the Paralympic Games following from August 15 through August 27. Across 17 competition days and more than 40 venues in nine geographic zones, the organizing committee has established clear operational targets: no new permanent construction, no spectator parking at most venues, and zero- or near-zero-emission buses across the entire Games Enhanced Transit System. These are defined operational parameters, not aspirational guidelines, against which the Games' transportation planning will be assessed.

With 14 million tickets available across Olympic and Paralympic events, LA Metro estimates that peak competition days will generate approximately one million additional transit trips above normal Metro daily ridership.[2] Translating that demand into zero-emission transportation requires not only a large electric bus fleet but a charging infrastructure that can reliably serve that fleet every night, across dispersed locations, many of which have no existing high-power electrical capacity.

1M+	14M
Additional transit trips per day during peak Games days (LA Metro)	Tickets available acrossOlympic and Paralympic events

1.2 The Electric Fleet: What Needs to Be Charged

The confirmed electric fleet for LA28 is drawn from multiple operators with distinct logistics, depot locations, and operational cycles. LA Metro's Games Enhanced Transit System calls for 2,700 zero-emission buses to supplement normal service during the Games.[2] Highland Electric Fleets, announced as the official LA28 school bus provider on September 29, 2025, will deploy 500 electric school buses sourced from school districts across Southern California, including Compton, Moreno Valley, and Oxnard, to transport athletes, officials, media, and accredited personnel.[1] A dedicated fleet of approximately 300 buses serves athletes and the Olympic family on direct point-to-point routes, and Uber, LA28's official rideshare partner, is expected to deploy a significant electric vehicle presence at venue staging areas throughout the competition period.[8]

The charging requirement this creates is distributed and dynamic. Buses operate on different schedules and return to different staging areas. A meaningful share of the required charging will take place wherever the fleet actually stops between runs: temporary staging areas, layover zones, and operational hubs that were not designed for high-power electrical infrastructure and will revert to other uses the moment competition concludes.

1.3 Daily Energy Demand

The LACI Going for Gold Blueprint, an independent analysis developed with LA28, the California Energy Commission, and the Transportation Electrification Partnership, estimates that fully electrifying Games transportation could require more than 1 GWh of charging energy per day.[3] The table below models the demand profile using published vehicle specifications and conservative daily utilization assumptions, with rideshare fleet figures derived using the methodology described in the note below.

Fleet Segment	Vehicles	kWh/Vehicle/ Day	Total kWh/Day	Notes
Highland School Bus Fleet	500	160 kWh	80,000 kWh	Xos-Blue Bird spec; 80% SOC utilization [1]
Athlete and Official Dedicated	300	160 kWh	48,000 kWh	Longer routes; same vehicle class
Metro GETS (Hub-scope sites)	500	160 kWh	80,000 kWh	Gap charging at venue staging areas [2]
Uber EV Rideshare (projected)	5,000	45 kWh	225,000 kWh	See methodology note below [11]
Lyft and Other Rideshare (proj.)	3,000	45 kWh	135,000 kWh	Conservative EV penetration estimate
Reserve and Surge Fleet	200	100 kWh	20,000 kWh	Partial utilization; standby buses
Total Daily Demand	9,500+		approx. 588,000 kWh	approx. 588 MWh per day across full ecosystem

> *588 MWh per day, concentrated into an overnight charging window, distributed across nine geographic zones. This requires infrastructure decisions made now, with deployment planned for 2027 and operational readiness confirmed before competition begins.*

Rideshare fleet methodology note: Uber reported approximately 200.000+ monthly active EV drivers globally as of Q4 2025, representing a tenfold increase over three years.[11] Los Angeles is one of five metropolitan markets generating approximately 20% of Uber's global Mobility Gross Bookings, suggesting an active LA driver base proportional to that share.[12] Applying Uber's reported California EV adoption rate and assuming 60-70% mobilization of EV-capable drivers during Games competition days yields the 5,000-vehicle projection used here. This figure is a Xos estimate, not a published Uber commitment, and is presented as a planning scenario rather than a confirmed fleet size.

Section 2: Why Conventional DC Fast Charging Does Not Work for an Existing Fleet

The instinct when facing a large-scale EV charging requirement is to install permanent DC fast charging infrastructure. For a fleet operator preparing for LA28, that instinct leads to the wrong place, not because the technology does not work, but because permanent infrastructure is built around fixed locations while fleets are built around routes, schedules, and operational cycles. The Highland school bus fleet does not need charging at Sepulveda Basin. It needs charging wherever its buses are between runs. The Metro GETS fleet does not need a charging station at a venue. It needs capacity at every staging area where buses layer over between competition sessions. Permanent DC fast charging answers a different question than the one fleet operators are actually asking.

Beyond the fundamental mismatch between fixed infrastructure and mobile fleets, conventional DCFC presents four additional problems that are each material on their own.

2.1 Timeline: The Fleet Cannot Wait for the Grid

Fleet operators preparing for LA28 do not control the utility interconnection process. They do not control permitting timelines, transformer procurement queues, or civil construction schedules. But they are responsible for having their buses charged and ready on July 14, 2028, regardless of what the grid has or has not delivered by then.

The California Public Utilities Commission documented that utility interconnection for DC fast charging sites averaged 38 weeks after construction was already complete, with utilities averaging a further 31 weeks to complete the physical service installation once chargers were built and waiting on-site.[4] Stanford SIEPR research identified adequate electrical service delivery as the primary delay factor in DCFC deployment across California, noting that bringing sufficient power to a site consistently exceeded timeline estimates.[5] When permitting, civil construction, and commissioning are included, the full deployment timeline for a new DC fast charging site in California ranges from 11 to 24 months under favorable conditions, and can extend beyond 36 months when transformer procurement or grid upgrades are required.

A fleet operator cannot hand that timeline to LA28 and ask for an extension. The fleet has to be ready. The charging infrastructure has to be ready first.

38 wks	11-24 mo
Average interconnection waitafter construction complete (CPUC, 2022)	Full DCFC site timelineunder favorable California conditions

2.2 Cost: Paying for Capacity in the Wrong Place

Permanent DCFC infrastructure locks capital into a specific geographic point. For a fleet that operates across nine zones, with different buses staging at different locations on different days, that model forces the operator to choose between underbuilding at some sites and overbuilding at others, with no ability to shift capacity as demand moves.

UC Davis research found total installed project costs for DC fast chargers in California ranging from $122,000 to $440,000 per charger, well above figures commonly cited in earlier studies that excluded civil works and utility costs.[10] The California Energy Commission reports an average total project cost of approximately $2,000 per rated kilowatt for DCFC installations.[7] Modeling a basic permanent DCFC network across eight primary venue staging zones, at 20 chargers per site rated at 150 kW each, produces an estimated program capital of $40 to $55 million before utility upgrades, permitting fees, and engineering costs. That capital is spent before a single bus has been charged, and it cannot move if the fleet's operational pattern changes between now and July 2028.

$2,000/kW
Average installed cost per kW for DCFC(CEC data, incl. civil and utility costs)

from $500/kW
Xos Hub starting cost per rated kWincl. integrated energy storage

2.3 Grid Load: Infrastructure That Works Against the Fleet's Schedule

Fleet operators need to charge buses overnight, when vehicles are not in service and the grid is at its cleanest and least congested. Conventional DC fast charging draws power from the grid at the moment of vehicle charging, which means it responds to the fleet's schedule rather than the grid's optimal operating window only if the operator is disciplined enough to avoid peak hours entirely, a difficult constraint to maintain across a distributed nine-zone operation under live competition pressure.

The Xos Hub inverts this relationship. It pre-charges from the grid during off-peak overnight hours, when California's renewable generation frequently exceeds demand, and holds that energy in battery storage until the fleet needs it. The fleet operator draws on stored energy throughout the day, at the pace the operational schedule requires, without placing any additional load on the grid during peak hours. The Hub works around the fleet's schedule. Permanent DCFC makes the fleet work around the grid's.

2.4 Post-Games: Infrastructure That Stays When the Fleet Leaves

When the LA28 Games conclude, the fleets return to their depots. Highland's school buses go back to Compton, Moreno Valley, and Oxnard. Metro's buses return to their yards. The routes change, the staging areas close, and the operational geography of the fleet reverts to its normal configuration.

Permanent DCFC infrastructure does not follow the fleet. It stays at the venue, at the staging area, at the temporary location where it was installed, generating costs without generating charging value for the fleets it was built to serve. The capital invested in that infrastructure does not transfer to Highland's depots, or to Metro's yards, or to any of the places where the fleet actually lives after the Games. It stays in the park.

The Xos Hub model resolves this directly. Every unit deployed for the Games redeploys with the fleet when competition ends, transitioning from Games-period staging areas to the depots, yards, and operational hubs where the fleet continues to operate. The investment follows the fleet, not the venue.

> *Permanent DC fast charging infrastructure is built for places. The Xos Hub is built for fleets. For LA28, that distinction determines what is feasible before July 14, 2028 and what remains useful after the closing ceremony.*

Section 3: The Xos Hub

3.1 Product Overview

The Xos Hub is a mobile battery energy storage and multi-vehicle EV charging system designed for commercial fleet applications. Mounted on a standard trailer platform, it follows the fleet. It positions where buses stage, where drivers dwell, and where routes begin and end, not where permanent infrastructure happens to exist. The Hub's battery system pre-charges during off-peak windows, from the grid, from co-deployed solar arrays, or from a low-emission generator at remote sites, and dispatches stored power to connected vehicles at up to 80 kW per port across four simultaneous connections. Individual units can be daisy-chained up to 16 at a single site, scaling total capacity to 9,600 kWh of storage and 5,120 kW of peak output when configured with the largest battery option.

Xos Hub deployment at a venue staging area, mobile configuration on trailer (left) and fixed ground-mounted configuration (right), with solar panels providing supplemental daytime charging energy. AI-generated concept rendering for illustrative purposes.

Specification	Detail
Battery Capacity Options	200 kWh, 400 kWh, or 600 kWh per unit
Charging Ports per Unit	4 simultaneous DC connections
Charging Rate per Port	80 kW DC
Peak Output per Unit	Up to 320 kW (4 ports at full load)
Daisy-Chain Capability	Up to 16 units at a single location
Max Array (16 x Hub 600)	9,600 kWh storage; 5,120 kW peak output
Deployment Time	Under one week from order to operational
Required Site Utility	Standard commercial service, or fully off-grid via solar or generator
Vehicles Served per Unit/Night	4 to 12 buses, depending on capacity and route length
Trailer Footprint	Approximately 14 ft. by 6 ft., plus vehicle charging stalls
Mobility	Road-mobile; redeployable between venues in hours
Active LADWP Deployment	8 Hub units with solar arrays, in operation today [6]

3.2 Solar Integration

At venues with available open space, Xos portable solar arrays connect directly to Hub units and provide a renewable energy source for pre-charging that is independent of the grid. This integration serves two purposes for LA28: it reduces the Hub's overnight grid draw at venues where off-peak renewable power may still carry a carbon cost, and it provides a physically verifiable renewable energy chain from panel to battery to vehicle, supporting LA28's commitment to genuine emissions reductions rather than offset-based accounting.

The standard Xos solar array generates up to 90 kW of peak output, producing approximately 540 kWh per day under Southern California summer conditions. A 180 kW large-format array produces over 1,000 kWh per day at high-irradiance sites, and multiple arrays can be connected in parallel at a single location. At venues with large surface parking areas, including Exposition Park, the Rose Bowl complex, SoFi Stadium's adjacent lots, and the Sepulveda Basin, solar-plus-Hub becomes the primary model: the bus fleet charges from energy generated on-site during the day and from off-peak grid power overnight, with minimal peak grid impact at any point in the cycle. For the Malibu surf venue and other remote locations, the same solar arrays combined with a low-emission generator backup enable full EV charging capability at sites where conventional utility infrastructure would require permitting and construction that cannot be completed in the available timeframe.

Xos Hub off-grid deployment concept at Sepulveda Basin, with two Hub 600 kWh units powered by on-site solar arrays. LA28 BMX and Skateboarding venue visible in background. AI-generated concept rendering for illustrative purposes.

3.3 Daily Operations

The Hub operates on the fleet's schedule, not the grid's. Its daily cycle is structured around when buses depart, return, and need to be ready again. During the off-peak overnight window, typically from 10 PM to 6 AM, the Hub recharges from the grid at its lowest carbon intensity and cost. Morning dispatch covers buses departing to venues for the first competition session. A midday window, as short-route buses return to staging areas between sessions, allows for partial recharging that enables a second full venue run in the afternoon or evening. Rideshare EVs staging at venue perimeters can top up during these same midday windows, without leaving the venue corridor. When the last bus returns at the end of the competition day, the overnight cycle begins again.

The intraday top-up window has a practical multiplier effect on fleet utilization. A bus that returns at midday with a 30% state of charge can reach 80% SOC in approximately 90 minutes at 80 kW, enabling a second complete venue run in the evening without returning

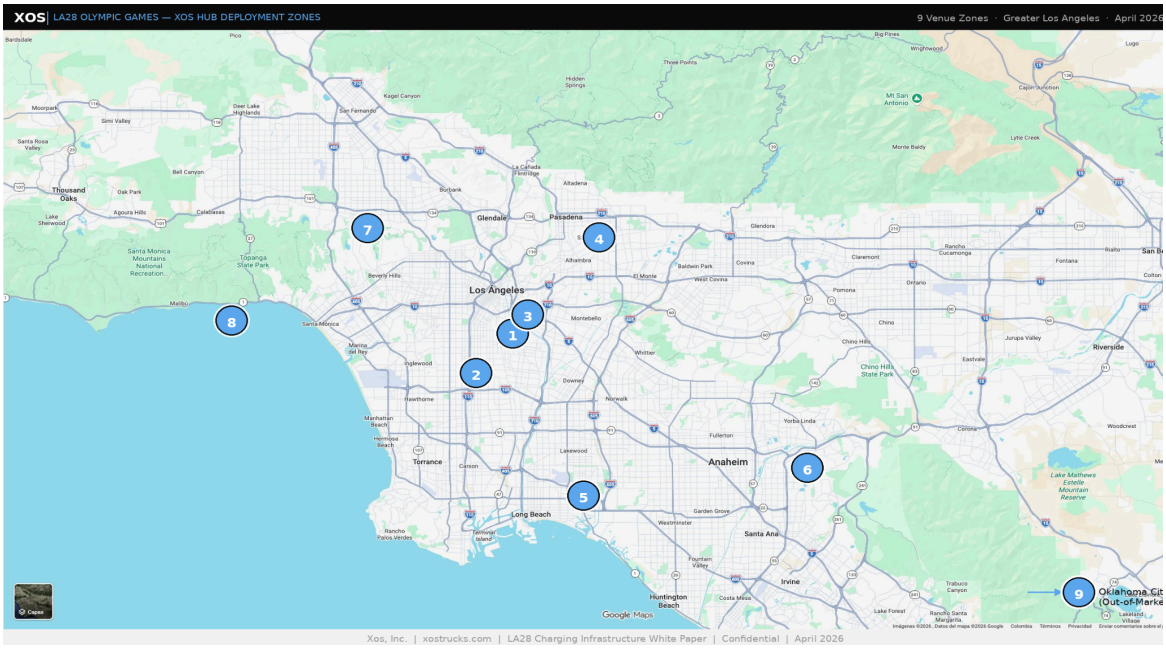
to a depot. A school bus fleet of 500 vehicles with Hub-enabled intraday charging at venue staging areas can achieve the effective transport output of a significantly larger fleet, without additional vehicles, drivers, or depot infrastructure.

3.4 Venue-by-Venue Deployment Model

The Hub deployment for LA28 is structured around the operators responsible for each fleet, not around the venues those fleets happen to serve. Each operator has a distinct staging pattern, a distinct set of locations where buses need to be ready, and a distinct post-Games destination for the infrastructure that serves them. The table below reflects that structure.

Fleet Operator	Fleet Size	Hub Units	Total kWh	Primary Staging Zones	Solar	Post-Games Destination
Highland Electric Fleets	500 school buses	12 x Hub 600	7,200 kWh	Exposition Park, Rose Bowl, Sepulveda Basin, Malibu	Yes	Highland depots: Compton, Moreno Valley, Oxnard
LA Metro GETS	500 buses (Hub-scope)	9 x Hub 600	5,400 kWh	Inglewood, DTLA, Long Beach, Anaheim	Limited	Long Beach Transit yards, Metro bus yards awaiting permanent upgrades
Athlete and Official Fleet	300 buses	6 x Hub 400	2,400 kWh	Exposition Park, Rose Bowl, Inglewood	Yes	LA World Airports, event operators
Uber Electric Rideshare	5,000 EVs (projected)	8 x Hub 600	4,800 kWh	All nine zones, venue perimeter staging	Yes	Redeployed to rideshare staging infrastructure post-Games
Lyft and Other Rideshare	3,000 EVs (projected)	4 x Hub 400	1,600 kWh	DTLA, Inglewood, Long Beach	Limited	Regional event and venue operators
Mobile Reserve and Surge	Variable	4 x Hub 600	2,400 kWh	Repositioned dynamically as demand shifts	N/A	Held as flexible regional asset post-Games
Park and Ride Hubs (x3)	Shared across fleets	3 x Hub 600	1,800 kWh	Distributed across outer zones	Yes	Metro and county transit operators
Total	**9,300+ vehicles**	**46 units**	**25,600 kWh**	**9 zones**		

The map below shows the geographic distribution of Hub deployments across the nine competition zones, corresponding to the staging areas where the fleets above operate during the Games period.



LA28 primary competition zones and proposed Xos Hub deployment sites across Greater Los Angeles. Oklahoma City (Softball, Canoe Slalom) is an out-of-state venue operating under a separate logistics plan.

Note on references:

Section 3.4 does not introduce new references. Fleet size figures draw from sources already cited in the document: Highland fleet [1], Metro GETS [2], Uber partnership [8], and rideshare fleet projections [11] and [12]. No renumbering of the existing reference list is required.

Section 4: Carbon Intensity and Honest Accounting

LA28 has publicly committed to genuine emissions reductions rather than offset-based carbon neutrality. That commitment requires transparency about where charging energy actually comes from. The table below outlines the carbon intensity of each energy source applicable to LA28 charging scenarios, from the lowest achievable to the conventional fossil fuel baseline.

Energy Source	Carbon Intensity	Context
Xos Hub with Solar (direct generation)	0 to 10 g CO2/kWh	Verified renewable generation; no grid dependency during solar hours
California Grid, Off-Peak (SCE territory)	180 to 220 g CO2/kWh	Improving annually as renewable capacity grows
California Grid, Peak Afternoon	280 to 350 g CO2/kWh	Gas peakers frequently dispatched during summer afternoons
Propane Generator Backup	350 to 400 g CO2/kWh	Recommended backup for remote sites
Natural Gas Generator Backup	450 to 500 g CO2/kWh	Acceptable for temporary use where propane is not available
Diesel Generator (reference baseline)	700 to 800 g CO2/kWh	
Diesel Bus (displaced)	800 to 1,100 g CO2/mi	Includes particulate matter and nitrogen oxide emissions

The Hub's default overnight charging scenario draws from the California grid during off-peak hours, accessing the grid at its cleanest point in the daily cycle, when renewable generation frequently exceeds demand and wholesale prices reflect surplus supply. Adding co-deployed solar arrays shifts the energy mix further, providing a directly traceable renewable generation source during daylight hours. The result is a physically verifiable energy chain from generation to vehicle, rather than a renewable energy certificate purchased separately from generation.

> *For high-visibility venues including the Coliseum, SoFi Stadium, and the Rose Bowl, a renewable pre-charge protocol combining solar arrays with verified off-peak grid power creates a credible basis for characterizing the transportation energy delivered to those bus fleets as substantially renewable-sourced. This is a chain of custody from generation to wheel, documented and auditable, not an accounting adjustment.*

Section 5: Xos Hub vs. DC Fast Charging

Criteria	Permanent DC Fast Charging	Xos Hub (Mobile)
Deployment Timeline	11 to 24 months or more, including utility applications, permitting, civil construction, and energization	Under one week from order to operational
Capital Cost per kW	Up to $2,000 per kW installed, including civil and utility costs (CEC data) [7]	From $500 per kW, including integrated energy storage
Utility Upgrade Required	Yes; most temporary sites require new or upgraded service	No; draws from existing standard commercial service, or operates via solar or generator
Permitting	Multi-agency process; typically months of lead time	Minimal; no permanent installation triggers permanent permitting requirements
Grid Load Impact	Adds to peak grid demand at the moment of vehicle charging	Pre-charges off-peak; no additional grid load during peak Games hours
Solar Integration	Not applicable; direct grid draw only	Compatible; Xos solar arrays connect directly to Hub units for on-site renewable generation
Redeployability	Not applicable; permanent installation	Fully mobile; redeployable between venues in hours as demand shifts
Remote and Off-Grid Sites	Not feasible without utility construction	Fully operational via solar and low-emission generator
Scale Flexibility	Fixed at installed capacity from day of commissioning	1 to 16 units at a single site; scalable as fleet size and demand shift
Rideshare Integration	Requires separate installation and access management	4 ports per unit serve fleet buses and rideshare vehicles from a single deployment
Post-Games Asset Value	Permanently sited at temporary venues with limited ongoing charging demand	Fully redeployable; transitions to regional fleet infrastructure immediately post-Games
Feasibility for July 2028	Not feasible at venues requiring new utility service, given current timelines	Operational today; available for 2027 pre-Games commissioning and testing

Section 6: Xos and the LA28 Ecosystem

Xos has operational relationships with several of the organizations central to LA28's transportation network. What follows is a factual account of where those relationships stand today.

6.1 Los Angeles Department of Water and Power

LADWP currently operates eight Xos Hub units with solar panel products in active service.[6] That deployment provides operational performance data under Southern California grid and weather conditions, and an established working relationship with the utility that will coordinate grid access during the Games period.

6.2 Highland Electric Fleets

On September 29, 2025, LA28 announced Highland Electric Fleets as the official electric school bus provider of the 2028 Games.[1] Highland will deploy 500 zero-emission school buses sourced from districts including Compton, Moreno Valley, and Oxnard, to transport athletes, officials, media, and accredited personnel across nine geographic zones. Highland Electric Fleets is a Xos customer, and the charging infrastructure behind their fleet operations runs on Xos technology.

6.3 Blue Bird Corporation and LAUSD

Blue Bird Corporation is a Xos powertrain customer. Separately, Blue Bird has sold 180 electric school buses to the Los Angeles Unified School District[9], making LAUSD one of the larger electric school bus operators in California and a likely contributor to the Highland LA28 fleet pool. Its depots are a natural candidate for Hub deployment during the Games.

6.4 LACI Going for Gold Blueprint

The LACI Going for Gold Blueprint, developed with LA28, the California Energy Commission, and the Transportation Electrification Partnership, identifies mobile energy and charging assets for last-mile transportation as one of five priority investment categories for the 2028 Games.[3] Xos responded formally to the associated RFI and is in active discussions with the LACI Transportation Electrification Partnership.

Section 7: Deployment Timeline and Execution

7.1 Phased Deployment Plan

The deployment plan is structured in seven phases, from procurement and site assessment through post-Games redeployment. The critical path is determined by two constraints: Hub manufacturing lead times and the Highland Electric Fleets depot integration schedule, which establishes the operational baseline before Games-time venue deployments begin.

Phase	Q3 2026	Q4 2026	Q1 2027	Q2 2027	Q3 2027	Q4 2027	Q1 2028	Q2 2028	Jul-Aug 2028	Post-Games	Key Milestones
Phase 1: Procurement and Site Assessment	■	■									*Hub fleet procured; site surveys at 13 venue zones; depot coordination initiated with Highland Electric Fleets*
Phase 2: Depot Electrification Support		■	■	■							*Hubs deployed at Highland and LAUSD school bus depots; pre-Games operational data collected under real fleet conditions*
Phase 3: Games Staging and Integration				■	■	■					*Full Hub array staged at venue zones; LA28 transport team integration; operator training and logistics planning*
Phase 4: Solar Array Deployment					■	■	■				*Solar arrays installed at open-area venues; off-grid configurations commissioned at Sepulveda Basin and Malibu*
Phase 5: Pre-Games Commissioning							■	■			*All venue Hubs active; charging management software operational; reserve units positioned and tested*
Phase 6: Olympic and Paralympic Games									■		*Full operations; daily reporting to LA28 transport team; dynamic Hub redeployment across venues as demand shifts*
Phase 7: Post-Games Redeployment										■	*Hubs transitioned to Highland depots, LAUSD facilities, Long Beach Transit, LAX, and regional event operators*

7.2 Site Requirements

The Xos Hub is designed to operate with minimal site preparation requirements, which is central to its viability at temporary venues. A standard venue deployment requires a flat, stable surface area for the Hub trailer, approximately 14 ft. by 6 ft., adjacent charging stalls equivalent to four standard bus parking spaces per Hub unit, a vehicle access lane for bus ingress and egress, and a standard physical security perimeter using event fencing. For grid-connected sites, standard commercial electrical service at a minimum of 200A and 480V three-phase is required. For fully off-grid configurations using solar arrays and a low-emission generator, no grid connection is needed.

No utility upgrade applications, no trench permits, no transformer procurement, and no multi-month construction timelines are required. The Hub is designed to work with the infrastructure that already exists at the site, which is the characteristic that makes it viable at temporary Games venues where conventional charging is not.

Section 8: The Post-Games Legacy

LA28 has framed its legacy commitment in specific terms: the Games should leave Los Angeles with tangible transportation infrastructure improvements, not a set of temporary solutions that disappear when competition ends. The Xos Hub model supports that commitment directly, because every unit deployed for the Games is fully redeployable once competition concludes.

- **Highland Electric Fleets depot network:** Hub units transition to school bus depots across Compton, Moreno Valley, Oxnard, and the broader Southern California region, providing permanent charging infrastructure for a growing electric school bus fleet that will continue expanding after the Games.
- **LAUSD:** Additional Hub capacity at district facilities supplements existing infrastructure as LAUSD's fleet expands toward its zero-emission mandate, building on Xos's existing relationship with Blue Bird and the district's large electric bus fleet.
- **Long Beach Transit and LA Metro:** Hub units deployed at bus yards still awaiting permanent utility upgrades bridge the gap between current depot charging capacity and the long-term grid buildout those agencies have planned.
- **LA World Airports:** Hub units support electric ground support equipment operations at LAX and the EV rideshare staging area at the SkyLink terminal connection, where high-power temporary charging demand is a known operational challenge.
- **Event and venue operators:** Hub units serve the growing market for high-capacity portable EV charging at large temporary events, including major festivals, sporting events, and public gatherings where permanent charging infrastructure is neither practical nor warranted.
- **Permanent fixed installation:** At venues with significant ongoing community use, Hub units can be removed from their trailer platforms and permanently sited as fixed energy storage and charging infrastructure, converting the temporary Games deployment into a lasting community asset.

> *The Games accelerate deployment. The redeployment of Hub units into the Southern California fleet electrification ecosystem is the return on that investment, continuing to generate value for years after competition concludes.*

Section 9: Stakeholder Engagement

The infrastructure decisions that will determine whether LA28's zero-emission transportation commitment is operationally achievable will not be made by a single organization. They involve a network of actors with distinct mandates, different planning timelines, and decisions that need to be made at different points between now and July 2028. Xos already has an operational presence with several of these organizations, which means the conversations that follow do not start from zero.

Stakeholder	The Shared Challenge	Role and Xos Engagement
LA28 Organizing Committee	Matching charging infrastructure to the scale and flexibility of a 40-venue, zero-emission Games.	Primary decision authority for Games transportation contracts. The Hub addresses the zero-emission commitment, the operational reliability requirement, and the July 2028 deployment timeline simultaneously, within a cost structure that avoids stranded asset risk.
LA Metro / GETS	Charging the GETS fleet at every point it operates, including the staging areas and layover locations that existing depot infrastructure does not reach.	Responsible for operating the 2,700-bus zero-emission GETS fleet. Hub units at temporary staging areas fill the gap between Metro's depot coverage and the venue-level charging the GETS schedule requires.
City of Los Angeles / Mayor's Office	Giving the city's public sustainability commitments a verifiable operational foundation.	Political sponsor of LA28 sustainability commitments. Hub deployment provides the operational infrastructure needed for the zero-emission transportation promise to be verifiable, not aspirational.
Highland Electric Fleets	Keeping 500 buses charged and ready across nine geographic zones, wherever the fleet operates, not just where depots exist.	Official LA28 school bus provider and existing Xos customer. Hub units extend charging infrastructure beyond depot boundaries to wherever the fleet operates during the Games.
Uber (Official Rideshare Partner)	Maintaining EV driver productivity at venue staging areas throughout the full competition day.	Official LA28 rideshare partner. Hub units at staging zones allow drivers to top up during venue dwell time without leaving the corridor, reducing downtime during peak competition periods.
Lyft and Other Rideshare Partners	Serving multiple rideshare platforms from a single charging infrastructure deployment.	Same operational requirement as Uber. Hub access control supports authorization across multiple rideshare platforms from a single installation.

Stakeholder	The Shared Challenge	Role and Xos Engagement
Blue Bird Corporation	Extending the Xos-Blue Bird-LAUSD relationship from drivetrain to full charging infrastructure.	Extending the Xos-Blue Bird relationship from powertrain supply to full charging infrastructure. | Xos powertrain customer and major electric school bus manufacturer. A natural partner as Xos expands from vehicle components into charging infrastructure for the Games.
LAUSD	Protecting fleet availability for the school year that begins immediately after the closing ceremony.	Operates 180+ Blue Bird electric school buses. Hub deployment at LAUSD depots during the Games period protects fleet readiness for the 2028 to 2029 school year.
LACI / Transportation Electrification Partnership	Translating the Blueprint's mobile charging recommendation into a formal procurement outcome.	Published the Going for Gold Blueprint identifying mobile and modular charging as a priority. Xos responded formally to the associated RFI and is positioned to implement the solution the Blueprint describes.
California Energy Commission	Structuring a deployment that qualifies as catalytic infrastructure investment with a verified post-Games legacy.	Funded the LACI Blueprint and administers Fast Charge California. A Hub deployment with documented redeployment to Highland, LAUSD, and Long Beach Transit is the use case CEC incentive programs are designed to enable.
LADWP	Building a formal Games-period grid coordination protocol on top of an existing operational relationship.	Active Xos Hub customer with eight units in operation today. Natural partner for off-peak charging optimization and renewable energy integration across venue zones during the July-August 2028 window.
LA County and Long Beach	Securing site access and permitting across county-jurisdiction venues with sufficient lead time for pre-Games commissioning.	Multiple venue zones within county jurisdiction. Key partners for site access, permitting coordination, and post-Games redeployment planning across Long Beach Transit and county-managed facilities.

Section 10: The Path Forward

The infrastructure decisions that will determine whether LA28's zero-emission transportation commitment is achievable are being made in 2026. The window for conventional DC fast charging at temporary venues has closed. Mobile, modular charging infrastructure is the approach the available timeline, the venue geography, and the post-Games legacy requirement all point toward, and it is the approach that LACI's Going for Gold Blueprint explicitly identifies as a priority.

Xos is prepared to move immediately, with a product that is operational today, relationships with the key organizations in the LA28 transportation network, and a deployment plan that fits within the timeline constraints that govern every other decision in this process. We are asking LA28, Highland Electric Fleets, Metro, the City of Los Angeles, and transportation partners to engage on a formal Hub deployment program for the 2028 Games. Specifically, we propose the following five steps:

- A formal meeting between Xos and the LA28 transportation team to present the Hub operational model, review venue-by-venue deployment requirements, and align on the scope of a Games-period charging infrastructure program.
- An integration planning session with Highland Electric Fleets to co-design the charging infrastructure plan for the 500-bus school bus fleet, covering depot-level Hub deployment during the pre-Games period and Games-time staging area configuration.
- A joint submission to the LACI Transportation Electrification Partnership formally identifying the Xos Hub as the mobile and modular charging solution described in the Going for Gold Blueprint, and initiating the procurement process the Blueprint recommends.
- A commercial term sheet for a Hub supply and service agreement covering the full LA28 deployment window, including pre-Games depot deployment, Games-period venue operations, and post-Games redeployment to the agreed legacy destinations.
- A proof-of-concept deployment at one Highland Electric Fleets school bus depot in Southern California in Q3 2026, generating real operational data under the specific conditions and duty cycles relevant to LA28 before Games-time deployment begins.

These five steps are designed to move from conversation to operational commitment within a timeline that still allows for pre-Games testing and commissioning. The organizations receiving this document are the ones whose decisions will determine whether LA28's zero-emission transportation commitment is achievable in practice. Xos is ready to begin with whichever of these is the most immediate priority.

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