



**LOS ANGELES**  
CANDIDATE CITY  
OLYMPIC GAMES 2024



**STAGE 1**

# **VISION, GAMES CONCEPT AND STRATEGY**



# TABLE OF CONTENTS

## 1.1 VISION AND GAMES CONCEPT

1.1.1 VISION	01
1.1.2 GAMES FEATURES AND OPERATIONAL CONCEPTS	03
1.1.3 VENUE CONCEPT	08
1.1.4 OLYMPIC VILLAGE	11
1.1.5 IBC/MPC	13
1.1.6 DATES OF THE GAMES	14
1.1.7 METEOROLOGY	14

## 1.2 LEGACY AND LONG-TERM PLAN INTEGRATION AND ALIGNMENT

1.2.1 EXISTING CITY/REGION LONG-TERM PLAN ALIGNMENT	15
1.2.2 BENEFITS FOR THE OLYMPIC/PARALYMPIC MOVEMENT	18
1.2.3 LEGACY	20

## 1.3 GENERAL INFRASTRUCTURE AND CAPACITY ANALYSIS

1.3.1 POPULATION STATISTICS	28
1.3.2 ACCOMMODATION	28
1.3.3 AIRPORT	30
1.3.4 TRANSPORT	34
1.3.5 ENERGY	42
1.3.6 TELECOMMUNICATIONS	44
1.3.7 MEDICAL SERVICES AND EMERGENCY RESPONSE	45

## 1.4 COUNTRY ANALYSIS

1.4.1 POLITICAL AND GOVERNANCE FRAMEWORK	48
1.4.2 ECONOMIC ANALYSIS	50
1.4.3 SAFETY AND SECURITY	52
1.4.4 SUPPORT FOR THE OLYMPIC GAMES	52
1.4.5 LEGAL FRAMEWORK	53

## 1.5 FINANCING ANALYSIS

1.5.1 FINANCING STRATEGY	54
--------------------------	----



1.1

**VISION AND  
GAMES CONCEPT**



## 1.1.1 VISION

### 1. IMAGINING WHAT'S NEXT: A NEW GAMES FOR A NEW ERA

The spirit of Los Angeles and indeed all of California is based on harnessing creativity and curiosity for the purpose of imagination and reinvention. There is no stronger image for the City of Los Angeles than its sunny, ideal weather and no stronger metaphor for reinvention than the sun itself, rising and falling every day, offering the promise of a better tomorrow. This unique ethos is the essence of our city, our region and our bid for the 2024 Games.

*Follow the Sun* is the perfect expression of our vision: LA 2024 will create a transformative Olympic Games utilizing our city's ideal climate, its unparalleled culture of creativity and innovation, and its youthful energy to reimagine a Games that:

- ◆ Delivers the ultimate personalized experience for the athletes
- ◆ Maximizes our existing world-class sporting culture and infrastructure to ensure a sustainable long-term Olympic legacy for our city, and
- ◆ Refreshes the Olympic brand around the world for a new generation

The Games celebration will be a seven-year platform for inspiring healthy living through sport and building ever-greater social cohesion among our diverse populations and neighborhoods.

- ◆ On a local level, the Games will be a catalyst for connecting the City of LA through new community green spaces for hosting citywide Games-time celebrations; after the Games, these spaces will contribute to the expression of our diverse communities, and provide access for Angelenos to be active and healthy through additional sports and cultural programming.

- ◆ On a national level, we plan to leverage the extraordinary excitement of an Olympic Games in the US to build national pride, reignite America's passion for the Games and significantly increase youth participation in sport across the country.
- ◆ And on an international level, we seek to create another transformative moment for the Olympic Movement, proving the power of Olympic Agenda 2020 to deliver sustainable benefits to their host communities while engaging global youth through a modern, integrated campaign of innovation and storytelling through Olympic and Paralympic sport.

And as a symbol of our vision, we will cast LA's brightest star, the sun, as our inspiration for providing a better tomorrow. The sun is much more than a stunning backdrop for the thousands of athletes who choose to live and train in Los Angeles. It represents hope, reinvention, and renewal. It can also be a powerful ally – the ultimate business partner. Even today, the sun is used to light the Olympic flame. Now we will use it to ignite an energy revolution. In 2024, LA aspires to introduce the first energy positive Olympic and Paralympic Games powered by the sun.

By following the sun, LA 2024 will reimagine a New Games for a New Era.

# THE LA 2024 STORY: A CITY OF REINVENTION

The story of LA 2024 is indelibly entwined with the story of our city, our nation and of our state, California. All embody the spirit of hope, reinvention and renewal.

LA 2024's Olympic story is based on the following five themes:

## LA 2024 is tailor-made for the athletes

- ◆ Los Angeles is a city blessed with dependable, ideal weather and an abundance of existing, modern, accessible facilities perfectly suited for year-around sport and for the Olympic and Paralympic Games.
- ◆ The LA 2024 Olympic Village will set new standards in sustainability as well as personalized comfort, preparation and convenience for the athletes.
- ◆ Los Angeles' long-term, proven dedication to sport and healthy lifestyles is why thousands of Olympians and Paralympians from around the world choose to live and train in our city and region.
- ◆ Los Angeles hosts dozens of world-class sporting events every year with stadia full of passionate, high-performing fans.
- ◆ Los Angeles offers athletes and their families once-in-a-lifetime, world-class entertainment and cultural opportunities to enjoy outside the Games experience.

## Los Angeles is an epicenter of innovation

- ◆ Many of the world's top technology companies call our region home; LA 2024 will harness the skills and creativity of these entities to help transform the Games experience for all Olympic stakeholders.
- ◆ Many of the world's top universities are based in and around our city; LA 2024 will harness this incredible wealth of intellect and optimism to help define our Games for the youth of the world.
- ◆ Many of the world's top media companies are based in Los Angeles and these visionary firms will help reimagine the presentation and the promotion of our Games, including the growth of the Olympic Channel.
- ◆ Many of the world's top innovations in sustainability were invented in our region and LA 2024 will build upon this progressive history to ensure our Games benefit our city and the Olympic Movement for generations to come.

## Los Angeles has been investing in the Games for years

- ◆ Over the last 30 years LA has redeveloped its urban core by creating a series of new venues and public celebration centers. This provides for a rich array of Olympic venue choices that are experienced in hosting world-class events.
- ◆ An impressive 97 percent of the venues in the LA 2024 plan either exist, are already planned as permanent venues by private investors, or will be temporary facilities.
- ◆ Leveraging existing venues and infrastructure minimizes risk; therefore, we can focus resources on the athletes and the Games experience for all stakeholders.
- ◆ Our city is investing nearly USD 300 billion in transport infrastructure plus almost USD 14 billion into the modernization of our major airport, LAX.
- ◆ LA is a ready-made Olympic city that reinforces the fiscal tenets of Olympic Agenda 2020.

## Los Angeles is a culture of youth, diversity and entrepreneurship

- ◆ Nearly 3.5 million people in Los Angeles County are under the age of 25, representing a large and crucial new audience for the values of Olympism and the Games themselves.

- ◆ Los Angeles County is home to over 10 million people representing 144 countries and 225 languages – yet 81 percent are united in their desire to host the Games. This is not a message of diversity; it is a message of unity – just like the Olympic Movement itself.
- ◆ Los Angeles had America's highest rate of entrepreneurial activity from the period between 2009 and 2011. Simply stated, people don't come to Los Angeles to work for big companies, they come here to create them.

## Los Angeles' entertainment assets will promote the Games and Olympism in new and compelling ways

- ◆ Many of the greatest storytellers on earth reside in Los Angeles, and they will be part of our Games planning.
- ◆ Los Angeles has more museums than any city in America with top cultural attractions located in Downtown LA's Exposition Park and Museum Row on Wilshire Blvd.
- ◆ Los Angeles is also home to world-class music venues (such as Walt Disney Concert Hall, Microsoft Theater, and Dolby Theater), major award shows (such as the Academy Awards and the Grammys), and countless other events honoring the arts. Each of these will provide new, unique opportunities to promote the 2024 Games.

The goal of our vision is to create a bold, new opportunity for the Olympic Movement. Together, the IOC, the USOC, and LA 2024 can elevate the Olympic and Paralympic Games for the world, while being the most fiscally responsible and sustainable Games in decades.

We can elevate and innovate the Games experience because we can leverage existing venues and infrastructure while minimizing risk.

We can be the most exciting and electric host city, while also being the most trustworthy because we have assets in place and host global events here, every day.

The time is now to help transform the Olympic Movement. By following the sun, together, Los Angeles and the IOC can launch this new Games paradigm, and shepherd Olympic Agenda 2020 into a new era.

## 2. A TRANSFORMATIVE PARALYMPIC GAMES

LA 2024 will utilize our city's ideal climate, our long-term commitment to Paralympic sport and standards of accessibility, our culture of acceptance, creativity and innovation, and our youthful energy to reimagine a Paralympic Games that:

- ◆ Delivers the ultimate personalized experience for the athletes
- ◆ Maximizes our existing world-class sporting culture and infrastructure to ensure a sustainable long-term Paralympic sports and accessibility legacy for our city, and
- ◆ Refreshes the Paralympic Games brand values around the world

LA 2024's vision for the Paralympic Games is directly linked to the vision of the LA 2024 Olympic Games because they are the world's two greatest events in a single celebration of sport.

While the Paralympic Games will be hosted approximately 17 days after the Olympic Games, both events will be organized by the same committee and directed by the same executive team. All Paralympians will receive the same quality of services, treatment and respect that the Olympians who precede them enjoy. Paralympians will reside in the same Village and compete in the same world-class venues. The Paralympic Games will be planned with facilities and services that speak directly to the current needs of the athletes and teams participating.

Like the Olympic Games, the Paralympic Games—and the heroes who take the stage to compete—will be elevated through the storytelling power of Los Angeles’ creative community. The LA 2024 Paralympic Games will help our city and the world celebrate the unity in diversity that drives the Games experience. It is imperative that participants recognize that their experience is equal to the Olympic experience by every organizational and emotional measure.

Through the Paralympic Games, we will seek to create an educational model that reaches into every aspect of social life and into every neighborhood throughout the City. While LA today considers itself among the most progressive of cities in terms of its inclusiveness and its attitude toward persons with an impairment, the City also recognizes that there is always room for improvement. Part of the vision for the LA 2024 Paralympic Games is to ensure a legacy of greater inclusion, compassion and respect for those with an impairment in all aspects of city life.

US Paralympics envisions the LA 2024 Paralympic Games as an extraordinary opportunity to expand its outreach and cast a broader net to draw more athletes with an impairment into the Paralympic movement. As an indication of the breadth of the opportunity: today, there are more than 21 million Americans with a physical impairment, many who are eligible to compete in Paralympic sport. US Paralympics is already working hard to address this national issue with programming from grassroots to the elite level. For instance, US Paralympics currently supports Paralympic Sport Clubs, a network of community-based organizations that provide programming to athletes at the local level, all across the country.

If LA is honored with the opportunity to host the 2024 Olympic and Paralympic Games, US Paralympics and LA 2024 will use their evolving partnership and the platform of the 2024 Games to grow the Paralympic Movement in the city, across the state, the country and around the world.

## 1.1.2 GAMES FEATURES AND OPERATIONAL CONCEPTS

### 3. A TRULY SUSTAINABLE AND TRANSFORMATIVE GAMES CONCEPT

The Pacific Ocean, miles of sunny coastline, beautiful sandy beaches, diverse neighborhoods, verdant canyons and hills, a magnificent climate, scenic public and civic spaces, and a wealth of world-class sports infrastructure provide LA with a unique canvas on which to create a truly sustainable and transformative Games Concept.

Because of LA’s extraordinary array of existing sport, transport and accommodation infrastructure, composing a responsible LA 2024 Games Concept is more a matter of selecting the best choices instead of building them.

Our Games Concept consists of four exciting venue clusters. Each cluster is uniquely positioned to share the excitement of the Games throughout the city, to take advantage of LA’s growing public transit system and excellent highway system, and to provide iconic broadcast backdrops such as our amazing beaches, the world famous Hollywood Hills and the Santa Monica Pier.

The Paralympic competition sites will also utilize the same four clusters. All sports with an Olympic counterpart, apart from wheelchair rugby, wheelchair basketball, and 5x5 football, will be hosted in the same venues.

We identified key venues based on several criteria:

- ◆ Our ability to provide athletes with an excellent field of play
- ◆ Locations where world-class venues exist today or where we can easily build temporary venues
- ◆ Locations with short journey times from the Olympic Village
- ◆ Opportunities for a sustainable legacy

#### DOWNTOWN CLUSTER

The new, revitalized Downtown LA will be the beating heart of the LA 2024 Games. Bustling day and night, Games visitors will have easy access to the best restaurants, nightlife, art and cultural destinations LA has to offer. Downtown will also be the main accommodation area, offering a vast choice of hotels in every price range.

A renovated, state-of-the-art LA Memorial Coliseum and the world-class LA Live entertainment complex anchor the Downtown Cluster. Eight different competition venues, as well as the Opening and Closing Ceremonies, will fill Downtown LA with Games-time celebration and festivities.

The Downtown Cluster will consist of two precincts, one at LA Live, the other centered around Exposition Park and the University of Southern California (USC). In addition, the LA 2024 Media Village will be located on the campus of USC.

#### LA Live Precinct

The LA Live Precinct includes the Staples Center (basketball), Microsoft Theater (weightlifting), and a newly renovated LA Convention Center (boxing, fencing, handball, judo, table tennis and wrestling). The LA Live Precinct is also home to LA 2024’s proposed Olympic Family Hotels - the JW Marriot at LA Live and the adjacent Ritz Carlton. The prime location of these properties, in the middle (and inside the secured perimeter) of LA Live, is surrounded by Games-time action, and guarantees an exceptional Games-time experience for the Olympic family.

#### USC Precinct

The USC Precinct will feature the USC Galen Center (badminton and taekwondo), the LA Memorial Coliseum operated by USC (athletics and ceremonies) and the new Los Angeles Football Club (LAFC) Stadium (temporary facilities for swimming, diving and synchronized swimming).

The Downtown Cluster will also host the road cycling, cycling time trials, marathon, race walk and archery events. The Start/Finish line of each road event will be located in front of the beautiful Grand Park and iconic Los Angeles City Hall.

#### VALLEY CLUSTER

Sepulveda Basin, a large recreational area in LA’s San Fernando Valley, will play host to four sports. Located northwest of the Downtown Cluster, Sepulveda Basin is a 20-minute drive-time from the Olympic Village along the Olympic Route Network (ORN). Utilizing this facility helps maintain an efficient Games Plan and brings the Games to an important area of the City that did not host events during the Los Angeles 1984 Games.

Sepulveda Basin will also provide an opportunity for a community legacy. The Basin will feature a canoe slalom course built for the Games. Post-Games this new facility could be operated as a leisure water park and canoe/kayak training facility.

Temporary equestrian, modern pentathlon and shooting venues will complete this exciting cluster.

## COASTAL CLUSTER

The Coastal Cluster will host six sports across two precincts, one at the University of California – Los Angeles (UCLA) and the other at Santa Monica Beach. In addition, the LA 2024 Olympic Village will be located within the Coastal Cluster at UCLA. The central location of the Village and state-of-the-art facilities at UCLA will be an amazing benefit to all athletes competing at the Games.

### UCLA Precinct

The UCLA Precinct will be home to four separate venues. Following a USD 136 million renovation in 2012, UCLA's Pauley Pavilion seats 13,800 making it one of the finest collegiate facilities in the nation today and a perfect host for the volleyball competitions. Steps away, UCLA's North Athletic Fields will host the field hockey competitions in two temporary venues. The LA Tennis Center, just west of Pauley Pavilion, will be transformed into a temporary water polo venue.

### Santa Monica Beach Precinct

Beach volleyball was invented on the beaches of Santa Monica and in 2024 it will return to where it all began. In addition to beach volleyball, Santa Monica Beach will also host triathlon and open water swimming competitions. These venues are just a 15-minute drive west of the Olympic Village along the ORN.

## SOUTH BAY CLUSTER

The South Bay Cluster will host four sports at the multi-use StubHub Center. This cluster is located 25km south of Downtown Los Angeles and is a 30-minute drive from the Olympic Village along the ORN.

The StubHub Center Soccer Stadium is the largest soccer-specific stadium in US Major League Soccer, and will host rugby during the Games. Steps away, the Tennis Stadium will host all tennis competitions.

The StubHub Center is also home to the existing VELO Sports Center. This facility will undergo renovation and a modernization program resulting in a world-class training and competition facility for the US Track Cycling team. The new VELO Sports Center will host track cycling competitions during the Games.

Additionally, the StubHub Center will host BMX competitions in a temporary venue.

## ADDITIONAL VENUES

Outside of the four major clusters, several other extraordinary venues will be utilized, including:

- ◆ The Wilson Golf Course is located in Griffith Park, a 25-minute drive-time from the Olympic Village, and surrounded by the iconic Hollywood Hills. It will be renovated into a world-class facility and will host golf during the Games.
- ◆ The Forum, located in Inglewood, a 15-minute drive-time from the Olympic Village, is a world-class multi-purpose 17,500 seat indoor arena that will host artistic, rhythmic and trampoline gymnastic competitions during the Games.
- ◆ The iconic Rose Bowl Stadium, UCLA's 92,000 seat American Football stadium, will host football prelims and finals. The Rose Bowl is a 35-minute drive-time from the Olympic Village.
- ◆ The LA Waterfront, located just south of the StubHub Center (South Bay Cluster), is a popular tourism destination consisting of a public promenade and walking paths, acres of open space and scenic views across San Pedro Bay. The LA Waterfront will host sailing during the Games.
- ◆ Lake Casitas is the proposed LA 2024 rowing and canoe/kayak sprint venue. Lake Casitas is a man-made lake located in the Los Padres National Forest of Ventura County, and was the site of the Los Angeles 1984 rowing events.
- ◆ The beautiful Santa Monica Mountains along the Southern California coastline is a popular hiking, biking, and recreation area. The mountains will host mountain biking during the Games.
- ◆ Preliminary matches for football will be hosted in a number of strategically selected cities across the United States.
- ◆ The International Broadcast Center (IBC) and Media Press Center (MPC) will be a new facility constructed at NBCUniversal's property in Universal City.





## 4. A FESTIVAL OF SPORT, CULTURE AND ENTERTAINMENT

The LA 2024 Olympic and Paralympic Games will be preceded by an eight-week LA 2024 Arts Festival to engage the residents of the entire city in Olympic-themed cultural and entertainment events that span the full spectrum of contemporary arts, tastes and budgets.

The LA 2024 Arts Festival will be the culmination of a four-year, national Cultural Olympiad designed to strengthen the connection between sport and culture across the county. Given the world-class stature of LA's multitalented entertainment community, the Cultural Olympiad will be scheduled to ensure that the City's diverse talent and spectators have a wide array of opportunities for performances over the years.

As the descriptions in this volume make clear, the LA 2024 venue plan is designed in four clusters spread across LA's geography. The Arts Festival will take advantage of this plan with events, exhibitions, performances, community rallies and public celebrations at LA 2024 Live Sites in and around these four clusters, as well as iconic locations such as Grand Park. Ticketed and free public events will serve to build the Olympic spirit before the Games begin—with programming that speaks to many of LA's diverse neighborhoods and nationalities.

As part of our vision for social unity, the LA 2024 Arts Festival will inspire our communities, taking advantage of the strong foundation of goodwill the public expresses toward the Games. Today, polling shows broad support for the Games across the diverse population of Los Angeles. In addition, almost 40 percent of Angelenos have expressed interest in volunteering for the Games. Many volunteers will be offered opportunities to participate in our LA 2024 Arts Festival.

As the celebration continues with multiple LA 2024 Live Sites offering free screenings and entertainment during the Games, LA

2024 will also stage certain strategic events across the City to offer free access and boost public participation and spirit. Among other events, the women's and men's marathon, the cycling time trials and road races, the triathlon and race walks will be planned and staged for the broadest public involvement. Following the Games, many of these sites will be left to the City as reimaged parks and community green spaces.

Significantly, the Downtown Cluster will also host LA 2024's largest Live Site - a central pedestrian corridor along Figueroa Street, linking all the Downtown LA venues, and creating an unparalleled zone of fan excitement for locals and visitors from around the world.

Additionally, LA 2024 will dress the City with the inspiring identity of its Olympic brand, creating a shared and seamless visual experience that connects all the City's neighborhoods in the Look of the Games, while delivering the spirit and camaraderie of the Games to street level. And complementing this visual identity, LA 2024's comprehensive marketing and advertising programs will create key activation opportunities for TOP Partners and Games partners to reach Los Angeles residents and a global audience.

## 5. ENGAGING THE ENTIRE UNITED STATES

To build excitement for the Games, LA 2024 will initiate a seven-year communication and engagement campaign. LA would be the first Summer Games in the US in 28 years, therefore the stories of LA's triumphant 2024 quest will send tidal waves of excitement through the sports community, fueled by Los Angeles' famous storytelling community and the incomparable resources of NBC's news and entertainment networks.

LA 2024 will use every major public milestone in the organizing effort to keep Americans engaged and current on Games preparations and the wider Olympic Movement. Following the USOC's successful model of building interest in US Olympic teams through cross-country road shows, LA 2024 will develop its own annual road shows to tour nationally before the 2018, 2020 and 2022 editions of the Games, leveraging the power of the pre-promotion of those Games and the Olympic trials that precede them to keep Americans tuned in to LA 2024. We will engage sponsors in this effort to ensure our communications are robust.

Since there will be several generations of young people who have never had the opportunity to witness the Olympic Games on American soil, young people will be a major focus of the seven year LA 2024 communications effort, four year national Cultural Olympiad, and a national Olympic and Paralympic sports education and participation program delivered in partnership with the USOC, the LA84 Foundation, and other corporate partners.

In the years before the Games, national campaigns directed at ticket sales, volunteer recruitment and torchbearer nominations will be used to further engage and inspire the American public.

LA 2024 will also partner with the US professional sports leagues to place LA 2024 Games promotional programming at each competition in the NBA (2014 total attendance 22 million), the NFL (2014 total attendance 17 million), NHL (2014 total attendance 21 million), the MLB (2014 total attendance 73 million) and other professional sports organizations.

Among all activations, the Olympic Torch Relay will, of course, captivate the nation, giving citizens in all 50 states the opportunity to reach out and touch the Games, and providing our marketing partners with the opportunity to create robust and inspiring national advertising campaigns.



## 6. THE LOS ANGELES OLYMPIC EXPERIENCE

LA 2024's unique Games Concept is poised to elevate the Olympic experience for all its key constituents. Just like the thousands of Olympians and Paralympians who live and train in Los Angeles today, all athletes will enjoy ideal weather as they compete, train and live in modern world-class venues and accommodation. Spectators will experience the greatest festival of sport in a city that knows how to put on a show. Members of the media will find a city that is renowned for its exceptional storytelling and constant innovation of the media craft.

### ATHLETE EXPERIENCE

LA 2024 is totally committed to putting athletes at the very heart of our Games Plan. We have established a prominent, well-rounded Athletes' Commission with a mission to give athletes from around the globe the opportunity to aid in the creation and development of an unforgettable Olympic and Paralympic Games in 2024. Led by five-time Olympic medalist, and LA 2024 Vice Chair, Janet Evans, the Athletes' Commission will bring together over 35 Olympians and Paralympians across all sports, to seek perspectives and ideas straight from the field of play from the thousands of current and former athletes, both within the US and internationally. Angela Ruggiero, a decorated US Olympian, USOC Board Member, and IOC Member elected to the IOC Athletes' Commission will also advise the LA 2024 Athletes' Commission. Olympians and Paralympians are the stars of the show and in LA we know how to ensure that our stars take center stage.

As a foundation for that stage, LA and the Southern California region offer an unparalleled environment conducive to high performance training and competition. Along with globally recognized world-class venues and an unmatched availability of high performance training facilities, LA has a diverse array of entertainment and recreation options that will inspire and refresh athletes in their downtime.

During Games time, all LA 2024 Olympic and Paralympic athletes will stay in the Games' Coastal Cluster at the University of California — Los Angeles (UCLA). The LA 2024 Olympic Village will offer all athletes a "personalized" Games experience. Taking advantage of the state-of-the-art facilities that already exist at UCLA, the LA 2024 Olympic Village will have fully accessible modern housing, expansive athletic facilities for training and recovery, world-class medical facilities, beautiful reception and hosting centers, and a full range of excellent dining options in a peaceful and secure corner of the beautiful UCLA campus. To ensure convenience for the athletes and allow them to focus their energies entirely on the competitions, nearly 90 percent of all sports are within a 30-minute drive-time of the Village.

When not in competition or training, athletes and their families will be at the doorstep of one of the world's greatest destination cities, with a myriad of well-known attractions and events, from arts and culture, to theme parks, to music and entertainment, to stunning beaches, mountains, and outdoor activities.

### SPECTATOR AND VISITOR EXPERIENCE

Our unique four cluster plan is designed to engage as much of the City as possible while at the same time allowing visitors the opportunity to experience the many new and surprising aspects of LA's unique and distinct neighborhoods. Much of this experience will be facilitated by LA's public transport system, currently undergoing USD 88 billion in planned renovations by 2024, that will connect every part of the City to the LA 2024 Games Concept.

To allow un-ticketed visitors a unique Olympic experience, LA 2024 and its partners will construct several Live Sites in iconic locations and communities across the City. LA 2024's principal Live Site will be the bustling "Olympic Way" on Downtown's Figueroa Street. This



unique pedestrian environment, public plazas and programming will link spectators with over 30 Olympic and Paralympic sports. The Olympic Way will be enhanced with a range of fan experience areas, international food offerings from LA's top chefs, entertainment zones and major festival sites in the key clusters, each showcasing sport and cultural events.

US sports leagues and teams pioneered the combination of in-venue entertainment and sport. LA 2024 will draw upon the most creative experiential marketing minds to help reimagine the in-venue Games experience for spectators. Working with the IOC Sports and Technology Departments, the International Sports Federations, and our world-class venue owners and operators, LA 2024 is uniquely poised to deliver the most innovative in-venue experience and sports presentation concepts available in 2024.

### BROADCAST AND PRESS EXPERIENCE

LA is the center of innovation for broadcast production and media technologies, and it is also incredibly well placed to work with the IOC to ensure the adoption of new and evolving technology.

Members of the media will have access to state-of-the-art content delivery technologies at the IBC/MPC, located at NBCUniversal's property in Universal City. This innovative facility will provide the ideal environment to disseminate the incredible journeys and unprecedented successes of the Olympic and Paralympic athletes.

LA is the entertainment capital of the world and the city is no stranger to hosting globally-televised events such as sporting spectacles, the Oscars, Golden Globes, Grammy Awards and Emmy Awards. This experience and commitment to international press coverage means that members of the media will experience world-class venues and facilities for press and broadcast, including the new and modernized IBC/MPC.

Finally, at the center of our Games Concept, the University of Southern California campus will host the Media Village and serve as the largest concentration of media housing. With USC's state-of-the-art new housing expansion and community development plans, members of the media (along with Games officials and supporters of the Games athletes) will enjoy high quality, affordable accommodation in the middle of our Downtown Cluster.

## 7. HARNESSING INNOVATIVE CALIFORNIAN MINDS

Capitalizing on Los Angeles' immense pool of innovative and entrepreneurial resources, LA 2024 has established an Innovation Network to ideate a range of new concepts to help support and deliver the Games. California is the epicenter of innovation where top tech and thought leaders come to design breakthrough concepts that are shared across the globe. LA 2024's Innovation Network will be comprised of pioneers and leaders from the most sophisticated and exciting companies in Southern California and Silicon Valley. Given our sustainable Games Concept, with limited new construction required, LA 2024 will be able to focus intense resources and thought leadership within this Network to reimagine the experience for all key constituents and transform the Games for a new generation across a number of important themes:

- ◆ Personalized athlete experience
- ◆ Games presentation and spectator experience
- ◆ Games promotion and distribution
- ◆ Games operations

### PERSONALIZED ATHLETE EXPERIENCE

Athletes want to be centrally located and have the very best environment to pursue their dreams. To that end, the Olympic Village has the opportunity to be transformed with everything that LA has to offer, providing the ideal, personalized setting for athletes to rest and prepare, including:

- ◆ Enhanced Olympic Village operations for security and accessibility
- ◆ Cutting-edge nutrition, with food fused from diverse cultures, prepared by world renowned LA based chefs and nutritionists, and
- ◆ Unique entertainment options located throughout the living space

Innovating Village life will not only provide for a uniquely enjoyable experience but will allow the athletes to focus on their preparations without distraction.

### GAMES PRESENTATION AND SPECTATOR EXPERIENCE

California and the United States are home to some of the most technologically advanced stadiums and sports organizations in the world, leveraging new technologies to enhance the spectator experience both in attendance and watching at home.

LA 2024's Innovation Network will solicit feedback from the International Sports Federations to understand their sports needs in order to showcase the competition in unique ways and improve spectator understanding and appreciation.

The LA 2024 Innovation Network will identify and evolve the cutting-edge technologies in sport presentation and fan engagement, many of which are pioneered here in the US sports marketplace.

Additionally, in January 2016, the National Football League (NFL) approved the relocation of the Rams to Los Angeles. The Rams will compete at a new, state-of-the-art, privately-financed stadium in Inglewood in the Greater Los Angeles area, centrally located adjacent to The Forum. The stadium will be covered by a transparent roof and seat 70,000 to 100,000 spectators, depending on the seat configuration. This new stadium presents an exciting opportunity to integrate next generation venue and event production technologies into LA 2024's Games Concept. Over the coming months LA 2024 will work with the stadium owner to further explore these opportunities.

### GAMES PROMOTION AND DISTRIBUTION

Without question, mobile technology is laying the foundation for media and fans to report on the experience, and California is home to the top companies innovating in this space. The LA 2024 Innovation



Network will leverage top minds from thought leaders in mobile, search, social media, and digital content distribution to advance connectivity in Los Angeles so that all experiencing the Games can seamlessly share unique content worldwide as it happens, from anywhere, at anytime.

In addition, many of the world's top media companies are based in Los Angeles. As part of the LA 2024 Innovation Network, these visionary firms will help reimagine the presentation and the promotion of our Games, including ideation around the development of the Olympic Channel.

### GAMES OPERATIONS

#### Transport

For all Games stakeholders, efficiently getting around the host city is critical. Transportation is being redefined daily by new technologies including autonomous cars and ride sharing apps. Nowhere are these technologies being advanced faster than in California. The LA 2024 Innovation Network will reimagine Games-time transportation for all Games stakeholders with efficient new technologies that will optimize and personalize point-to-point movement from accommodation to competitions and other attractions throughout LA.

#### Ticketing

California is home to the world's top ticketing organizations and innovators who are consistently seeking to reinvent the entire game-day experience from purchase to post-game celebration. Through the expertise of these industry leaders, LA 2024 will set new standards in ticket buying, distribution and utilization, enhancing innovations already being imagined such as real-time in-venue upgrades, connection to personalized transport, and inclusion in the digital wallet.

#### Energy Efficiency

Utilizing the unprecedented amount of sunshine, creativity and technological innovation for which LA and California are well known, LA 2024 will offer something new – yet at the same time something ancient – to the modern Olympic Games. Powered by the sun, LA 2024 aims to be the first energy positive Olympic and Paralympic Games since the days of ancient glory in Olympia. In doing so we will set new sustainability objectives for future Olympic Games. A sub-set of the Innovation Network will be comprised of California-based companies already innovating in green technology.

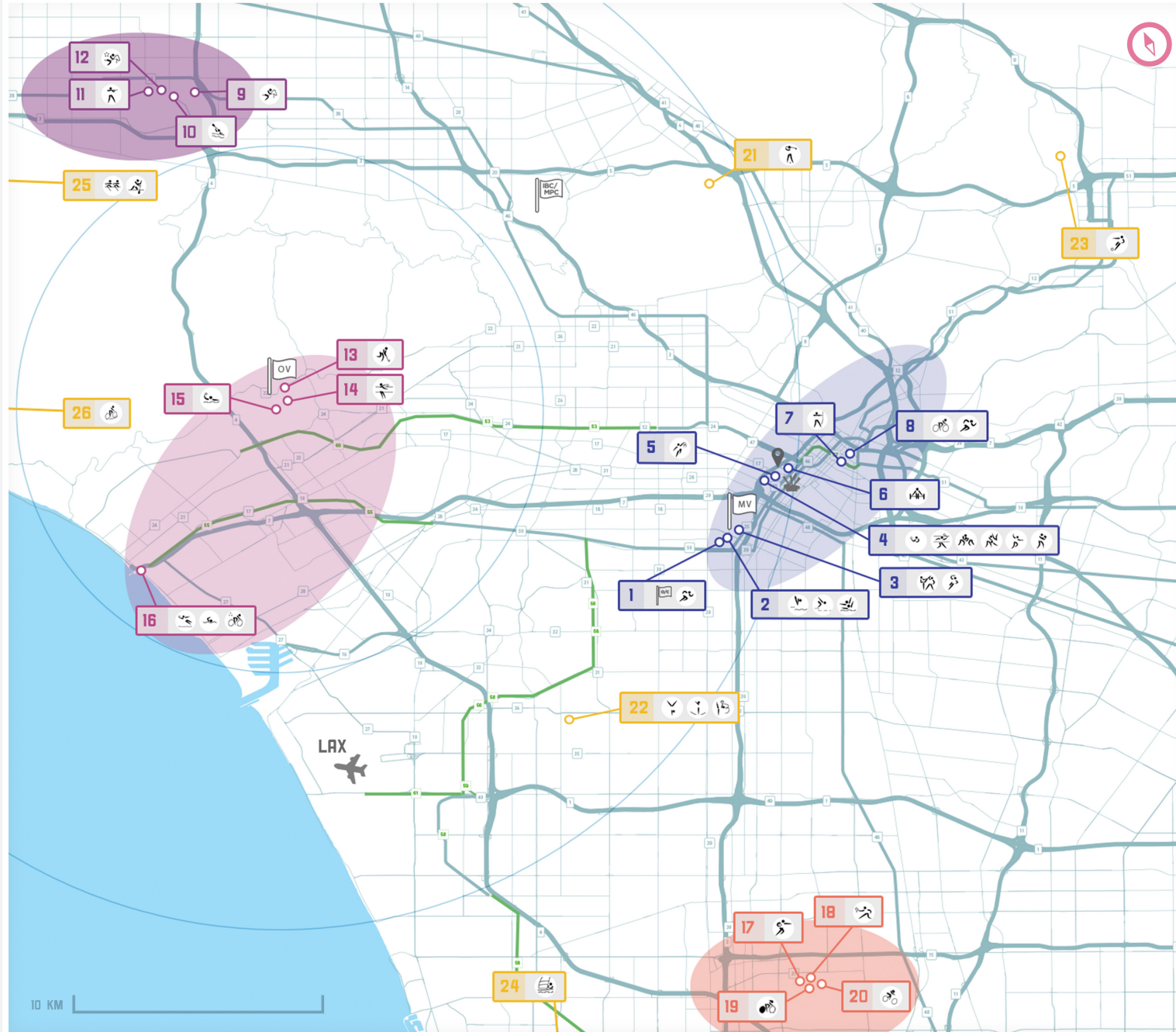
#### Environmental Sustainability

Many of the world's top innovations in sustainability were invented in our region and LA 2024 will build upon this progressive history to ensure our Games benefit our city and the Olympic Movement. A sub-set of the Innovation Network will be comprised of California-based companies and thought leaders already innovating in areas such as water conservation, waste management and biodiversity.

California is the epicenter of innovation. Through this unique Innovation Network, LA 2024 will harness the skills and creativity of world-class minds to usher in a reimagined Games experience for the Olympic and Paralympic Movements for generations to come.

# 1.1.3 VENUE CONCEPT

## 8. THEATERS OF SPORT FOR OLYMPIANS



### MAP A OLYMPIC GAMES

#### DOWNTOWN CLUSTER

1. LA Memorial Coliseum
2. LAFC Stadium
3. Galen Center
4. LA Convention Center
5. Staples Center
6. Microsoft Theater
7. Bunker Hill
8. City Hall
- 📍 Olympic Family Hotels
- 🌳 Figueroa Corridor (Live Site)
- 🏠 Media Village

#### VALLEY CLUSTER

9. Sepulveda Basin - Equestrian
10. Sepulveda Basin - Canoe Slalom
11. Sepulveda Basin - Shooting
12. Sepulveda Basin - Modern Pentathlon

#### COASTAL CLUSTER

13. North Athletic Field
14. Pauley Pavilion
15. Los Angeles Tennis Center
16. Santa Monica Beach
- 🏠 Olympic Village

#### SOUTH BAY CLUSTER

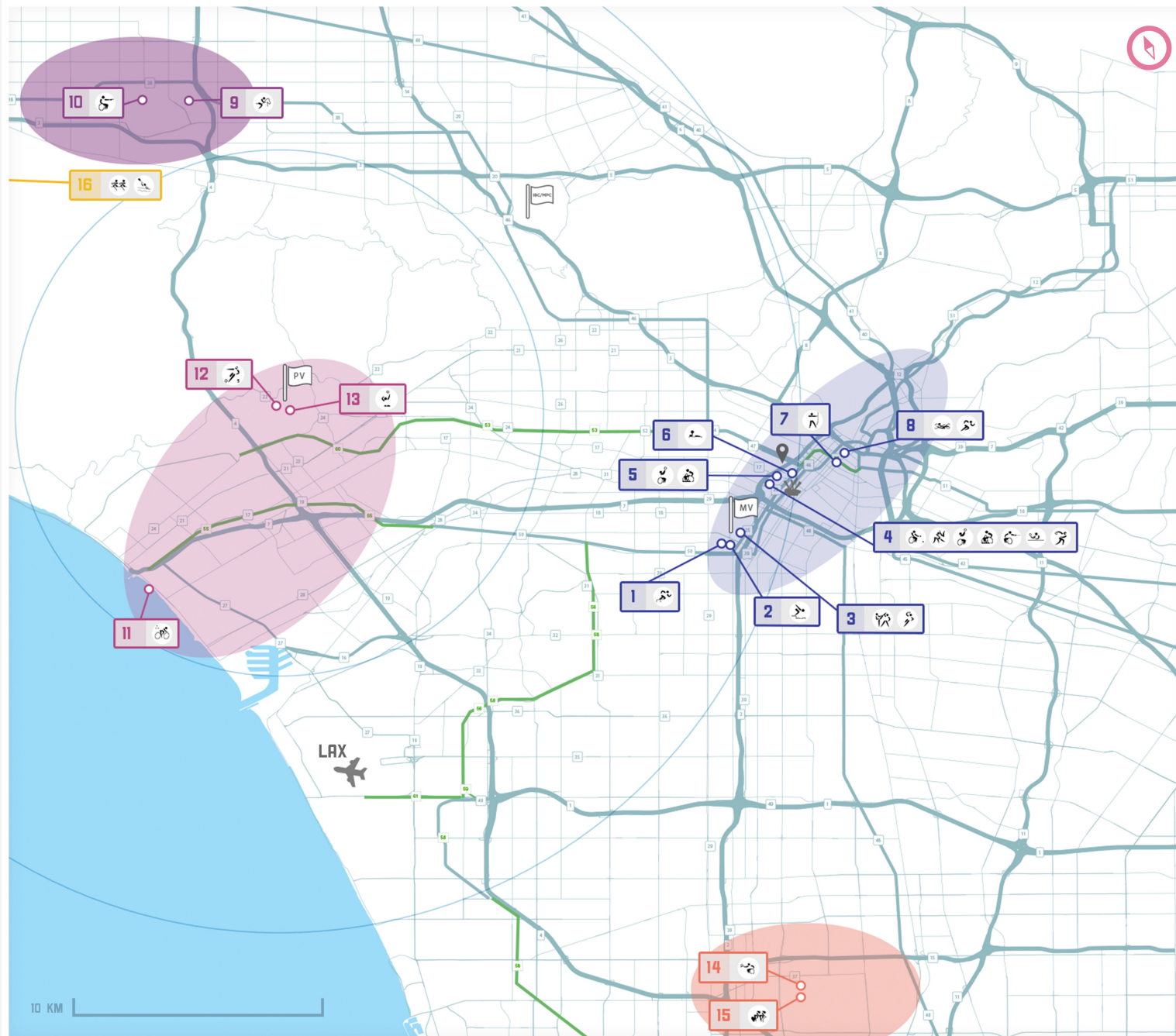
17. StubHub Stadium
18. StubHub Tennis Center
19. StubHub VELO Sports Center
20. StubHub Center - BMX

#### OTHER VENUES

- 🏠 Universal Studios
21. Wilson Golf Course at Griffith Park
22. The Forum
23. Rose Bowl Stadium
24. LA Waterfront
25. Lake Casitas
26. Santa Monica Mountains

— # — EXISTING INFRASTRUCTURE FROM TABLE 50A  
 — # — PLANNED INFRASTRUCTURE FROM TABLE 50C

## 9. THEATERS OF SPORT FOR PARALYMPIANS



### MAP B PARALYMPIC GAMES

#### DOWNTOWN CLUSTER

1. LA Memorial Coliseum
2. LAFC Stadium
3. Galen Center
4. LA Convention Center
5. Staples Center
6. Microsoft Theater
7. Bunker Hill
8. City Hall
- 📍 Olympic Family Hotels
- 🏠 Media Village
- 🌳 Figueroa Corridor (Live Site)

#### VALLEY CLUSTER

9. Sepulveda Basin - Equestrian
10. Sepulveda Basin - Shooting

#### COASTAL CLUSTER

11. Santa Monica Beach
12. North Athletic Field
13. Pauley Pavilion
- 🏠 Paralympic Village

#### SOUTH BAY CLUSTER

14. StubHub Tennis Center
15. StubHub VELO Sports Center

#### OTHER VENUES

- 🏠 Universal Studios
16. Lake Casitas

- # — EXISTING INFRASTRUCTURE FROM TABLE 50A
- # — PLANNED INFRASTRUCTURE FROM TABLE 50C

# 10. INSPIRATIONAL VENUES FOR INSPIRED PERFORMANCE

## TABLE 10: COMPETITION AND NON-COMPETITION VENUES

Olympic Sport / Discipline (for competition venues)	Paralympic Sport / Discipline (for competition venues)	Name of Competition or Non-Competition Venue	Venue Construction Status (Existing, Existing with Permanent Works Required, Planned, Additional, Temporary)	Gross Seating Capacity (for Competition Venues in 2024)	Ownership (Public/ Private/Joint)	PERMANENT WORKS				Post-Games Use
						Original Date of Construction	Date of Upgrade (If Completed)	DATE OF PERMANENT WORKS (ALL NON-OCOG)		
								Start Date	End Date	
Olympic Stadium	Olympic Stadium	LA Memorial Coliseum	Existing	60,000	Joint	1923	1983	2016	2019	American Football at USC
Olympic Village	Olympic Village	UCLA Campus	Existing	n/a	Public	1880	Continual	n/a	n/a	UCLA Housing
IBC	IBC	NBCUniversal Studios	Planned w/ Temp Overlay	n/a	Private	n/a	2023 (Planned)	n/a	n/a	NBC Studios
MPC	MPC	NBCUniversal Studios	Planned w/ Temp Overlay	n/a	Private	n/a	2023 (Planned)	n/a	n/a	NBC & Commercial
Media Village	Media Village	USC Campus	Existing	n/a	Private	1919	Continual	n/a	n/a	USC Housing
Aquatics	Swimming	LAFC Stadium	Planned w/ Temp Overlay	22,000	Joint	n/a	n/a	2016	2018	Football
Open Water Swimming		Santa Monica Beach	Existing	5,000	Public	n/a	n/a	n/a	n/a	Public Beach
Water Polo		Los Angeles Tennis Center	Temporary	5,000	Public	n/a	n/a	n/a	n/a	UCLA Tennis
Archery	Archery	Bunker Hill	Temporary	8,000	Public	n/a	n/a	n/a	n/a	n/a
Athletics	Athletics	LA Memorial Coliseum	Existing	60,000	Joint	1923	1983	2016	2019	USC American Football
Marathon and Race Walk	Marathon	City Hall	Existing	30,000 (Marathon) 5,000 (Race Walk)	Public	n/a	n/a	n/a	n/a	n/a
Badminton	Badminton	Galen Center	Existing	6,000	USC	2006	n/a	n/a	n/a	USC Basketball & Volleyball
Basketball	Wheelchair Basketball (Finals)	Staples Center	Existing	18,000	Private	1999	Annually	n/a	n/a	Basketball & Major Events
Boxing		LA Convention Center	Existing	6,000	Public	1971	Ongoing	2016	2020	Convention Center
Canoe – Slalom		Sepulveda Basin	Additional	8,000	Public	n/a	n/a	2020	2023	Legacy Canoe Slalom Venue
Canoe – Sprint	Canoe	Lake Casitas	Temporary	12,000	Public	n/a	n/a	n/a	n/a	Legacy Rowing Venue
Cycling – BMX		StubHub Center	Temporary	6,000	Private	2003	n/a	n/a	n/a	Existing Athletics Field
Cycling – Mountain Bike		Santa Monica Mountains	Temporary	2,000	Public	n/a	n/a	n/a	n/a	National Park & Recreation Area
Cycling – Road	Cycling – Road	City Hall	Existing	1,000	Public	n/a	n/a	n/a	n/a	n/a
Cycling – Time Trial	Cycling – Time Trial	City Hall	Existing	1,000	Public	n/a	n/a	n/a	n/a	n/a
Cycling – Track	Cycling – Track	Stubhub Center (VELO Sports Center)	Existing w/ Perm Works Req	6,500	Private	2004	n/a	2020	2022	USA Cycling
Equestrian	Equestrian	Sepulveda Basin	Temporary	20,000 (Eventing) & 12,000 (Jumping, Dressage)	Public	n/a	n/a	n/a	n/a	Public Park & Recreation Area
Fencing	Wheelchair Fencing	LA Convention Center	Existing	7,000	Public	1971	Ongoing	n/a	n/a	Convention Center
Football – Finals		Rose Bowl Stadium	Existing	92,000	Public	1922	n/a	n/a	n/a	Football & Major Events
Football – Preliminaries		Regional Football Stadiums	Existing	TBD	Private & Public	TBD	TBD	TBD	TBD	Football & Major Events
Golf		Wilson Golf Course at Griffith Park	Existing	1,000	Public	1896	Ongoing	2020	2022	Public Golf Course
Gymnastics		The Forum	Existing	17,500	Private	1967	2013	n/a	n/a	Entertainment Events
Handball		LA Convention Center	Existing	8,000	Public	1971	Ongoing	n/a	2020	Convention Center
Hockey		North Athletic Field	Temporary	15,000 (Primary) & 5,000 (Secondary)	UCLA	n/a	n/a	n/a	n/a	UCLA Athletics
Judo	Judo	LA Convention Center	Existing	7,000	Public	1971	Ongoing	2016	2020	Convention Center
Modern Pentathlon		Sepulveda Basin	Temporary	2,000	Public	n/a	n/a	n/a	n/a	Public Park & Recreation Area
Rowing	Rowing	Lake Casitas	Temporary	12,000	Public	n/a	n/a	n/a	n/a	Legacy Rowing Venue
Rugby		StubHub Center (Soccer Stadium)	Existing	27,000	Private	2003	n/a	n/a	n/a	Football
Sailing		LA Waterfront	Existing	1,000	Public	n/a	n/a	n/a	n/a	Sailing
Shooting	Shooting	Sepulveda Basin	Temporary	3,000	Public	n/a	n/a	n/a	n/a	Public Park & Recreation Area
Table Tennis	Table Tennis	LA Convention Center	Existing	5,000	Public	2004	Ongoing	2016	2020	Convention Center
Taekwondo	Taekwondo	Galen Center	Existing	6,000	USC	2006	n/a	n/a	n/a	USC Basketball & Volleyball
Tennis	Wheelchair Tennis	StubHub Center (Tennis Stadium)	Existing	10,000 (Center Court)	Private	2003	n/a	n/a	n/a	Tennis
Triathlon	Triathlon	Santa Monica Beach	Temporary	2,500	Public	n/a	n/a	n/a	n/a	Public Beach
Volleyball – Beach		Santa Monica Beach	Temporary	12,000	Public	n/a	n/a	n/a	n/a	Public Beach
Volleyball – Indoor	Sitting Volleyball	UCLA Pauley Pavilion	Existing	13,500	Public	1965	2012	n/a	n/a	UCLA Basketball & Volleyball
Weightlifting	Powerlifting	Microsoft Theater	Existing	7,000	Private	2007	n/a	n/a	n/a	Entertainment Events
Wrestling		LA Convention Center	Existing	8,000	Public	1971	Ongoing	2016	2020	Convention Center
	Boccia	LA Convention Center	Existing	5,000	Public	1971	Ongoing	2016	2020	Convention Center
	Goalball	LA Convention Center	Existing	5,000	Public	1971	Ongoing	2016	2020	Convention Center
	Football 5-a-side	North Athletic Field	Temporary	6000	UCLA	n/a	n/a	n/a	n/a	UCLA Athletics
	Wheelchair Rugby – Finals	Staples Center	Existing	18,000	Private	1999	Annually	n/a	n/a	Basketball & Major Events
	Wheelchair Rugby – Preliminaries	LA Convention Center	Existing	8,000	Public	1971	Ongoing	2016	2020	Convention Center
	Wheelchair Basketball – Preliminaries	LA Convention Center	Existing	8,000	Public	1971	Ongoing	2016	2020	Convention Center

## 11. A WEALTH OF EXISTING VENUES

See separately submitted **LA 2024 Existing Venues Photographic File**.

## 12. SUSTAINABLE NEW VENUES

### LA 2024 GAMES CONCEPT - NEW VENUES

#### **Sepulveda Basin Canoe Slalom:**

The canoe slalom facility will be located in the Sepulveda Basin recreation center. As with the adjacent Balboa Lake, the facility will operate on 100 percent recycled water, which would meet all health and safety requirements for recreational use. LA 2024 and the City of Los Angeles will jointly develop this facility. Post-Games, the venue could be operated as a training and recreational facility.

#### **Reconstructed VELO Sports Center at Stub Hub Center:**

LA 2024 and StubHub Center owner and operator, AEG, will jointly renovate and modernize the VELO Sports Center Velodrome. Post-Games, the new VELO Sports Center will become the new elite training center for USA cycling and will host other AEG events and sports within the venue.

#### **International Broadcast Center (IBC) and Media Press Center (MPC):**

The IBC and MPC will be a new, purpose-built facility constructed at NBCUniversal's property in Universal City. Universal Studios is planning a substantial increase in their studio space. The resulting construction will be converted to serve as the IBC/MPC for the Games. LA 2024 will work with NBCUniversal to develop the specific Games-time facility needs and specification, including the temporary overlay and operations. Following the Games, the IBC will be converted to new sound stages, storage and office space. The MPC will be reinstated as NBCUniversal's administration and post-production offices.

#### **Los Angeles Football Club (LAFC) Stadium:**

The privately financed LAFC stadium is being developed on the site of the current Sports Arena at Exposition Park. Targeted for completion in 2018, this facility will host LA 2024 aquatics events in a purpose-built, temporary pool within the new stadium. Pre- and post-Games the stadium's primary tenant will be LAFC, and the privately owned and operated stadium will also host other sporting and entertainment events.

## 1.1.4 OLYMPIC VILLAGE

### 13. THE LA 2024 OLYMPIC VILLAGE

The values of Olympism are shared and celebrated by one of Los Angeles' strongest institutional partners, the University of California - Los Angeles (UCLA). With the addition of a small percentage of housing units already planned for development, the expansive and modern UCLA campus is ideally suited to serve as the LA 2024 Olympic Village.

The LA 2024 Athletes' Commission played an integral role in the selection and planned overlay of the Olympic Village, and enthusiastically supports UCLA as its location. As well as hosting athletes during the Los Angeles 1984 Games, UCLA has a proud history of producing Olympians and Paralympians. A total of 398 UCLA student-athletes have combined to make over 650 Games appearances, winning 251 Olympic Summer Games medals.

The beautiful UCLA campus - consisting of palm-tree terraces, cozy cafes, vibrant vistas and several recreation centers - is designed to support the brightest and best minds from every culture and corner of the world.

The 72-hectare LA 2024 Olympic Village will offer Olympic and Paralympic athletes a personalized, ideal location to rest and recover in between their competitions, allowing them to compete at their best. Leveraging many of the state-of-the-art facilities already existing at UCLA, all athletes will have access to:

- ◆ Fully accessible modern housing
- ◆ Expansive athletic facilities
- ◆ World-class medical facilities
- ◆ Welcoming reception and hosting centers, and
- ◆ A full range of excellent diverse dining options

The Olympic Village is located at the center of the Coastal Cluster, at an altitude of 110-170 meters and consists of 33 buildings ranging from 3 to 10 stories in height. With the addition of approximately 2,000-2,500 housing units on property owned by UCLA, a total of 16,500-17,000 beds will be provided for athletes and team officials.

In addition to delivering the required NOC office provision, the extensive facilities at UCLA will provide an opportunity to offer flexible support/storage space.

UCLA's Student Housing Master Plan 2011-2021 demonstrates UCLA's commitment to expand housing to meet the needs of all undergraduate students. This population will only increase as UCLA accepts the UC Board of Regents' challenge to substantially increase undergraduate enrollment.

UCLA will manage this development process and the associated financing. LA 2024 will be responsible for the construction and staging of temporary overlay, ensuring that these facilities exceed the expectations of all athletes.

LA 2024 is committed to athletes helping define their personalized experience in the Olympic Village. Free from the complexities of an enormous Village infrastructure project, we can focus on the details of the "Village life" experience in a way that is unique and appropriate for the athletes of the future.

Completing the full build-out of undergraduate housing, and customizing the Village and its services for the athletes of tomorrow will leave a legacy for future generations of students in an environment that celebrates the values of sport and Olympism.

### 14. NO RISK OLYMPIC VILLAGE FINANCING

UCLA has an aspiration and the resources to finance and develop an additional 2,000 – 2,500 housing units to meet future student demand. This objective aligns perfectly with LA 2024's requirements for a 16,500 – 17,000 bed Olympic Village.

UCLA possesses state-of-the-art facilities for the dining halls, polyclinics, welcome center, media center, international zone, and recreational areas for sports and guests. We have identified the appropriate transport mall location as well as the dedicated internal transport network.

LA 2024 will be responsible for the financing and build of the overlay that is required in addition to the existing and planned UCLA facilities to meet the IOC's requirements for the Olympic Village.



OLYMPIC VILLAGE AND PARALYMPIC VILLAGE AT UCLA

## 1.1.5 IBC/MPC

### 15. WORLD-CLASS FACILITIES FOR WORLD-CLASS MEDIA

LA 2024 has identified the ideal site that only Los Angeles can deliver with the most innovative Post-Games use in the history of the Games. The International Broadcast Center (IBC) and Main Press Center (MPC) will be a facility constructed at NBCUniversal's property in Universal City, a neighborhood of Los Angeles. NBCUniversal is the sole owner of the proposed site.

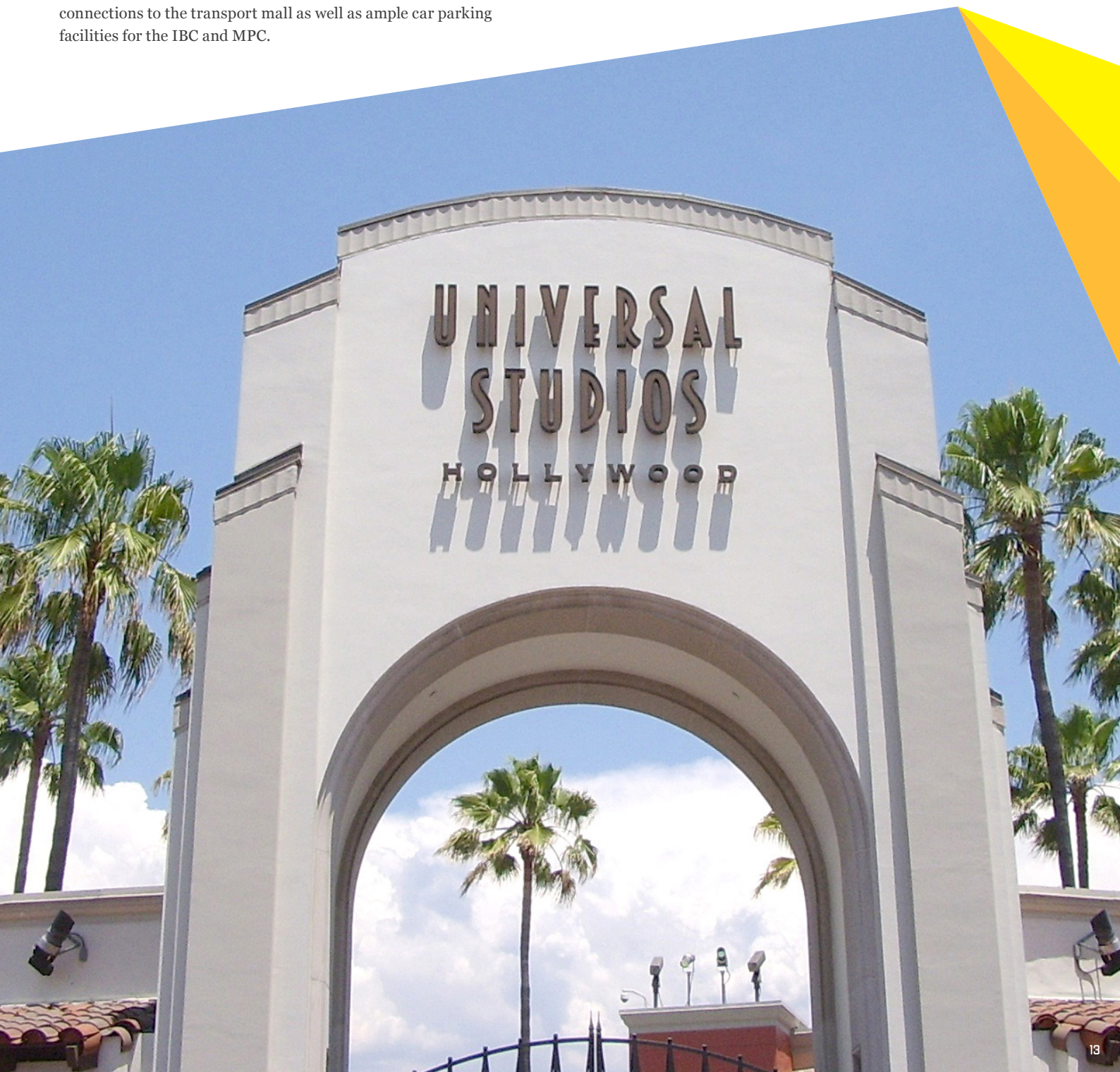
The complete IBC/MPC site is approximately 85,000 square meters. The IBC will total approximately 55,000 square meters, comprised of six main studios, each with two floors and internal and external access routes. Dedicated IBC offices will be located adjacent to the main studio buildings, allowing direct access to the studios. A 6,000-square meter satellite farm will be located southeast of the IBC.

Adjacent to the main studios will be dedicated temporary catering and support services facilities. In addition, there will be direct connections to the transport mall as well as ample car parking facilities for the IBC and MPC.

The MPC will be a campus-style office complex. The complex will be situated adjacent to the IBC and will function as a secure standalone facility. The Main Press Workroom and the Main Press Conference Auditorium will be constructed as temporary facilities within the complex. Support services and temporary catering facilities will be provided on the MPC campus.

The IBC/MPC location provides convenient access to all major Games venues — the average time to all venues is just 30 minutes on dedicated Olympic Lanes.

The IBC/MPC project is aligned with Universal Studios' plans to build new studio space. Post-Games the IBC/MPC could be converted to NBCUniversal sound stages, production support and office space. Never before has there been a legacy for such a key venue so clearly linked to the Games.





## 1.1.6 DATES OF THE GAMES

### 16. LA 2024 OLYMPIC AND PARALYMPIC GAMES DATES

Proposed dates for the LA 2024 Olympic and Paralympic Games:

- ◆ **LA 2024 OLYMPIC GAMES:** 19 July - August 4, 2024
- ◆ **LA 2024 PARALYMPIC GAMES:** 21 August - 1 September, 2024

During these periods, Los Angeles' ideal weather and climate should ensure perfect conditions for all competitions. These dates also coincide with the traditional US holiday calendar and school summer recess, yielding a significant reduction in traffic volume while providing excellent opportunities to promote both volunteerism and Olympic and Paralympic Games ticket sales. Finally, these are optimum dates on the international sports calendar.

## 1.1.7 METEOROLOGY

### 17. PERFECT WEATHER

**TABLE 17A: TEMPERATURE, HUMIDITY, WIND**

City	Time	TEMPERATURE (°C)			HUMIDITY (%)			WIND (KM/H)	
		Minimum	Maximum	Average	Minimum	Maximum	Average	Direction	Strength
Los Angeles	9:00	18.6	26.6	22.5	52.0	79.4	67.6	S	1.0
	12:00	23.3	32.2	27.6	34.3	61.8	49.9	W	3.1
	15:00	23.5	31.9	27.1	34.4	61.2	50.3	W	6.7
	18:00	21.9	28.9	25.0	36.7	67.1	55.4	W	6.6
	21:00	18.1	24.9	21.0	55.9	80.9	71.3	W	2.3

Source: MesoWest, University of Utah, KCQT Weather Station (Los Angeles), National Oceanic and Atmospheric Administration (NOAA)

**TABLE 17B: PRECIPITATION AND ALTITUDE**

City	PRECIPITATION (NUMBER OF DAYS)			Altitude
	Annually	Period of Games	Fog (number of days during period of Games)	
Los Angeles	32.5	0.5	0.0	54.6

Source: National Oceanic and Atmospheric Administration (NOAA). Based on weather measurements of a representative weather station (Downtown LA/USC Station)

Note: Precipitation day counted as any day with greater than a tenth of a mm of rainfall  
 Note: Fog days counted as days with heavy fog (less than 1/4 mile visibility)





# 1.2

## **LEGACY AND LONG-TERM PLAN INTEGRATION AND ALIGNMENT**



## 1.2.1 EXISTING CITY/REGION LONG-TERM PLAN ALIGNMENT

### 18. LOS ANGELES - REIMAGINING THE FUTURE

The City of Los Angeles has a number of distinct long-term development plans. Consistent with the City's historical practice, these distinct plans exist in lieu of a single, consolidated development strategy. These plans include:

1. The Metropolitan Transportation Authority's (MTA) Long-Range Transportation Plan
2. The LA Sustainable City pLAN
3. The General Plan

#### MTA LONG-RANGE TRANSPORTATION PLAN

At the core of the City's long-term infrastructure development planning lies the MTA Long-Range Transportation Plan. This ambitious 30-year vision seeks to drastically expand the regional public transportation network with an unprecedented infusion of nearly USD 300 billion dollars in the coming decades. At least USD 88 billion will be invested in projects delivered in time for the 2024 Games. This plan was released in 2009, and now serves as the guiding policy behind funding decisions on transportation projects and programs in Los Angeles County.

- ◆ Pursuant to the Transportation Plan, the 30-year vision for the regional transportation system includes: significant expansion of existing rail lines to never-before-served areas; expansion of the fixed bus network to over 177 stations covering nearly 230 miles; expansion of the Metro Rapid network to provide over 400 miles of service; expansion of the commuter rail system; continued commitment to the paratransit bus system; addition of 170 carpool lane-miles; and new freeway interchanges and carpool lane connectors.
- ◆ To maximize traffic efficiency, the Transportation Plan includes transportation demand management, pedestrian enhancements, and the promotion of ridesharing. In addition, the Transportation Plan includes incentives to encourage environmentally sustainable alternatives to driving.

#### LA SUSTAINABLE CITY pLAN

The City of LA's unparalleled commitment to sustainability is best embodied in the 2015 LA Sustainable City pLAN (the pLAN), a twenty-year plan to prepare LA for the environmental challenges of the

coming decades, and to position our city as an international leader in scalable climate solutions and innovative approaches to sustainability. This plan was developed through consultation with hundreds of subject-matter experts, community activists, and sustainability advocates, along with extensive quantitative analysis.

- ◆ The pLAN advances a vision for specific, achievable long-term outcomes to be realized over the next 20 years in over a dozen key aspects of LA's environment, including local water, local solar power, energy-efficient buildings, carbon and climate leadership, and waste and landfills. In each of these categories, the Sustainability pLAN sets forth measurable, quantitative benchmarks for success.
- ◆ In the short-term, LA will add more green jobs and install more electric vehicle infrastructure than any other city in the United States. By 2025, LA will be the first major city in the US to achieve zero waste and will add more new transit infrastructure than any other city in the country, improving air quality and reducing vehicle-miles traveled.

#### THE GENERAL PLAN

The City of LA, pursuant to state law, is required to prepare, adopt, and periodically update a comprehensive, long-term General Plan for its future development. The General Plan sets forth principles and policies to govern numerous elements of municipal growth over the next 20 years, including economic development, transportation, housing, conservation, open space, and land use. In addition, LA has adopted discretionary elements on air quality and health and wellness. For example, the General Plan includes:

- ◆ The Economic Development program, which is designed to provide LA with the physical and financial environment necessary to attract further economic development and facilitate business retention and job growth. Specifically, the most recent update recommends retaining and growing target industries like entertainment and tourism, focusing the City's economic development efforts to more effectively utilize resources and incentivizing the development of renewable energy and clean industries.
- ◆ The Health and Wellness Element, which is designed to elevate health as a priority for the City's future growth and development. This program focuses on improvements to the built environment

and city services that will help achieve better health for residents and social equity through programs, policies, and community engagement. For example, the current element recommends increased use of community resources such as schools to promote health and well-being, and greater access to affordable and safe opportunities for physical activity, particularly in park poor communities.

## 19. BOLSTERING AND ADVANCING CITY OF LA OBJECTIVES

Los Angeles County—the most populous county in the nation with 10.1 million people—is projected to grow, reaching a population of about 13 million by 2040. Given this tremendous rate of growth in the City and surrounding region, the City must thoughtfully plan for the future and LA 2024 is ideally suited to enhance the City’s existing vision.

The City of Los Angeles has adopted several distinct long-term development plans to ensure LA adapts to meet the evolving needs of its residents and visitors. The LA 2024 Games Concept aims to align with these long-term development goals, bolstering and advancing those objectives where possible through the hosting of the Olympic Games.

Additionally, LA 2024 is committed to weaving together the principles of Olympic Agenda 2020 with the long-term goals of the City to host a sustainable, fiscally responsible Games. These principles and goals notably align with a number of the United Nations Sustainable Development Goals (UNSDG) as outlined in the UN 2030 Agenda for Sustainable Development. LA 2024 will work with the IOC and the UN to ensure a positive contribution toward these goals as more information on the UNSDG become available.

The City’s three major long-term development plans and LA 2024’s alignment with these plans are detailed below.

### TRANSPORT

The LA 2024 Games Concept was developed to fully utilize the City’s massive ongoing investment in transit and will not require the construction of any additional transportation infrastructure beyond what is already planned for the region. This includes a close nexus between the LA 2024 Games Concept and the complete renovation of LAX, the first direct public transit link to the airport, and the expansion of several rail lines, including the first public rail link to the UCLA campus, the site for the LA 2024 Olympic Village.

Today, LA is committed to minimizing the environmental impact from transit: it has the nation’s largest clean air bus fleet and is continuously exploring alternative fuel sources, including electricity and biomethane. Hosting the Olympic and Paralympic Games provides an opportunity to showcase and expand on the City’s commitment to sustainability and clean energy. Working with many of the world’s leading technology companies that are headquartered in California, the LA 2024 Transport Plan intends to leverage the latest transport innovations to ensure the highest standards of mobility and sustainability.

Additionally, hosting the Olympic and Paralympic Games offers an opportunity for the City to accelerate projects already in the planning process to ensure their delivery in time for the 2024 Games, which could be the first major event in LA to fully utilize the planned public transit expansion. These projects include, for example, the extension of the Purple Line to the UCLA campus, which further extends the subway system to the westside of LA, and the Automated People Mover at LAX, which connects the Central Terminal Area with a new Metro Line currently under construction. These projects will dramatically impact the accessibility and productivity of public transit

options for visitors landing at LAX, residents traveling to and from the airport, and alternatives to driving for daily commuters.

### SUSTAINABILITY

LA 2024 is committed to delivering a responsible, sustainable Games, consistent with LA’s unparalleled commitment to sustainability as set forth in the LA Sustainable City pLAN (the pLAN). The pLAN is designed to help LA prepare for and adapt to environmental pressures and develop strong resiliency, while growing the economy and improving the lives of all residents.

By 2024, LA will have made significant progress toward being the national leader in green jobs, installed electric vehicle infrastructure, transit infrastructure, and zero waste. The LA 2024 Games Concept shares a commitment to new technology and innovation that advance the long-term goals of the City.

Consistent with the Sustainability pLAN and in the spirit of our bid slogan, Follow the Sun, LA 2024 aspires to be the first energy positive Games in history. The LA 2024 initiative will strive to supply the City with additional zero carbon electricity before, during and long after the Games. Without question, we will leverage existing solar installations outside the City, but we also intend to engage the community on this quest. With over 4,000 hectares of roofs available in LA and other emerging technologies, LA 2024 will leverage the robust infrastructure in LA to achieve our energy objectives.

Additionally, across areas of water preservation, resiliency and wellness, LA 2024 will help advance the objectives of the City through innovative partnerships. Working with the owners and operators of our proposed venues, we will investigate opportunities for increased water recycling, storm water capture and tree cover.

### THE GENERAL PLAN: ECONOMIC DEVELOPMENT AND WELLNESS

Hosting the Games in 2024 will help advance the principles of the Economic Development Element of the City’s General Plan by providing the City with a coordinated, multi-year project involving significant economic investment throughout the City and region. Taking advantage of LA’s wealth of existing venues and resources, the Games will result in thousands of jobs and billions of dollars in economic investment without requiring the City to undertake any costly public infrastructure projects solely for the ability to host the Games. Because LA 2024’s Games Concept is geographically dispersed and will result in the collection of significant governmental revenue, it will ensure that the economic benefits of the Games are shared across the city and region. Finally, the honor of having the international spotlight on LA during the Games will allow the City and region to raise its profile as a top international destination for trade, tourism, and investment, leaving an economic legacy for decades to come.

LA 2024 also intends to leave a legacy for LA that will help further the vision set forth in the Health and Wellness Element of the City’s General Plan. LA is already a mecca for health and fitness; however, the Games offer a unique opportunity to inspire a new generation of Angelenos to connect with the values and sports of the Olympic Movement, encouraging participation and healthy lifestyles.

In addition, through existing partnerships with organizations such as the LA84 Foundation and new relationships with LA-based community groups, LA 2024 intends to help the City reach its goals in the areas of youth development and health leading up to the Games and beyond. By supporting these programs in the seven-year lead up to the Games, and through a major legacy commitment, LA 2024 can advance goals for health education, access, and programming resources to support physical activity, nutrition, and education.



LA84 FOUNDATION SUMMER SWIM 2015

## 1.2.2 BENEFITS FOR THE OLYMPIC MOVEMENT

### 20. REIGNITING THE WORLD'S OLYMPIC PASSION

If the LA 2024 bid is successful in its quest to bring the Olympic and Paralympic Games back to the US, the worldwide Olympic Movement will benefit in multiple ways:

Reigniting the world's passion for Olympism and the Olympic Movement:

- ◆ The United States is the largest single, national media market in the world, and Los Angeles is the leading global center of entertainment.
- ◆ A LA 2024 Olympic and Paralympic Games can help propel the message of a “New Games for a New Era” via our powerful global media expertise, our state-of-the-art sports promotion, presentation and production skills and access to the world's foremost creative storytelling community.
- ◆ These assets can help the Olympic Movement disseminate its values and message more effectively to young people around the world and greatly strengthen the Olympic Channel in the process.

Greater visibility for each Olympic sport and the NGBs that guide them, enhancing the ability of each to recruit new athletes and organizational talent:

- ◆ The LA 2024 Olympic Games will be the culmination of a decade-plus strategy to strengthen the USOC's international partnerships with the Olympic family. By hosting international events and championships along with coaching clinics, the USOC can share its management techniques, marketing methods and elite performance development practices with other NOCs through cooperative agreements.
- ◆ By hosting the Games in LA, Olympic sports will have the opportunity to expand their reach and increase their participation numbers – both in the lead up to the Games and continuing well after the Games are complete. Whether it is by expanding sport offerings in Olympic sports to areas/districts in both California and nationwide where they may not currently be mainstream, or introducing non-traditional sports to thousands of local children, the Olympic Movement is strengthened by hosting the Games in the US as youth are introduced to the Olympic Movement.

Increased investments from broadcast and corporate partners:

- ◆ Just as the Los Angeles 1984 Games helped transform Olympic and sponsorship marketing, we believe that LA 2024 will introduce transformative innovations through our region's leadership in technology, innovation, marketing and promotion.
- ◆ LA 2024's overall value to the Olympic Movement will include pioneering new methods and means of promoting the Olympic Games as a product to younger consumers around the world.

### 21. ENHANCING THE OLYMPIC BRAND IN NEW WAYS

In 2024, Los Angeles is planning to reimagine the presentation of the Games to the world through the infusion of its entertainment expertise—film, music, event staging, sports production, digital media—into the spectator and broadcast experience, thus enhancing the brand worldwide in new ways.

With the LA creative community and its imaginative storytellers fully engaged in the city's Olympic mission, the opportunities for new and innovative Olympic programming will greatly expand, providing fresh creative resources for the IOC's Olympic Channel and fostering new collaborative platforms that will give the Olympic brand a new cachet.

Every edition of the Olympic Games creates a dramatic boost in public consciousness of the Olympic brand—and of the values of friendship, excellence and respect it represents. Hosting the Games on US soil in 2024 will help create a sense of reconnection to the community of nations. And, the possibilities of that reconnection—the story of the world coming together in friendship and peace through sport—will, in the hands of the extraordinary storytellers of LA 2024 greatly enhance the Olympic brand.

The Games will also offer an opportunity to highlight the stories surrounding the amazing cast of international athletes who have graced the Olympic stage. Through their stories of perseverance, sacrifice and dedication, we will be able to bring to life lessons of how the Olympic values shape boys and girls and inspire men and women for success in sport and in life.

During the seven-year run-up to the Games, news coverage will develop and expand nationally around all the key milestones of the Olympic organizational effort. The communications team at LA 2024 will ensure that all of these stories are shared with the world in new and refreshing ways to enhance the Olympic brand to existing and newer, younger audiences. Using the parameters and principles of Olympic Agenda 2020, LA 2024 plans to create the story of a new model of economic prudence, innovation and creativity in hosting the Games.

In the final years before the Games, as broadcast coverage intensifies, Olympic trials will highlight the stories of Olympic legends and emerging hopefuls in their quests to make the US Olympic Team. Milestone stories around the design of team uniforms, medals, the Look of the Games and the flame that will be borne in the torch relay, will all be highlighted to emphasize the positive qualities of the Olympic brand. The volunteer program and the LA 2024 Torch Relay will greatly expand the opportunities for direct participation in the Games and its values.

Finally, every edition of the Olympic Games hosted in the US draws a new group of corporate sponsors and suppliers into the Olympic Movement, strengthening the engagement of long-term national and TOP Partners. LA 2024 will help create the storytelling framework in which these corporate partners communicate, advertise and market their commitment to the Olympic Movement and its values, thereby strengthening the Olympic brand. With many of the world's most innovative companies based in California, the potential brand marketing opportunities of LA 2024 could be unprecedented.

### 22. EMPOWERING THE PARALYMPIC MOVEMENT

The Paralympic Games are more popular than ever in the US. Given this reality, LA 2024 will use its creative storytelling power to create greater appeal for the public, corporate partners and broadcasters—and the emergent worldwide audience. LA 2024 will draw a new level of corporate marketing partners and revenues to the Games and give the public broader opportunities for recognizing and embracing Paralympians and Paralympic sport across the country. In setting new benchmarks for innovation and creativity in the delivery and presentation of the Paralympic Games, LA 2024 will also strive to strengthen the global Paralympic Movement. By ensuring the growth of the US Paralympic Movement, LA 2024 will help strengthen the global foundation of Paralympic sport in new ways.

None of this would be possible if it weren't for the significant investment the USOC has made over the last 15 years in the development of Paralympic sport. Since its founding in 2001, the US

Paralympics, a division of the USOC, has been engaged in actively developing, guiding and promoting participation in Paralympic sport at the elite and grassroots levels across the country. By partnering with hundreds of civic and community based organizations across the country, the US Paralympics has sought to ensure that anyone with a physical or visual impairment has a chance to participate in competitive Paralympic sport. While the growth of the US Paralympic Movement has been great, the need for even greater outreach is pressing. The LA 2024 Paralympic Games would provide an extraordinary platform for US Paralympics to extend the success of its current programming and engage millions of new participants and their families in Paralympic sport.

Among the US Paralympics' current major initiatives, the Paralympic Sports Clubs (PSC) program stands to benefit most from an LA 2024

Paralympic Games. In 2007, US Paralympics launched a concerted nationwide strategy to develop a network of Paralympic Sports Clubs that would expand opportunities for participation in Paralympic sport to young people and adults. Beginning with just 10 clubs in its first year, the concept grew to a total of 211 PSCs in 48 states and Washington, D.C. by the end of 2014.

The visibility, promotional and communications opportunities represented in an LA 2024 Paralympic Games would help empower the expansion of this highly successful program. It would also help US Paralympics solidify the national PSC network and to achieve one of the key objectives of the overall program—creating a national, unified grassroots branding campaign to educate Americans on the opportunities and benefits inherent in sport and physical activity as practiced by people with a physical or visual impairment.





## 1.2.3 LEGACY

### 23. OUR SUSTAINABLE CITY PLAN

California has long led the United States in the areas of proactive sustainability, progressive environmental leadership and legislation. In April 2015, Mayor Eric Garcetti announced the City of Los Angeles' first-ever Sustainable City Plan (the "pLAN"). The pLAN is an unprecedented and comprehensive vision that establishes near-term (i.e., 2017) and long-term (i.e., 2025 and 2035) goals to protect the environment, strengthen the economy, and build equity in the community. Time bound, interconnected targets have been set across 14 topic areas including Local Water, Local Solar, Housing, Mobility and Transit, Prosperity and Green Jobs, Air Quality, and Resiliency and Preparedness.

Since its release, the pLAN has helped inspire other local governments in the region, including the County of LA, to move toward establishing similar sustainability plans. In addition, the residents of LA have rallied in response to the pLAN and its call for water conservation. In less than one year, LA residents have reduced water consumption by 17 percent; this is indicative of how Angelenos come together to take action toward a common goal.

True to our city and region's heritage of progress and innovation, LA is the second city in the world to set an urban heat island reduction target. An urban heat island is an urban area that is significantly warmer than its surrounding rural areas due to human activities. Waste heat generated by energy usage is a large contributor and LA has set aggressive targets to help minimize this effect. LA is the first city to set a GHG and economic efficiency target. Additionally, the improvement in air quality in the Los Angeles basin has been significant, and is one the great success stories of the region.

The pLAN also builds on LA's environmental leadership—the City leads the US in both installed solar capacity and the most Energy Star rated buildings over 9 out of the last 10 years. Energy Star is an international standard for energy efficient consumer products originated in the United States. Additionally, via the Metropolitan Transit Authority, the Metropolitan Water District, and the South Coast Air Quality Management District, the Mayor serves and/or makes key appointments to invest in transit, increase conservation, and improve air quality.

### 24. BENEFITS BEYOND THE GAMES

The Olympic and Paralympic Games are humankind's greatest opportunity to demonstrate the power of sport and its values to move a city, its people and indeed the world forward. Entrusting the Games to Los Angeles will help bring about long-term economic, social environmental and sporting benefits. Further, LA 2024 can help reimagine the future of the Olympic Games and our city. LA 2024 will ensure that the concept of "winning through bidding" is a central component of our bid campaign.

#### ECONOMIC

LA 2024 believes that we can provide a positive force in the local economy and help the City achieve development goals on an accelerated timeline.

We are developing a Games Concept in close connection with city partners. In the development of our Venue Concept and the Games Transport Plan, LA 2024 can be a catalyst to help the City accelerate public infrastructure projects already in progress. For instance, local transit authorities are seeking to accelerate the extension of the Purple Line to the UCLA campus in Westwood and the opening of the Automated People Mover at LAX. This will connect the Central Terminal Area to a new Consolidated Car Rental Facility (ConRAC) and public transport options. No matter the outcome of candidature, these projects will benefit Angelenos and all tourists arriving to LA at LAX.

Additionally, hosting the Olympic Games is a multi-billion dollar economic stimulus with significant tax revenue implications for the state and local government. The OCOG will inject billions of dollars into the economy for the construction and staging of the events. Specifically, LA 2024 offers expanded opportunities to engage and grow target industries, including entertainment, clean technology and tourism, throughout the planning and staging of the Games.

#### SOCIAL

The culture of LA celebrates the diversity of its many residents and communities. The City is made of countless smaller "towns," from Koreatown to Little Armenia to Venice. Each is distinct, accessible and welcoming to all Angelenos—a network of cultures that is distinctly LA. The Games are a unique opportunity to develop programs that reinforce unity across the City.



The Games have an opportunity to be a catalyst for connecting the City of LA through community green spaces for hosting Games-time celebrations. After the Games, these spaces will provide greater access to facilities for the development of youth sports programming, creating a more active, healthy-minded LA for generations of Angelenos and aspiring Olympians. This legacy will contribute to air quality and offer open spaces for people to gather, play and refresh. The spaces can celebrate the unique cultures and traditions of the surrounding neighborhood, celebrating the diversity that makes LA such a great city.

## SPORTING

LA 2024 intends to build on the proven living legacy of the Los Angeles 1984 Olympic Games. The LA84 Foundation, the legacy organization of the Games, dramatically changed city-wide access to sport. Over the last 30 years, this foundation has introduced more than 3 million young people to Olympic sport and awarded 2,200 grants to sports organizations to promote healthy living through education, exercise, competition, and outcome based results within and beyond sport.

To deliver even greater benefits to America's youth, LA 2024 will work with the LA84 Foundation to expand this proven model, providing increased access to sport programming across the country in the years leading up to—and beyond—2024.

## ENVIRONMENTAL

LA 2024 is working to actively identify innovative technical solutions that accelerate the City's goals for clean renewable energy. As outlined in **Question 19**, LA 2024 will work towards delivering an energy positive Olympic and Paralympic Games.

Furthermore, bidding for and hosting the Games offers the City an extraordinary opportunity to achieve its resiliency goals. Together with our venue partners and non-profit groups, LA 2024 will explore initiatives in water conservation, energy consumption, and green infrastructure to promote well-being for the residents of LA.

## 25. A COMMUNITY ENGAGED

The Candidature Process provides a unique opportunity to create value and drive benefits to the City of Los Angeles by aligning the economic, social, sporting, and environmental priorities and objectives of our relevant stakeholders. LA 2024 has already established solid working relationships with these and more stakeholders to participate in the bid's sustainability vision through the Candidature Process and beyond.

### CITY OF LOS ANGELES

LA 2024's partnership with the City of Los Angeles is solid and vast—and undeniably the most important partnership in bidding for the Olympic and Paralympic Games. LA 2024 has the unequivocal support of Mayor Eric Garcetti, and works closely with the Mayor and his staff. LA 2024 also meets with city representatives weekly to discuss and further all elements of the Candidature Process. Finally, representatives from LA 2024 periodically meet with and present to the Los Angeles City Council, a specially created Ad-Hoc Committee on the 2024 Olympic Games, and individual City Council members. LA 2024 has planned an extensive program of community consultations to ensure the entire city continues to embrace the Games. Additionally, the bid team has committed to attend community meetings in each of the City's 15 council districts.

### UNIVERSITIES

The Los Angeles area is home to over 150 colleges and universities and three of these institutions are recognized within the top 25 in the United States. Specifically, UCLA and USC have been crucial partners throughout our planning. They will be major partners for sports competitions as well as athlete and media accommodation. We have been working with operational groups at both universities within sport, housing, and community and public relations. Through our partnerships with UCLA and USC, LA 2024 is developing a



more sustainable plan for our Olympic Village accommodation. This enables our bid team to focus resources on creating the most innovative experience for the athletes, spectators, media, sponsors, and community of Los Angeles.

## VENUE OWNERS

Over the last 18 months, we have been working with our key venue owners to establish a sustainable venue plan. This plan leverages the immense number of existing sports venues that host annual major local, national and international events. Our relationships with top leaders at USC, UCLA, AEG, Madison Square Garden Company and Los Angeles Recreation and Parks Department have allowed us to quickly develop our venue master plan. We are continuing to identify and refine environmental opportunities specifically around resiliency, energy and water sustainability, and health and wellness (e.g. WELL-buildings).

## PRIVATE SECTOR

In addition to our venue partners, we have begun to engage the broader business community in our sustainability efforts. LA and California are home to the world's top innovators across many aspects of sustainability such as new technologies, energy evolution, or creating new environmental standards. We have begun discussions with Solar City, an innovative LA company (among others), to help us engage the public in a solar-powered vision for the Games. Our objective is to engage the other key innovators in this area to develop a practical approach to introduce the first energy positive Olympic and Paralympic Games.

## ENVIRONMENTAL LEADERS

LA 2024 has been working with officials from the City of Los Angeles, including the City's Chief Sustainability Office, to help ensure the bid is consistent with and can help further the City's long-term goals and plans related to environmental sustainability. Environmental experts at AECOM, a global design and construction company headquartered in LA, have been and will continue to be key in helping lay out our sustainability strategy. We are also collaborating with innovative non-profits such as the Nature Conservancy to help ensure that our plan protects the important lands and waterways for our community, catalyzes the development of crucial green infrastructure, and promotes well-being for the residents of the City.

As stated in **Question 7**, LA 2024 has established an Innovation Network for the bid that will include an environmental advisory team comprised of thought leaders from the top businesses and community groups in California and the US. With these visionary thought leaders in advisory roles, we seek to evolve our unique sustainability efforts to truly transform the impact that the Olympic and Paralympic Games can have on a city and region.

## 26. RESPECTING LA'S NATURAL AND CULTURAL ENVIRONMENTS

The **Environmental Assets Map** on **Page 23** showcases the main geographical features, key biodiversity areas, and all protected and conserved areas in and around the LA 2024 Games Concept.

The two most significant natural risks facing the Los Angeles region are earthquakes and wildfires.

- ◆ LA is subject to earthquakes because of its location on the boundary between the Pacific and the North American tectonic plates. LA and California are world leaders in the advancement of seismic detection and warning technology, as well as strict building codes. The City has already enacted nation-leading seismic regulations and continues to increase its resiliency to

seismic events. In partnership with Google, the City has recently begun development of an enhanced earthquake warning system that would feature a publicly available interface.

- ◆ Due to dry brush and unpredictable wind conditions, outlying areas and suburban regions of Southern California are susceptible to wildfires. The Los Angeles County Fire Department (LAFD) is world renowned and a leader in cutting-edge technologies encompassing the operational arena as well as support services. LAFD's Fire Prevention Division focuses on educating the community about the benefits of proper safety practices and identifying and eliminating all types of hazardous conditions, which pose a threat to life, the environment and property.

## 27. BUILDING SUSTAINABLY

The City of Los Angeles has long been an innovator and leader in sustainable building policies and practices.

LA is a leader on sustainability policies and practices with:

- ◆ More LEED-certified municipal building square footage than any other city in the US and the world
- ◆ Some of the world's most rigorous energy and water efficiency building codes, complimented by State policies and incentives
- ◆ Least per capita water use of any US city over 1 million people
- ◆ Most solar power installed of any city in the United States, and
- ◆ The second greatest number of Energy Star certified buildings

For new construction, all City-built facilities are required to be certified under the Leadership in Energy and Environmental Design (LEED) standard since 2002. In 2008, the LEED certification requirement was extended to major developments undertaken by the private sector, and later led to a statewide change to building codes called CalGreen.

For existing buildings, Los Angeles is setting new policies to require increased energy efficiency in buildings and facilities with a draft target of 930 square meters or larger. As one of the inaugural 10 US cities participating in the City Energy Project, an initiative with the National Resources Defense Council, LA has additional resources and support to improve the performance of the buildings in the City.

In addition to compliance with local and state sustainable building requirements, we anticipate that key Games projects will pursue even higher goals, including:

- ◆ Ecodistricts' accreditation for each Games cluster
- ◆ Net zero energy retrofits for projects over a certain size, and
- ◆ All facilities that will be used as part of the running of the Games will be encouraged to achieve or exceed the city goal of improving energy efficiency in existing buildings by 15 percent by 2020

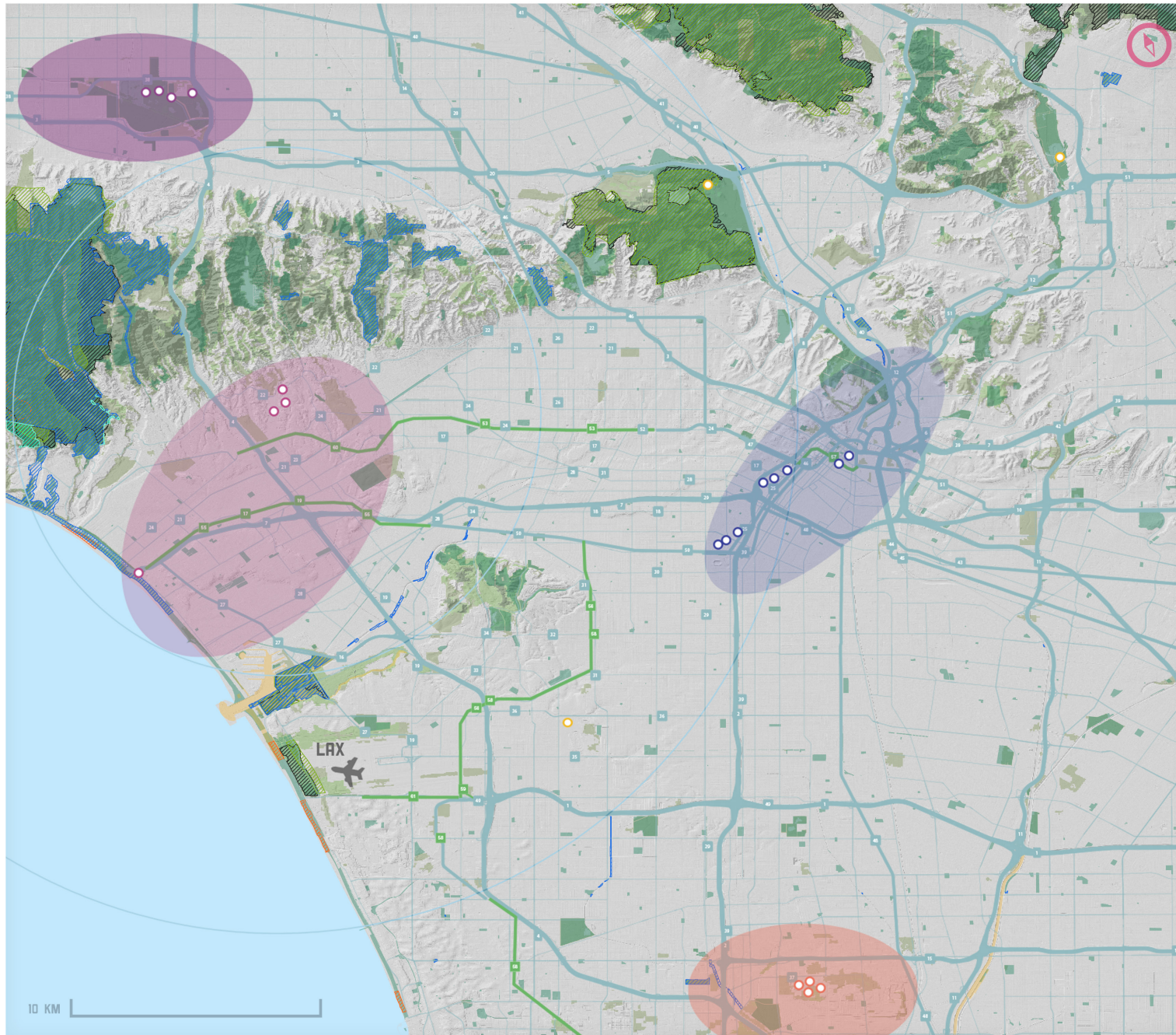
LA 2024 is committed to delivering innovative initiatives that contribute to LA's resiliency and serve as a catalyst for citywide change.

Since many of the LA 2024 venues already exist — a sustainable virtue itself — additional emphasis will be placed on sustainable Games-time venue operations such as: zero waste, sustainable sourcing, performance tracking, reduction in greenhouse gas emissions, net zero water, carbon offset projects, and sustainable operations in sport.

## 28. ZERO DISPLACEMENT

LA 2024 is committed to a sustainable Games that offers a positive experience for athletes, spectators, Angeleno residents, and local LA businesses. As part of this commitment to sustainability for all Olympic stakeholders, there are no projects in the plan for the Games that require displacement of existing communities or businesses.

# ENVIRONMENTAL ASSETS MAP






-  IUCN MANAGEMENT CATEGORIES II
-  IUCN MANAGEMENT CATEGORIES V

## NATIONAL, STATE, AND CITY DATA

-  CPAD HOLDINGS 2015A
-  AUDUBON IMPORTANT BIRD AREAS 2014
-  USFWS CRITICAL HABITAT
-  DAP SIGNIFICANT ECOLOGICAL AREAS
-  DAP PROPOSED SIGNIFICANT ECOLOGICAL AREAS

## BIOPOTENTIAL BASED ON CBI SPECIES MODELING

-  13-20 - MEDIUM
-  21-27 - HIGH
-  28-34 - VERY HIGH

International Data Source: IUCN and UNEP-WCMC, 2015. The World Database on Protected Areas (WDPA), downloaded under license from IBAT, the Integrated Biodiversity Assessment Tool ([www.ibatforbusiness.org](http://www.ibatforbusiness.org)), February 2016.

National, State, and City Data Source: The Nature Conservancy (TNC), The Nature Conservancy Los Angeles Office. Received February 1, 2016. <http://www.nature.org/a>

-  # EXISTING INFRASTRUCTURE FROM TABLE 50A
-  # PLANNED INFRASTRUCTURE FROM TABLE 50A

## 29. GAMES COMMITTED TO A LASTING LEGACY

Consistent with the long-term sustainability framework adopted by the City of Los Angeles, LA 2024 is committed to providing a Games that leaves a lasting sustainable legacy, both for our community and for the environment. This includes maximizing the use of existing infrastructure and ensuring existing venue owners incorporate Olympic standards into already planned renovations or modifications. No strategic sustainability impact assessment has been conducted on our Games Concept to date and none is required by US law.

In areas where construction will be required, the LA 2024 Games Concept envisions temporary venues or permanent works that minimize impact. Because the major facilities proposed for the Games are already built or planned for renovations (e.g., the Olympic Village, stadiums, convention centers), it is not anticipated that any additional environmental reviews or assessments would be required.

The National Environmental Policy Act (NEPA) and California Environmental Quality Act (CEQA) provide the basic framework for environmental and sustainability planning and disclosure for projects that might have a significant environmental impact in the US and California. NEPA is a federal law and CEQA is a state law. No federal action is anticipated until the construction and execution phase. By statutory exemption, “CEQA does not apply to activities or approvals necessary to the bidding for, hosting or staging of, and funding or carrying out of, Olympic Games under the authority of the International Olympic Committee, except for the construction of facilities necessary for such Olympic Games.”

Under both NEPA and CEQA the venue owner would be responsible for supervising and directing an Environmental Impact Statement/ Review, should it be necessary. For example, the LA Memorial Coliseum Commission would be responsible for determining whether renovations to the Coliseum would have a significant environmental impact. CEQA would be triggered at the point of relevant permit approval for construction projects. NEPA would be similarly triggered, though likely only for construction around waterways or construction of temporary security infrastructure. It is not anticipated that any environmental review would find a significant environmental impact.

## 30. REFRESHING AIR QUALITY

The improvement in air quality in the Los Angeles basin has been significant, and is one the great success stories of our region. The trend is expected to continue as existing regulations and planned control measures are implemented, and vehicle and equipment turnover continue to occur. As it implements the Sustainable City pLAN, the City is leading by example by:

- ◆ Having the most pure battery EVs of any city fleet in the US by June 2016
- ◆ Creating neighborhood air quality monitoring through data technology partnerships
- ◆ Reducing emissions from heavy trucks and ground equipment at the Port of Los Angeles and airports with electric and ultra-low emission vehicles

The pLAN also sets the target to have “zero non-attainment days” by 2025, a target whose clean air requirements will increase and improve quality further thanks to our South Coast Air Quality Management District (SCAQMD). SCAQMD along with Ventura County Air Quality Management District (VCAQMD) are responsible

for monitoring air quality in Los Angeles and Ventura Counties. Both entities collect air quality data following the quality analysis and quality control process prescribed by the US Environmental Protection Agency:

POLLUTANT	TESTING METHODOLOGY
O <sub>3</sub>	Ultraviolet Photometry
PM2.5	Inertial Separation and Gravimetric Analysis
PM10	Inertial Separation and Gravimetric Analysis & Beta Attenuation
NO <sub>2</sub>	Gas Phase Chemiluminescence
SO <sub>2</sub>	Ultraviolet Fluorescence

For the months of July and August between 2010 and 2015, pollutant levels were consistently far below the WHO guideline levels in Los Angeles County and Ventura County. WHO air quality guidelines for acceptable levels of NO<sub>2</sub> or SO<sub>2</sub> were never exceeded at any air monitoring station, and levels of PM<sub>10</sub> and PM<sub>2.5</sub> were above the WHO guidelines levels infrequently, at only a few stations. Air monitoring stations in and near cities (Los Angeles, West Los Angeles, North Long Beach, Compton, Piru and Ojai) where major event venues are likely, are already below or very close to the WHO guideline levels for ozone.

Los Angeles County has experienced dramatic improvements in air quality with recent ozone levels approximately 50 percent lower than the typical levels observed during the Los Angeles 1984 Games. In Ventura County, peak ozone levels have decreased over 40 percent since 1984. As current regulations are implemented, and as LA develops, adopts, and implements additional controls to meet ambient air quality standards, ozone levels in 2024 for Los Angeles and Ventura Counties are projected to continue to improve with decreases of 25-30 percent from current levels.



### 31. CLEAN AND CLEAR WATERS

The Greater Los Angeles Area is home to many of the world’s most renowned beaches and water bodies, each ideally suited as potential venues for the Olympic and Paralympic Games. LA also boasts some of the highest water quality in the world for a metropolitan area of its size with water conditions of “Good” or “Very Good” by WHO standards. Local water bodies undergo rigorous testing and research that ensures the water quality is safe for the athletes.

The City of Los Angeles Bureau of Sanitation (LASAN) is a progressive leader in the area of environmental stewardship. LASAN’s Environmental Monitoring Division strictly follows Environmental Protection Agency (EPA) approved protocols, complies with the federal requirements of the Clean Water Act and adheres to the more stringent State of California Porter-Cologne Water Quality Act (AB 411). In general, AB 411 standards are more stringent than water quality guidelines issued by the World Health Organization (WHO) for recreational waters.

In order to monitor and benchmark water quality for recreational purposes, LASAN has developed a grading system in collaboration with a local non-profit group, “Heal the Bay”. This grading system assigns letter grades (A-F) for each monitored beach location. These grades are based on LASAN’s AB 411 standards, which means that these grades are more stringent than the WHO standards.

In our venue plan, there are three natural water based competition venues: Santa Monica Beach, the Port of Los Angeles, and Lake Casitas. The beach waters are subject to LASAN grading. Alternatively, Lake Casitas is not given a LASAN grade but is subject to strict water quality standards as a drinking water reservoir. All of these venues are fit for recreational sport. An analysis of water conditions in our three natural water based competition venues is provided below:

#### SANTA MONICA BAY

In general, the beaches of Santa Monica Bay have excellent water quality during the summer months. LASAN conducts extensive monitoring at these beaches to ensure the health and safety of the public, especially as it relates to recreational activities.

The beaches in Santa Monica Bay received “A” or “B” grades, and are safe for all activities during summer dry-weather conditions. These grades correspond to “Very Good” and “Good” by WHO standards.

#### PORT/WATERFRONT

The harbor will serve as an excellent venue for events that require calm waters as well as those that require a nexus to the open ocean such as sailing. LASAN conducts extensive monitoring of the Los Angeles harbor that shows that this area is very safe for water-contact recreation.

A wealth of historic data validates that the harbor waters and open ocean near the harbor have excellent water quality. The Outer Cabrillo Beach, which faces the ocean, received an “A” grade in in the latest Heal the Bay report card, which correspond to “Very Good” by WHO standards.

#### LAKE CASITAS

Lake Casitas is a 4.0 square mile reservoir managed by Casitas Municipal Water District. The lake is used primarily for domestic drinking water supply. The water in Lake Casitas originates from the adjacent protected watershed and is subject to rigorous testing. The lake meets all criteria for public health security and would meet the highest WHO standards.

### 32. MANAGING OUR WATER RESOURCES

California’s urban water suppliers prepare Urban Water Management Plans to support long-term resource planning, and ensure adequate water supplies are available to meet existing and future demands. The most recent plan estimates that Los Angeles has approximately

758,000,000 cubic meters of total water available in 2015, of which 98 percent is freshwater resources (~741,000,000 cubic meters) and 2 percent is conserved water resources (~17,000,000 cubic meters). As shown in the tables, residents of LA have access to nearly 178,000 freshwater liters per capita annually and about 485 freshwater liters per capita daily.

#### TOTAL WATER AVAILABILITY AND USAGE

	CUBIC METERS PER YEAR	LITERS PER CAPITA	LITERS PER CAPITA DAILY
2010	767,000,000	187,000	510
2015	758,000,000	182,000	500

Table Sources: 2010 Water Management Plan, LADWP; numbers are rounded

#### FRESHWATER AVAILABILITY AND USAGE

	CUBIC METERS PER YEAR	LITERS PER CAPITA	LITERS PER CAPITA DAILY
2010	757,000,000	185,000	508
2015	741,000,000	178,000	485

Over the next 10 years, the City has pledged to reduce water usage per capita through increased conservation efforts. LA’s goal is to achieve 386 liters per capita daily by 2025 and is well on its way to meet those goals.

#### LA WATER SUPPLY, PROTECTION AND MANAGEMENT

The Los Angeles Department of Water and Power (LADWP) is the largest municipal utility in the United States, supplying water to residents and businesses in LA and the surrounding communities. LADWP manages the current and projected mix of water supply:

SOURCE	FY2009-10 ACTUAL	2015 PROJECTED	2025 PROJECTED
Municipal Water District (MWD) Water Purchases	48%	40%	27%
Los Angeles Aqueduct (LAA)	36%	41%	37%
Groundwater	14%	7%	17%
Conservation	1%	2%	6%
Recycled Water	1%	3%	6%
Water Transfers	0%	7%	6%
Stormwater Capture	0%	0%	1%

Table Sources: 2010 Water Management Plan, LADWP

Today, the majority of LADWP resources come from the Municipal Water District (MWD), which is supplied primarily by the California State Water Project (SWP) and the Colorado River Project. Each source is closely monitored and regulated by local, state and federal agencies.

- ◆ The SWP collects water from the Northern California Bay-Delta and redistributes this water to Southern California through aqueducts, canals, and reservoirs. The California Department of Water Resources manages the SWP and the Bay-Delta water supply.
- ◆ The Colorado River Water project is governed by a series of agreements, treaties and regulations known as the Law of the River and the Colorado River Board of California is the main state authority. MWD has developed numerous water supply programs to improve reliability of the Colorado River supplies, such as agricultural water transfers and storage programs.

The second major water supply is the Los Angeles Aqueduct (LAA), which is also known as the Owen's Valley Watershed. Surface runoff from snowmelt in the eastern Sierra Nevada Mountains is the primary source of supply for the LAA. LADWP regulates system output through storage control at seven reservoirs and has placed strict limits on the extent of development that could impact the city-owned watersheds.

### 33. DRIVING THE CLIMATE CHANGE AGENDA

The City of Los Angeles and Mayor Eric Garcetti are recognized leaders on combating global climate change. Since assuming office in 2013, Mayor Garcetti co-founded the domestic Mayors' National Climate Action Agenda (MNCAA) and hosted the first US-China Climate Leaders Summit. The Mayor was also elected to the global steering committee for C40.

In preparing for a better future, the City has created a rigorous climate change management program reflected in three separate plans: the Sustainable City pLAN, the Resilience by Design Plan and the latest Climate Action Report. The City committed to a 45 percent reduction in total GHG emissions (1990 levels) by 2025, 60 percent by 2030, and 80 percent by 2050. LA will achieve these goals through comprehensive policies to decarbonize electricity, support transportation alternatives, promote public transportation usage, and build energy and water efficiency. LA has committed to a fleet of alternative fuel vehicles, ensuring that electric vehicles represent at least half of all municipal vehicle procurement.

The City is quantifying the impact of its policies with regular GHG inventories and publishing updated, verified emissions data on a regular basis going forward. The latest data shows that the City is already 20 percent below its 1990 GHG levels—nearly halfway toward the goal of 45 percent by 2025.

In order to address climate adaptation, the Sustainable City pLAN and Resilience by Design Plan identify climate preparedness and resiliency measures to protect residents from the impacts of climate change. These include increasing tree canopy to combat the urban heat island effect, installing 10,000 new cool roofs by 2017, implementing a series of water conservation and local water strategies to combat drought, and developing emergency preparedness strategies like city-wide Wi-Fi. In extreme weather, the power grid and communications system may be compromised and city-wide Wi-Fi allows residents to stay connected and allows the city to facilitate emergency response measures. In order to educate residents about these measures, LA uses schools, libraries, and parks to engage the public.

### 34. BUILDING THE NEXT GENERATION OF AMERICAN TALENT

The LA 2024 Olympic and Paralympic Games will provide an unprecedented opportunity to recruit, train, and cultivate executive staff and volunteer talent across the broad spectrum of mega-event planning and organization.

The USOC is actively working with universities and colleges to further enhance educational opportunities for athletes, to build strong networks for career development and further develop the impact of the Olympic Movement on campuses across the country. The opportunities for integrating this strategy into Los Angeles and California universities in the seven-year run up to the Games are robust—and enjoy the full support of the Mayor's office. California is home to seven of the world's top universities — Stanford, California Institute of Technology, University of California Berkeley, University of California — Los Angeles, University of California San Diego,

University of California San Francisco and University of Southern California. The world sends its brightest and best students to many of these great institutions. All of this provides LA 2024 with an unprecedented opportunity to invite the leaders of tomorrow into a tangible, new relationship with the Olympic Movement. Harnessing the collective intellectual and creative power of this unique human resource will be one of the keys to our success in delivering on our vision of reinvention.

Additionally, as indicated in the response to **Question 20**, the USOC is already engaged in the most robust international sports championship hosting cycle in its history. Between 2014 and 2021, the US will host approximately 30 world championship level events in individual sports from the Olympic and Paralympic Games programs, and each of these events helps the USOC and its attendant NGBs draw new talent into the Olympic Movement in the US to introduce an ever widening circle of executives to the rigors of Olympic and Paralympic business and event management.

The employees and volunteers working on the planning and staging of the Olympic and Paralympic Games comprise the human legacy of the Games, and as such should reflect the rich cultural, ethnic, gender, and generational diversity of both LA and the broader Olympic family. To ensure that the Olympic and Paralympic experience both benefits and inspires the broadest demographic, LA 2024 will engage the most diverse talent pool possible from the community to harness the creative spirit of LA and to foster a shared sense of identity throughout the region — unity through diversity. Reflecting a diversity of voices, ideas, and experiences will raise the bar for the delivery of the Games and will reflect all attendees, making them feel at home in LA.

### 35. SPORT - A CORNERSTONE OF AMERICAN SOCIETY

Sport in the United States is governed by various organizations across youth, amateur and professional sport. Collectively these organizations encourage youth participation, eliminate barriers to participation and encourage opportunities for amateurs to become professionals.

#### CLUB SPORT

At the grass roots level, the United States Olympic Committee (USOC) has developed partnerships with various national organizations chartered to promote the development of sport and supports broad-based public school physical education programs to ensure children and young people have ample opportunities to participate in sport.

To help expand the reach of Olympic sports to young people, the USOC recognizes 45 multi-sports organizations (MSOs), which represent more than 60 million Americans. Organizations such as the YMCA/YWCA, the Boys & Girls Clubs of America, the Aspen Institute Project Play, the National Federation of State High School Associations and the National Coalition for Physical Activity all help the USOC expand its scope of influence to drive more programs toward youth participation in sport and physical activity.

#### COLLEGIATE AND OLYMPIC SPORT

Collegiate and Olympic sport in the US is guided by two major entities—the National Collegiate Athletics Association (NCAA), which regulates sports on colleges and university campuses across the country, and the USOC, which governs and guides the development of Olympic sports in the US through 47 National Federations or NGBs.

In 1972, the US Congress enacted amendments to the Higher Education Act, including the now famous Title IX, which prohibits discrimination on the basis of sex in the practices of colleges and universities receiving federal funding. The result was a major impact

on the participation of women in both college and high school sports. In 1971, fewer than 295,000 girls participated in high school varsity athletics, accounting for just 7 percent of all varsity athletes. Now that number is 2.8 million, or 41.5 percent of all varsity athletes. Similarly, in 1971 there were less than 30,000 female athletes competing at the college level. That figure has grown almost seven-fold since that time.

## PROFESSIONAL SPORT

At the professional sports level, sports are guided by leagues such as the National Football League (NFL) with 32 teams, Major League Baseball (MLB) with 30 teams, the National Basketball Association (NBA) with 30 teams, the National Hockey League (NHL) with 30 teams, Major League Soccer (MLS) with 20 teams, and the Women's National Basketball Association (WNBA) with 12 teams. These leagues and teams are committed to growing their respective sports at the youth level through extensive league and team community programs. Additionally, these leagues pioneered the combination of sport and entertainment within the venue for a unique and fun spectator experience, and LA 2024 will adapt and utilize much of this expertise in our Games experience to develop more immediate connections between Olympic sports and our audiences. These leagues also provide career opportunities for many athletes and traditionally draw the nation's finest athletes into their ranks.

## 36. PROMOTING SPORT AND OLYMPIC VALUES

In the seven-year run-up to the 2024 Games, the Los Angeles Organizing Committee will implement a three-prong strategy to promote sport and engage Americans in a broad public conversation about the Olympic values and the overall value of the Olympic Movement to our world. This program will build on the living legacy of the LA84 Foundation, and will include a youth sport initiative, a national communications strategy and annual thought leadership forums.

## YOUTH SPORT

Since the Los Angeles 1984 Games, the LA84 Foundation, which started with an endowment from those Games of USD 93 million, has been continually active in promoting youth sports education and participation across Southern California. Through its varied programs, it has directly introduced more than 3 million young people to dozens of Olympic and Paralympic sports. It has trained more than 80,000 coaches and invested more than USD 225 million in 2,200 grants to community-based sports organizations over the last 30 years while effectively managing the financial growth of its endowment, which now totals USD 160 million.

During the Candidature Process, LA 2024 will work with the LA84 Foundation and the USOC to scale a proven model of youth participation in Olympic and Paralympic sports, to ensure that the bid delivers an enhanced sports legacy to the community. If our campaign to host the Olympic and Paralympic Games is successful, this program will be expanded across the seven-year organizing period. Nationally, LA 2024 plans to partner with the USOC and US Paralympics to develop legacy plans that empower youth sport development outreach across the country through existing partnerships with multi-sports organizations, potentially reaching the more than the 60 million Americans these organizations represent. Out of this effort, LA 2024 will develop an exportable model for youth sport development that can be deployed by communities around the world.

## COMMUNICATIONS

On a parallel track, LA 2024 will develop a seven-year national communications program to inspire America and particularly its young people with stories drawn directly from the lives of Olympians and Paralympians, both historical and current. Working with LA's world-class creative community—and the broadcast, media and



corporate sponsors partnered with the Games—LA 2024 will engage in an unprecedented campaign of Olympic and Paralympic storytelling designed to reach young people at home and abroad through all media channels and digital platforms. As an example, the storytelling will span five categories of inspiration drawn from archives of Olympic history and the contemporary lives of those striving to make it to the Games today:

- ◆ **Overcoming Adversity:** Stories of national and international Olympic and Paralympic legends who overcame personal hardships, injuries and obstacles to triumph against all odds.
- ◆ **Innovators and Record Setters:** Stories of those breakthrough performances that pushed forward the boundaries of human achievement and created the awe-inspiring traditions that make the Olympic Games the world's greatest sporting event throughout history.
- ◆ **Excellence, Friendship and Respect:** Stories that showcase how the core Olympic values are embodied by athletes and teams as they meet and befriend their competitors in the Olympic Village and show them respect on the fields of play.
- ◆ **Healthy Living Through Sport:** Stories and proof-points of how sport, and even moderate levels of physical activity, can prolong and enhance the lives of everyone around the world – not just Olympic athletes.
- ◆ **Human Legacies of Sport:** Stories of how investing in youth via sport can enhance and improve their chances of success in life, whatever their chosen vocation or dreams.

## OLYMPISM IN ACTION

LA (and California in general) is the world epicenter of imagination, creativity and reinvention – it is where the future is imagined – and realized time and time again. In each of the seven years leading up to the Games, LA 2024 will leverage its Innovation Network outlined in **Question 7** to host an annual symposium on *Olympism for the Next Century*. We will draw together respected international thought leaders from the technology and academic communities, sport, culture, entertainment, media and business as well as Olympians and Paralympians, to discuss and discover the role of sport and the Olympic Games in society and the value of the Olympic Movement to our world over the next one hundred years. Leveraging feedback from the International Sports Federations, we will also explore both the promotion and presentation of the Games, with an aim towards increasing interest in and passion for the Games in the youth audience, using technology and entertainment.

Aligned with the aspirations of Olympic Agenda 2020's drive for greater social relevance for the Olympic Movement, this continuing program will seek to engender an ongoing public debate about how sport and the Olympic Movement can best serve society.



# 1.3

## **GENERAL INFRASTRUCTURE AND CAPACITY ANALYSIS**





## 1.3.1 POPULATION STATISTICS

### 37. CALIFORNIA'S BIGGEST CITY

Los Angeles is the second largest city in the United States and the most populous city in the State of California. Current and projected city, region and country population figures are provided in the table below.

REGION	POPULATION		SOURCE
	2014	2024	
City of Los Angeles	3,928,864	4,063,861	<b>Current:</b> US Census Bureau Projections <b>Projections:</b> Calculated using Southern California Association of Governments 2014 Report 'Growth & Infrastructure'
County of Los Angeles	10,116,705	10,648,306	<b>Current:</b> US Census Bureau Projections <b>Projections:</b> CA Department of Finance Projections Dec 2014
California	38,802,500	42,021,197	<b>Current:</b> US Census Bureau Projections <b>Projections:</b> CA Department of Finance Projections Dec 2014
United States	318,857,056	344,814,299	<b>Current/Projections:</b> US Census Bureau Projections 2014 Estimates

## 1.3.2 ACCOMMODATION

### 38. WORLD-CLASS ACCOMMODATION FOR ALL

From world renowned luxury to modern conference hotels, and everything in between, Los Angeles offers accommodation choices for every style and budget. In total, there are more than 125,000 existing hotel rooms within 50km of the Games Center. Approximately 93,000 rooms are located in the LA market and this inventory is supplemented by an additional 34,000 rooms in neighboring Orange County.

Within the LA market, there are more than 50,000 3, 4, and 5 star rooms within 20km of the Downtown Cluster. In addition, LA's burgeoning tourism business is generating even more demand for hotels. As a result, LA's pipeline of 47 future properties with nearly 9,500 rooms will further support our Olympic and Paralympic Games allocation plan. The Los Angeles Tourism and Convention Board (LATCB) is a strong supporter of LA 2024 and will continue to be a key partner in delivering a superior hospitality experience.

The abundance and location of suitable hotel rooms gives us the ability to provide key Games Delivery personnel with accommodation close to their place of work and spectators with hotel options near every venue.

**Table 38 (Existing and Planned Hotel Rooms)** lists existing and planned hotels in the LA market within a 0-10km and 10km-50km radius of the city center. The table does not include the additional 34,000 rooms available to Games constituents in neighboring Orange County.

**TABLE 38: LOS ANGELES HOTELS AND ACCOMODATIONS**
**EXISTING**

Hotel Rating	WITHIN A RADIUS OF 0-10KM OF THE GAMES CENTER		WITHIN A RADIUS OF 10-50KM OF THE GAMES CENTER		TOTALS	
	Number of hotels	Number of rooms	Number of hotels	Number of rooms	Total number of hotels	Total number of rooms
5 star	2	1,001	51	9,683	53	10,684
4 star	21	6,143	148	32,695	169	38,838
3 star	22	1,914	175	16,177	197	18,091
1-2 stars	86	4,134	418	21,185	504	25,319
					<b>923</b>	<b>92,932</b>

**PLANNED**

Hotel Rating	WITHIN A RADIUS OF 0-10KM OF THE GAMES CENTER		WITHIN A RADIUS OF 10-50KM OF THE GAMES CENTRE		TOTALS	
	Number of hotels	Number of rooms	Number of hotels	Number of rooms	Total number of hotels	Total number of rooms
5 star	4	2,088	5	1,003	9	3,091
4 star	7	1,515	19	3,538	26	5,053
3 star	4	496	8	837	12	1,333
1-2 stars						
					<b>47</b>	<b>9,477</b>

**EXISTING AND PLANNED BY CLUSTER**

Venue/Cluster Precinct Name	Hotel Rating	EXISTING		PLANNED	
		Number of hotels	Number of rooms	Number of hotels	Number of rooms
Downtown Cluster	5 star	2	1,001	4	2,088
	4 star	21	6,143	7	1,515
	3 star	22	1,914	4	496
	1-2 stars	86	4,134		
Coastal Cluster	5 star	22	4,010		
	4 star	35	4,881	2	411
	3 star	16	837	1	143
	1-2 stars	23	742		
South Bay Cluster	5 star				
	4 star	7	1,830	1	300
	3 star	10	1,273	1	81
	1-2 stars	68	3,121		
Valley Cluster	5 star				
	4 star	1	213		
	3 star	10	1,004	1	70
	1-2 stars	31	1,727		

**TABLE 39: ALTERNATIVE ACCOMODATION**

City	Type of Accommodation	Current Capacity (Rooms)	Planned Expansion (Rooms)	Distance from City Centre (0-10km or 10-50km)	Anticipated Games Client/ Workforce Use
Los Angeles & Surrounding Communities	Airbnb	12,000	Continued growth	0-10km	Spectators, workforce, friends & family
	Airbnb	30,000	Continued growth	10-50km	Spectators, workforce, friends & family

## 39. ALTERNATIVE ACCOMMODATION OPTIONS

Although the inventory of Los Angeles area hotels far exceeds our Games-time accommodation requirements, there are additional opportunities to host our international visitors during the Olympic and Paralympic Games. Our universities and our local residents are no strangers to hosting visitors from around the world. Campus residences and the homes of Angelenos will also be available during the Games.

In addition to USC and UCLA, there are a number of other universities that can offer comfortable accommodation options near many of our competition and non-competition venues. LA 2024 will continue to work with these institutions to offer additional accommodation options as needed.

Furthermore, local Angelenos will open their homes to all spectators and Games clients through offerings like Airbnb – a California-based company that has revolutionized the concept of home share and home rental. Airbnb hosts are a strong representation of the people of Los Angeles: diverse, welcoming, and hospitable. Across Los Angeles and Ventura County, hosts speak 17 different languages. Furthermore, these hosts offer a wide range of amenities from kosher kitchens to pet-friendly environments for service dogs. Every international visitor can find a place that feels like home in Los Angeles.

**Table 39** showcases Airbnb capacity in Los Angeles and Ventura Counties.

## 40. A MEDIA VILLAGE SURROUNDED BY GAMES ACTION

At the center of our Games Concept, in the heart of the Downtown Cluster, the University of Southern California (USC) campus will host the Media Village and serve as the largest concentration of LA 2024 media housing. USC takes great pride in its Olympic heritage. As well as hosting athletes during the Los Angeles 1984 Games, USC has produced 420 Olympians bringing home 288 Olympic Summer Games medals.

USC’s exciting new housing expansion and community development plans, members of the media will benefit from the prime location of the Media Village, which is only minutes from the competition venues

for nearly 50 percent of the Olympic and Paralympic sports. The Media Village’s dedicated transportation hub will connect members of the media with all LA 2024 competition and non-competition venues, including the IBC/MPC located only 30 minutes northwest of the Media Village.

The accommodation mix includes studio, one bedroom and two bedroom apartments. All apartments, except studios, have a full kitchen with stove and refrigerator. Studios have a microwave and refrigerator. Additionally, all apartments and communal spaces have Wi-Fi, air-conditioning and access to numerous dining facilities. All blocks have washing machines and dryers and many have pool tables and TVs in the recreation areas. Finally, houses on university streets have been converted into student housing, offering a home away from home for additional officials and supporters of the athletes.

The LA 2024 Media Village will offer 4,000 beds with one media member per room to allow for private working space. On average, USC student housing offers a room to bathroom ratio of 2:1. To accommodate all of the estimated members of the media, hotels will supplement the primary village to reach 17,000 beds. In addition, USC can provide upwards of 3,000 beds to accommodate additional Games officials and supporters of the athletes, making for an energetic community in the Games’ Downtown Cluster.

## 41. GAMES-READY ACCOMMODATION

The inventory of existing and planned hotel rooms, in addition to the Villages for media and athletes, will cover all Olympic family and spectator Games-time accommodation needs without the pressure to develop any additional hotel or accommodation capacity.

In addition, the residents of LA can serve as hosts to spectators through alternative accommodation options like Airbnb, as detailed in **Question 39**.

Los Angeles is no stranger to hosting large-scale events. The Los Angeles Tourism and Convention Bureau (LATCB), hoteliers, hotel staff, and even local residents sharing their homes will be critical ambassadors for Los Angeles and the Olympic Games.

## 1.3.3 AIRPORT

### 42. LAX - LOS ANGELES INTERNATIONAL AIRPORT

The main international airport for the LA 2024 Olympic and Paralympic Games will be the Los Angeles International Airport (LAX). LAX is the country’s second-busiest passenger airport. It is also the world’s busiest origin-and-destination airport, with more passengers beginning or ending their trips in Los Angeles, as opposed to just connecting, than any other airport in the world. In 2014, LAX served 74.7 million passengers, offered direct flights to 105 domestic and 75 international cities, and handled nearly 2 million tons of freight and mail.

See **Question 45** for details on the significant LAX modernization program that will be completed by 2023, and fully operational in time for the 2024 Games.

### 43. FOUR ADDITIONAL AIRPORTS

In addition to LAX, four additional airports, all located in close proximity to the City, will be used for the 2024 Games:

- ◆ LA/Ontario International Airport (ONT)
- ◆ John Wayne Airport, Orange County (SNA)
- ◆ Burbank Bob Hope Airport (BUR)
- ◆ Long Beach Airport (LGB)

### 44. CAPACITY TO WELCOME THE WORLD

In addition to our main airport LAX, the Los Angeles area is served by four other airports, significantly expanding the region’s capacity to facilitate travel for those participating in and attending the Games. This network of regional airports supports an annual capacity of over 130 million passengers from across the country and around the world.

#### CAPACITY

	LAX	ONT	SNA	LGB	BUR
Number of Runways	4	2	2	3	2
Number of Gates	137	35	26	11	14
Annual Airport Capacity	96,600,000	10,000,000	12,500,000	5,000,000	7,300,000
Peak Capacity Over 24 Hrs	265,000	28,000	34,500	14,000	20,000



## DISTANCE TO CITY CENTER AND EXISTING, PLANNED AND ADDITIONAL PUBLIC TRANSPORT LINKS

### LAX

Los Angeles International Airport (LAX) is 24km from the City Center. Existing public transport links include a free shuttle service that transports passengers between airline terminals, remote parking lots, and Metro's Green Line light rail. The LAX Flyaway® bus service provides frequent nonstop transportation between LAX and Union Station in Downtown LA, the Van Nuys Bus Terminal, Westwood/UCLA, Santa Monica, Long Beach, the San Fernando Valley and Hollywood. Additionally, the planned Automated People Mover will connect passengers to the Metro Crenshaw/LAX Line, and is scheduled for completion near the end of 2023.

### Ontario (ONT)

Ontario International Airport is 56km east of Downtown LA. Connections are available from Ontario Airport to LA via public bus lines, taxis, and shuttle vans.

### John Wayne Airport (SNA)

John Wayne Airport is 66km south of Downtown LA. Charter buses, shuttle services, and taxis offer service into Orange County. From nearby Santa Ana Train Station, Amtrak and Metrolink trains offers a direct route to Union Station in downtown LA.

### Long Beach Airport (LGB)

Long Beach Airport is 40km south of Downtown LA and 11km northeast of Downtown Long Beach, where Long Beach Transit buses offer service to LA.

### Burbank (BUR)

Burbank Bob Hope Airport is 24km northwest of Downtown LA and connects directly to the Downtown Burbank Metrolink Station. Bob Hope Airport also offers a complimentary shuttle van service so passengers can travel between the airport and the North Hollywood Red Line/Orange Line pick-up and drop-off location.

## OPPORTUNITY TO EXTEND HOURS OF OPERATIONS IF REQUIRED

We do not anticipate the need to extend hours at any of the airports due to the significant existing capacity at LAX and ONT, which operate 24 hours a day.

## 45. THE NEW LAX

Los Angeles International Airport (LAX) is committed to the continuous advancement of operations and the passenger experience and has invested in considerable capital improvement projects to remain among the world's best airports. In the last several years, LAX invested more than USD 1.9 billion into the new Tom Bradley International Terminal. Passengers can now relax in the lounge-like seating in the 14,000 square meter Great Hall featuring more than 60 premier dining and luxury retail shops, and 23,000 square meters of duty-free shops.

Additionally, LAX is modernizing every single terminal and the airside experience – a USD 8.5 billion project – and investing USD 5 billion in the construction of landside improvements. Together, this capital budget supports improvements such as runway rehabilitation, terminal renovations, improved baggage handling, security and communications improvements, and improved ground access and circulation in the surrounding street network. LAX will also further expand its capacity through the construction of a new Midfield Concourse Terminal, which will have 11 new gates by 2019. Improvements will also focus on enhancing the passenger experience, and include amenities such as large video and art displays, new restaurants and shops, improved bathrooms and Wi-Fi.



None of the other regional airports are currently planning a major physical expansion. However, the Long Beach Airport is about to conduct a feasibility study to determine whether it should develop a federal customs facility, which would enable the airport to start receiving international flights.

Given the strength and capacity of the Los Angeles network of airports, no additional physical expansion is required to support our Games transport plan or to deliver a positive experience for all stakeholders attending the Olympic and Paralympic Games.

## 46. CONNECTING THE US TO THE WORLD

Los Angeles is a global hub of business and tourism. This is reflected in the City's air transport capacity and connectivity. Currently, LAX offers approximately 1,200 direct international flights each week to 41 countries, directly serving 75 international destinations around the world.

The supporting network of nearby airports offer additional flight options to and from Mexico and Canada. The LA/Ontario International Airport offers 11 direct international flights to Mexico each week, and John Wayne Airport offers 35 additional flights to Mexico and Vancouver, Canada. Long Beach Airport does not currently have a customs facility or international flights but the airport is scheduled to undergo a feasibility study for a Federal Inspection Services site in 2016. Although Burbank Bob Hope Airport does not currently offer international service, it is an additional option for those traveling domestically.

**Table 46 (Flight Network)** provides a breakdown of these flights and the countries they serve

**TABLE 46: FLIGHT NETWORK**

Continent	Countries Served	NUMBER OF WEEKLY FLIGHTS PER AIRPORT (2015)	
		Main airport (Los Angeles International Airport-LAX)	
Asia	China	74	
	Japan	72	
	Taiwan	36	
	South Korea	32	
	Hong Kong	29	
	United Arab Emirates	22	
	Philippines	14	
	Turkey	11	
	Qatar	7	
	Israel	5	
Oceania	Saudi Arabia	5	
	Australia	67	
	New Zealand	20	
	French Polynesia	17	
	Fiji	7	
Europe	Cook Islands	1	
	United Kingdom	65	
	Germany	29	
	France	27	
	Netherlands	14	
	Sweden	10	

Continent	Countries Served	NUMBER OF WEEKLY FLIGHTS PER AIRPORT (2015)		
		Main airport (Los Angeles International Airport-LAX)		
Europe	Russian Federation	7		
	Italy	7		
	Switzerland	7		
	Ireland	7		
	Spain	5		
	Iceland	4		
	Denmark	3		
	Norway	2		
	North America	Mexico	277	
		Canada	207	
El Salvador		27		
Costa Rica		26		
Panama		22		
Guatemala		14		
Belize		2		
Nicaragua		1		
Jamaica		1		
South America		Peru	14	
	Brazil	10		
	Colombia	4		
Total		~1,211		



## 1.3.4 TRANSPORT

### 47. A GAMES AND CITY IN MOTION

Today, Los Angeles is defining the future of mobility with a nearly USD 300 billion public transit investment (see **Question 18**). By 2024, at least USD 88 billion worth of expanded subway, light rail, rapid bus transit and express lane projects will be operational, connecting all venue clusters, the airport, the Games Center, and every corner of LA.

Currently the entire LA transport system is managed by a collaborative effort of local and state agencies, using the most innovative traffic management systems. During the Games, these centers and agencies will be managed under the single command and control of the City of Los Angeles' Unified Operations Center (UOC) and the OCOG's Transport Operations Center(s).

Applying best practice Games Transport planning principles, the LA 2024 Transport Strategy will leverage the city's infrastructure and LA's sophisticated traffic control systems and centers to efficiently transport all key Games stakeholders while keeping the residents of Los Angeles moving.

The LA 2024 Transport Strategy has the following four priority objectives:

#### **Objective 1: To provide athletes, officials, media, and the entire Olympic family with safe, convenient, and time sensitive travel through the Games network.**

Using existing motorways and expanding the already immense High Occupancy Vehicle and Toll express lane systems (HOV/HOT), the entire Olympic Family will move expediently to all competition and non-competition venues along a robust and free flowing Olympic Route Network (ORN). On the ORN, drive-times to and from almost all competition and non-competition venues will be less than 30 minutes.

Enforcement of the ORN use will begin with the application of the Venue Access/Parking and Permit (VAPPS) program. While elements of the VAPPS program are intended for passage through vehicle checkpoints at venue precincts and footprints, the VAPPS program will include circulation components that will allow for access to the ORN as well. To this point, the LA 2024 Transport Strategy recognizes an opportunity to integrate VAPPs with new technology, including GPS/navigation downloads that will direct vehicles to the specific designated entry points at each venue. This technology will allow for more efficient and timely movement of key Games stakeholders in and out of competition venues.

#### **Objective 2: To provide spectators and the workforce with an efficient, clean transport system, combining existing public transport with a robust Park & Ride network.**

The Metro rail, Metrolink rail and Bus Rapid Transit systems will be the primary mode of transport for spectators and the workforce. Coupled with the existing Park & Ride facilities and the overlay of Games-specific Park & Ride options, spectators and workforce will be able to travel via public transit from both centralized and outlying locations to competition venues, non-competition venues, ceremonies, and Live Sites.

Key Metro stops will be located adjacent to most of the Downtown and Coastal Cluster venues. For those venues, where Metro stops are not within 1km, a direct shuttle service will be added from the closest transit location. Additionally, venues in both the Valley and South Bay Clusters will have a direct service via the Bus Rapid Transit (BRT) lines.

We envision supplementing the current 75+ Park & Ride locations, which will be linked to the bus transit, Metrolink rail, and Metro rail

systems. Additional facilities are being constructed as part of the new Metro rail expansion projects, which will provide for several thousand more parking spaces.

#### **Objective 3: To keep the City of Los Angeles moving throughout the Games-time period.**

Real-time management of the ORN and the entire Games-time network will be done by the following agencies in conjunction with the OCOG's transport operations center(s):

- ◆ The City of Los Angeles' Unified Operations Center (UOC) will be activated during the entire Games-time period. This facility has accommodation for all transport providers and key support departments, allowing for a single management structure.
- ◆ The Automated Traffic Surveillance and Control System (ATSAC) will provide innovative, real-time ability to manage traffic on all major urban arterials within the City. This will allow for designated Games vehicles to complete travel between clusters and venues as quickly as possible.
- ◆ The City of Los Angeles' Department of Transportation (LADOT) traffic engineers and traffic control officers will support management and enforcement of the ORN in the field, working in concert with the ATSAC system.
- ◆ Existing external partnerships with technology solutions such as NextBus can be expanded and leveraged to offer real-time information to riders and drivers alike, including arrival/departure information and provision of routes.

The Los Angeles region also has extensive experience with developing, communicating, and implementing strategic travel demand management plans. On an annual basis, LA manages road closures and traffic control during major events such as the Oscars, Grammys and LA Marathon.

Finally, the LA 2024 OCOG will install a technology platform, integrating the ticketing process with the selection of transport mode options, venue by venue, session by session, day by day. In doing so, Games spectators will use modes of transport and roadways based on available capacities, ensuring that the traffic impact on the existing roadways and venue precincts are manageable and that the options are dynamic from preliminary to gold medal events. LADOT and Metro already have trip planning apps that can be leveraged and built upon to offer sophisticated solutions to manage demand, move key stakeholders throughout the ORN, and keep the rest of LA moving.

#### **Objective 4: To use the LA 2024 Transport Strategy as a means to accelerate changed behavior among Angelenos and encourage broader public use of LA's rapidly evolving transport system before, during, and after the Games.**

The Olympic and Paralympic Games offer an incredible opportunity to shift the perception of LA's public transport for visitors and residents alike. LA 2024 is working closely with LA transit authorities to accelerate the Metro Purple Line extension to Westwood and the Automated People Mover at LAX. This acceleration and promotion of public transit through the Games will dramatically impact the accessibility and productivity of public transit options for visitors landing at LAX, residents traveling to and from the airport, and daily commuters in need of public transit options across the City. Encouraging the use of public transit options to keep LA moving during the Games can encourage changed behaviors long after the Games.

For detail on the public transport systems that will play a key role during the Games, please reference **Question 52**.

## 48. DEFINING THE FUTURE OF MOBILITY

As evidenced by our four key objectives in **Question 47**, the LA 2024 Transport Strategy is closely aligned with these core principles of LA’s long-term infrastructure plan — the Los Angeles Metropolitan Transportation Authority’s Long-Range Transport Plan (see **Question 18**).

Furthermore, the Games provide a unique opportunity to promote the current and ever-expanding public transport systems as a way to reduce individual car transport, minimize traffic impacts, and showcase innovative technologies for real-time traffic control.

Leading up to the Games in 2024, at least USD 88 billion of the nearly USD 300 billion planned investment will already be delivered to Los Angeles. The Olympic Route Network and movement of all constituent groups will depend on this extensive public transit network. Some of these already planned major initiatives will support key Games-time transport needs:

- ◆ For visitors arriving to LA, the airport is the key point of entry. In addition to the USD 1.9 billion renovation of the Tom Bradley Terminal already completed, roughly USD 14 billion in airside and landside improvements are planned beyond the nearly USD 300 billion in the Metro Transport Plan.
- ◆ For spectators commuting from the airport, the Automated People Mover will connect the Central Terminal Area to public transit and a new Consolidated Car Rental Facility by 2023.
- ◆ The Crenshaw/LAX transit project will connect LAX to Downtown by 2020.
- ◆ The new 96<sup>th</sup> St Rail Station will also connect LAX to Downtown by 2023.
- ◆ For moving around the City, the extension of the Expo Line to Santa Monica in 2016 will increase access to the Westside from the Games Center in Downtown LA.
- ◆ Additionally, the Downtown Regional Connector will connect distinct cultural areas of Downtown by 2020, providing access to Little Tokyo and the Arts District.

All of these expansions (planned, in process, and not included in the OCOG budget) will clearly serve the Games. They also closely align the City’s objectives for more extensive, more efficient public transport options with LA 2024’s objectives of transporting key constituents and keeping LA moving.

### A CATALYST FOR CHANGE

Hosting the Games in 2024 will also help accelerate additional transport initiatives that benefit the residents of LA and improve Games-time transport. At the federal level, partnership is required to help accelerate two key projects in our LA 2024 Transport Strategy:

- ◆ The Automated People Mover is currently set to be complete in 2023; however, the City of LA is investigating acceleration strategies to ensure Games-time readiness.
- ◆ The extension of the Purple Line to Westwood would ultimately connect Union Station in downtown LA to UCLA in Westwood, which serves as a critical hub for our venues.

Beyond infrastructure, the LA 2024 Transport Strategy is aligned with numerous other objectives in the City’s long-term transport and mobility plans. Regarding innovative technology, the Games will allow LA to leap forward in embracing new technologies for ridesharing and parking, including an autonomous vehicle pilot program. Metro and the LA Department of Transportation are already piloting partnerships with innovative start-ups to improve traffic demand management, public transit payment programs, and real-time traffic info availability.

During the Games, we will leverage additional partnerships to offer on-demand transport services and improve real-time traffic demand management, linking accreditation and VAPPs to innovative navigation and on-demand technologies. These programs and command center improvements will benefit traffic management well after the Games. Furthermore, LA 2024’s commitment to an energy positive Games will allow LA to explore more widespread use of alternative fuel sources, further supporting the City’s commitment to providing more sustainable, more energy efficient public transport options.

Lastly, significant use of these systems during Games time will be critical to encouraging a shift in transport behaviors today. LA 2024 will partner closely with LA transit authorities to launch the largest city-wide public communications campaign for public transportation to date and ensure that LA keeps moving during the Games.

## 49. INVESTING IN A GREATER PUBLIC TRANSPORT MIX

**Table 49** shows an increasing share of public transport travel and a motorization rate for Los Angeles, which is rising slower than the county and country as LA invests in greater public transportation options.

## 50. A HIGHLY CONNECTED GAMES CONCEPT

In the last 30 years, the Los Angeles transportation infrastructure has undergone a dramatic transformation. This transformation will continue over the next 30 years with the Los Angeles County Metropolitan Transportation Authority’s ambitious vision to further expand the public transportation network with a nearly USD 300 billion investment.

**TABLE 49: MOTORIZATION RATE AND PUBLIC TRANSPORT SHARE**

MOTORIZATION RATE	CITY			REGION (LA COUNTY)			COUNTRY		
	2000	2014	2024	2000	2014	2024	2000	2014	2024
Automobile motorization rate (cars per thousand people)	498.6	536.0	562.7	530.5	568.0	594.7	633.7	649.4	660.7
Share (%) of public transport journeys in relation to all motorized journeys	7.3%	10.1%	11.9%	4.8%	6.6%	7.9%	1.8%	2.5%	2.9%

Source: US Census, City of Los Angeles, National Highway Traffic Safety Administration





To North Hollywood

To Union Station

Given the existing infrastructure in LA and the funds already committed to improvements (outside the OCOG budget), no additional permanent works or additional transport infrastructure will be needed for the Games.

**Table 50a** showcases the existing transport infrastructure while **Table 50c** highlights the additional infrastructure already planned. **Tables 50b** and **50d** are not provided as no permanent works or additional infrastructure are needed.

## 51. ACCELERATED PROJECTS AND BEHAVIORAL CHANGES

As detailed in **Questions 18, 47** and **48**, Los Angeles has the largest locally financed transport infrastructure plan in the country. As a result of this investment, Los Angeles will not require any additional transport infrastructure to host the Games.

Hosting the Olympic and Paralympic Games offers two major transport related benefits to LA and the wider metropolitan area:

### 1. ACCELERATE IMPORTANT PLANNED PROJECTS

Accelerated projects would provide Angelenos with greater alternatives to driving sooner. The Purple Line extension to Westwood offers greater public transit access to the Westside and the Automated People Mover at LAX gives travelers direct access to landside public transit options, alleviating stress inside the airport and ensuring greater circulation for pick-up and drop-off areas.

### 2. PROPEL CRITICAL BEHAVIORAL CHANGES IN ANGELENO RESIDENTS

The reliance on public transport options to move LA 2024 spectators around the Games clusters will help demonstrate the ease of travel and quick travel times of public transit options. This accomplishment can showcase the power and efficiency of the system, encouraging dramatic behavioral shifts during and after the Games and turn more LA residents into daily public transit commuters.

## 52. NO ADDITIONAL TRANSPORT INFRASTRUCTURE NEEDED

Los Angeles has an extensive transport infrastructure and a commitment to improving that network over the next 30 years. Given the projects already planned, only existing or planned infrastructure elements (**Table 50a** and **50c**) will be needed to meet all of the transport objectives for the 2024 Olympic and Paralympic Games.

### MOTORWAYS

Once on the ground, Games clients can quickly and efficiently travel to the Olympic Village or other official accommodation on the LA area's superb motorways. Our system already consists of 16 major "Freeways" and over 550km of HOV/HOT Express Lanes. Vehicles with multiple passengers or in some instances, paying a use fee, are allowed to use these lanes. These Freeways will easily be converted to an extensive Olympic Route Network (ORN) system that connect venue clusters within 30-minute drive-time. By Games time, an additional 50km of HOV/HOT lanes will be added, allowing for more bus rapid transit and an even more extensive ORN.

### MAJOR URBAN ARTERIALS

During the Games, major urban arterials offer a convenient alternative to motorways and will play a key role in the ORN, ensuring the fastest, most direct routes to every venue. Today, half of all vehicle trips in the County occur on arterial roadways. During the last decade, significant improvements were made to the roadway system, including the widening of over 160km of major arterials,



signal timing and coordination at over 5,000 intersections and deploying advanced technology to monitor and manage real-time traffic flow. During the Games, LA 2024 will work closely with the Los Angeles Department of Transportation (LADOT) to manage traffic demand and maximize traffic flow.

### BUSES AND BUS RAPID TRANSIT (BRT)

The Los Angeles Metropolitan Transportation Authority (Metro) and the outlying districts and counties operate 3,900 buses on a daily basis for both local and rapid bus services. This expansive bus system will serve spectators and keep LA moving freely during the Games. Some BRT routes have dedicated right of way or dedicated routes along major arterials, such as the Wilshire Blvd Transitway, the Orange Line, and the Silver Line. Leading up to 2024, these particular lines have planned expansions nearing 85km. Additionally, the OCOG will operate additional buses along the major motorways and arterials to augment this system for spectators, as well as provide exclusive bus systems for athletes, officials, and media.

### RAIL AND SUBWAY

As of 2015, the Metro operates and maintains more than 140km of urban rail and 80 associated stations. The rail network includes the Metro Red and Purple Line subways as the backbone of the system with four light rail lines (Metro Blue, Green, Gold and Expo Lines). Metro will expand four Metro rail lines, lengthening the system by 50 percent, to 200km, while opening 27 new rail stations and adding 140 rail cars. The Metrolink suburban rail system will also expand, with an additional 40km of service, using six different lines and servicing 62 stations. All trains service Union Station in Downtown LA, which serves as the primary transportation terminal for connectivity across the City.

Metro bus and rail lines will be the primary mode of transport for spectators and the workforce. For those venues where Metro stops are not within 1km, we will have a direct shuttle service to the closest transit location. Additionally, accessibility for passengers with an impairment is provided by all public transportation services in Los Angeles County.

See **Public Transport Map** on **page 40**.

**TABLE 50A: EXISTING TRANSPORT INFRASTRUCTURE (NO PERMANENT WORKS REQUIRED)**

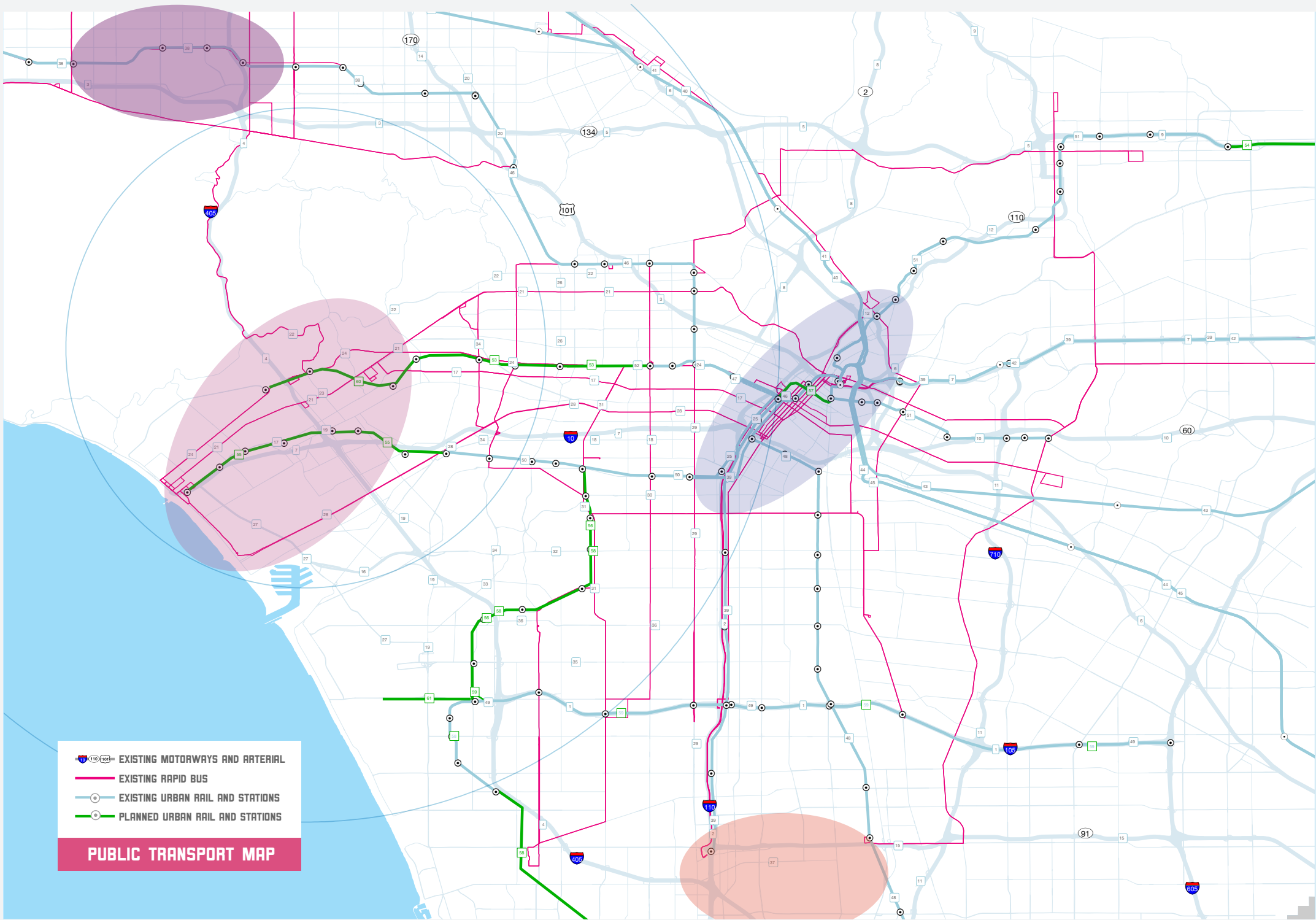
Type of transport infrastructure (motorways, major urban arterial network, suburban rail, subway, light rail public transport systems)	LENGTH (KM) + CAPACITY		CONSTRUCTION/UPGRADE	
	Within city boundary	From city boundary to outlying venues	Construction date	Date of completed upgrade(s)
<b>MOTORWAYS</b>				
1. Interstate 105 Freeway – El Segundo/LAX to Norwalk	29km, 8-10 lanes (2 HOV)	N/A	N/A	N/A
2. Interstate 110 Freeway – San Pedro to Downtown Los Angeles	33km, 10-12 lanes (4 HOV)	N/A	N/A	N/A
3. US 101 Freeway – Ventura County to Downtown Los Angeles	65km, 8-10 lanes	83.6 Km, 8-10 lanes	N/A	N/A
4. Interstate 405 Freeway – Mission Hills (San Fernando Valley) to Orange County	79km, 12-14 lanes (2 HOV)	N/A	N/A	N/A
5. State Route 134 Freeway – Studio City (San Fernando Valley) to Pasadena	22km, 8-10 lanes (2 HOV)	N/A	N/A	N/A
6. Interstate 5 Freeway – Santa Clarita to San Diego	89km, 6-14 lanes (some HOV)	190 Km, 6-14 lanes (some HOV)	HOV Construction Underway	2020
7. Interstate 10 Freeway – Santa Monica to San Bernardino County	76km, 6-12 lanes (some HOV)	N/A	HOV Construction Underway	2021
8. State Route 2 Freeway – Glendale to Silver Lake (Central Los Angeles)	15km, 6-8 lanes	N/A	N/A	N/A
9. Interstate 210 Freeway – Sylmar (San Fernando Valley) to San Dimas	76km, 8-10 lanes (some HOV)	N/A	N/A	N/A
10. State Route 60 Freeway – Riverside County to Downtown Los Angeles	49km, 8-10 lanes	N/A	N/A	N/A
11. I-710 Freeway – Long Beach to Alhambra	36km, 6-8 lanes	N/A	N/A	N/A
12. State Route 110 Arroyo Seco Parkway – Pasadena to Downtown Los Angeles	17km, 6-8 lanes	N/A	N/A	N/A
13. State Route 118 Freeway – Ventura County to Pacoima (San Fernando Valley)	20km, 6-10 lanes (2 HOV)	N/A	N/A	N/A
14. State Route 170 Freeway - Sun Valley (San Fernando Valley) to Studio City (San Fernando Valley)	10km, 6-10 lanes (2 HOV)	N/A	N/A	N/A
15. State Route 91 Freeway – Harbor Gateway / Carson to Riverside and San Bernardino Counties	25km, 8-12 lanes, (2 HOV)	N/A	N/A	N/A
16. State Route 90 Freeway - Marina Del Rey to Culver City	4km, 4-6 lanes	N/A	N/A	N/A
<b>MAJOR URBAN ARTERIALS</b>				
17. Olympic Boulevard, between 14th Street and Olive Street	22km, 4-6 lanes	N/A	N/A	N/A
18. Adams Boulevard, between Interstate 110 and La Cienega	9km, 4 lanes	N/A	N/A	N/A
19. Sepulveda Boulevard, between Interstate 105 and Wilshire Boulevard	16km, 6 lanes	N/A	N/A	N/A
20. Lankershim Boulevard, between Victory Boulevard and US 101 Freeway	8km, 4-6 lanes	N/A	N/A	N/A
21. Santa Monica Boulevard, between Lincoln Boulevard and US 101 Freeway	20km, 4-6 lanes	N/A	N/A	N/A
22. Sunset Boulevard, between US 405 Freeway and US 101 Freeway	16km, 4 lanes	N/A	N/A	N/A
23. Westwood Boulevard, between Wilshire Boulevard and Olympic Boulevard	2km, 4 lanes	N/A	N/A	N/A
24. Wilshire Boulevard, between Lincoln Boulevard and Figueroa Boulevard	24km, 4-6 lanes	N/A	N/A	N/A
25. Figueroa Street, between Martin Luther King Jr. Boulevard and 3rd Street	6km, 4-6 lanes	N/A	N/A	N/A
26. La Brea Avenue, between Hollywood Boulevard and Olympic Boulevard	5km, 4-6 lanes	N/A	N/A	N/A
27. Lincoln Boulevard, between Olympic Boulevard and Sepulveda Boulevard	11km, 4 lanes	N/A	N/A	N/A
28. Venice Boulevard, between Lincoln Boulevard and Figueroa Boulevard	19km, 4-6 lanes	N/A	N/A	N/A
29. Vermont Avenue, between Artesia Boulevard and the 101 Freeway	23km, 4-6 lanes	N/A	N/A	N/A
30. Martin Luther King Jr. Boulevard, between Crenshaw Boulevard and the Interstate 110	6km, 4-6 lanes	N/A	N/A	N/A
31. Crenshaw Boulevard, between Olympic Boulevard and Manchester Boulevard	11km, 4-6 lanes	N/A	N/A	N/A
32. Slauson Avenue, between Crenshaw Boulevard and La Cienega Boulevard	4km, 6 lanes	N/A	N/A	N/A
33. La Tijera Boulevard, between La Cienega Boulevard and Sepulveda Boulevard	3km, 6 lanes	N/A	N/A	N/A
34. La Cienega Boulevard, between Interstate 405 and Santa Monica Boulevard	15km, 6 lanes	N/A	N/A	N/A
35. Century Boulevard, between Sepulveda Boulevard and Interstate 110	11km, 4-8 lanes	N/A	N/A	N/A
36. Manchester Boulevard, between Sepulveda Boulevard and Interstate 110	11km, 4-6 lanes	N/A	N/A	N/A
37. 190th Street, between Interstate 405 and Central Avenue	4km, 4-6 lanes	N/A	N/A	N/A
<b>TRANSITWAYS, SUBURBAN RAIL, SUBWAY AND LIGHT RAIL</b>				
38. Orange Line Bus Transitway – Chatsworth/Warner Center (San Fernando Valley) to N. Hollywood (San Fernando Valley)	29km, 2 lanes BUS ONLY	N/A	N/A	N/A
39. Silver Line Bus Transitway – Harbor Gateway/Carson to El Monte (San Gabriel Valley)	42km, 2-4 HOV lanes shared w/ I-110 & I-10 FWYs	N/A	N/A	N/A
40. Metrolink Ventura County Suburban Rail Line – Ventura County to Downtown Los Angeles	114km, 1-2 tracks	N/A	N/A	N/A
41. Metrolink Antelope Valley Suburban Rail Line – North Los Angeles County to Downtown Los Angeles	123km, 1-2 tracks	N/A	N/A	N/A
42. Metrolink San Bernardino Suburban Rail Line – San Bernardino County to Downtown Los Angeles	90km, 1-2 tracks	N/A	N/A	N/A
43. Metrolink Riverside Suburban Rail Line – Riverside County to Downtown Los Angeles	95km, 1-2 tracks	N/A	N/A	N/A
44. Metrolink Orange County Suburban Rail Line – North San Diego County to Downtown Los Angeles	140km, 2 tracks	N/A	N/A	N/A
45. Metrolink 91 Line – Suburban Rail Line – Riverside and Orange County to Downtown Los Angeles	99km, 2 tracks	N/A	N/A	N/A
46. Metro Red Line Subway – Downtown Los Angeles to North Hollywood (San Fernando Valley)	24km, 2 tracks	N/A	N/A	N/A
47. Metro Purple Line Subway – Downtown Los Angeles to Western Avenue	10km, 2 tracks	N/A	N/A	N/A
48. Metro Blue Line Light Rail – Downtown Los Angeles to Long Beach	34km, 2 tracks	N/A	N/A	N/A
49. Metro Green Line Light Rail – Norwalk to Redondo Beach	32km, 2 tracks	N/A	N/A	N/A
50. Metro Expo Line Light Rail – Downtown Los Angeles to Culver City	14km, 2 tracks	N/A	Extension Underway	2016 See 50c
51. Metro Gold Line Light Rail – East Los Angeles to Downtown Los Angeles Union Station to Pasadena	25km, 2 tracks	N/A	Extension Underway	2016 See 50c
52. Wilshire Bus Transitway – Westlake to West Los Angeles	13km, 2 lanes, PEAK HOUR BUS ONLY	N/A	N/A	N/A





**TABLE 50C: PLANNED TRANSPORT INFRASTRUCTURE**

Type of transport infrastructure (motorways, major urban arterial network, suburban rail, subway, light rail public transport systems)	LENGTH (KM) + CAPACITY		CONSTRUCTION/UPGRADE			
	Within city boundary	From city boundary to outlying venues	Body responsible	Start	End	Source of financing (public/private/joint)
<b>TRANSITWAYS, SUBURBAN RAIL, SUBWAY AND LIGHT RAIL</b>						
53. Metro Purple Line Subway – Line Extension Project from Western Ave. to Beverly Hills	6km, 2 tracks	N/A	Metro	Ongoing	2023	Public
54. Metro Gold Line Light Rail - Line Extension Project from Pasadena to Azusa (San Gabriel Valley)	19km, 2 tracks	N/A	Metro	Ongoing	2016	Public
55. Metro Expo Line Light Rail - Line Extension Project from Culver City to Santa Monica	11km, 2 tracks	N/A	Metro	Ongoing	2016	Public
56. Metro Crenshaw Line Light Rail - New Line Construction Project from Expo Line to Green Line	14km, 2 tracks	N/A	Metro	Ongoing	2019	Public
57. Metro Regional Connector Light Rail - Line Extension Project from Blue and Expo Lines to Gold Line in Downtown Los Angeles	3km, 2 tracks	N/A	Metro	Ongoing	2020	Public
58. K Line (former Metro Crenshaw Line and Green Line West End) Light Rail - Track Extension	14km, 2 tracks	N/A	Metro	TBD	2020	Public
59. L Line (former Metro Green Line and Crenshaw Line South End) Light Rail – Connector between Metro Green Line and Crenshaw Line South End	28km, 2 tracks	N/A	Metro	TBD	2020	Public
60. Metro Purple Line Subway – Line Extension Project from Beverly Hills to Westwood (Segments 2 and 3)	10km, 2 tracks	N/A	Metro	TBD	TBD*	Public
61. Los Angeles International Airport (LAX) Automated People Mover - New Line Project from Central Terminal Area to Metro 96th St. Station and Car Rental Facility	3km, 2 tracks	N/A	LA World Airports	TBD	2023*	Public/Private

\* Currently pursuing acceleration options with the city





 **EXISTING MOTORWAYS AND ARTERIAL**  
 **EXISTING RAPID BUS**  
 **EXISTING URBAN RAIL AND STATIONS**  
 **PLANNED URBAN RAIL AND STATIONS**

**PUBLIC TRANSPORT MAP**



# 1.3.5 ENERGY

## 54. CLEAN, RELIABLE ENERGY

In the United States, the national power infrastructure is comprised of three power grids called “Interconnections”. The Los Angeles system lies within the Western Interconnection that serves a population of approximately 82.2 million and spans more than 4.66 million square kilometers.

The Western Interconnection is comprised of a diverse mix of generation resources varying by geographic area and serves as a national leader in renewable energy generation. Approximately 30 percent of installed wind capacity and 80 percent of installed solar capacity in the United States is located in this interconnection. The Western Energy Coordinating Council (WECC), the authority responsible for the reliability of bulk energy distribution in the region, reports a total generation capacity of 284,300 MW and more than 800 thousand gigawatt-hours of electricity over 200,000km of transmission lines.

Within each grid, local utilities manage the transmission and distribution of energy from regional power stations. LA is powered by the largest municipal utility in the US - the Los Angeles Department of Water and Power (LADWP). The LADWP is a highly reliable power provider and ranks in the top quartile for reliability among peer utilities across the US.

The utility’s power mix consists of renewable energy, natural gas, nuclear, large hydro, and coal sources. LADWP manages over 7,640 MW of generation capacity and supplies more than 24 million megawatt-hours of electricity annually for 1.4 million residential and business customers across the City.

To ensure continued reliability, LADWP has implemented the Power System Reliability Program. This USD 1 billion program is focused on rebuilding infrastructure and proactive maintenance over the next 5 to 15 years.

## 55. POWERED BY THE SUN

The Los Angeles Department of Water and Power (LADWP) currently sources 23 percent of its energy from renewable sources. By 2030, LADWP plans to source 50 percent of its power supply from renewable energy sources. By transforming its power supply, LA is moving toward a clean energy future – a future with more efficient energy use, greater reliance of renewable energy, and zero coal.

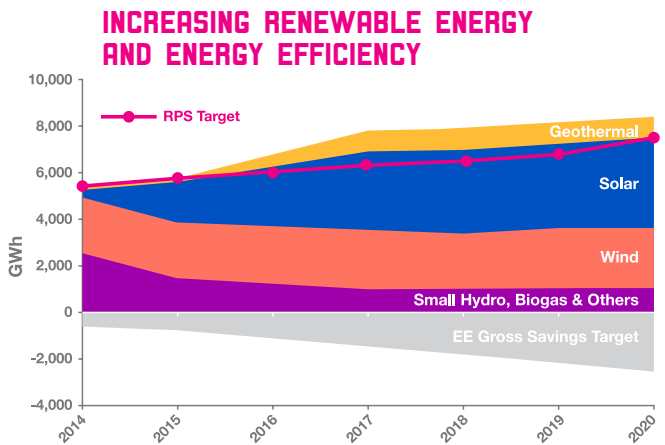
To transform its power supply, LADWP will:

- ◆ Increase energy efficiency by 15 percent by 2020
- ◆ Be coal-free by 2025, and
- ◆ Expand renewable energy to 50 percent by 2030

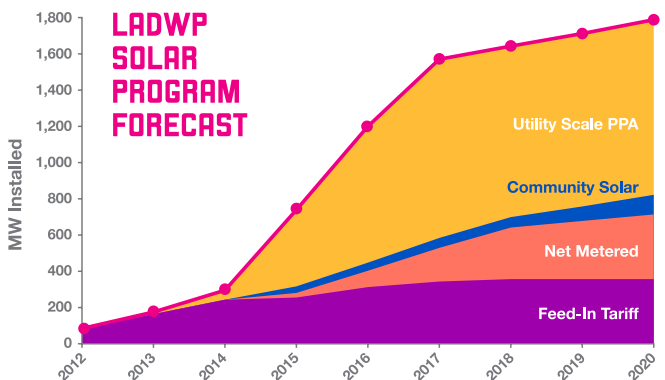
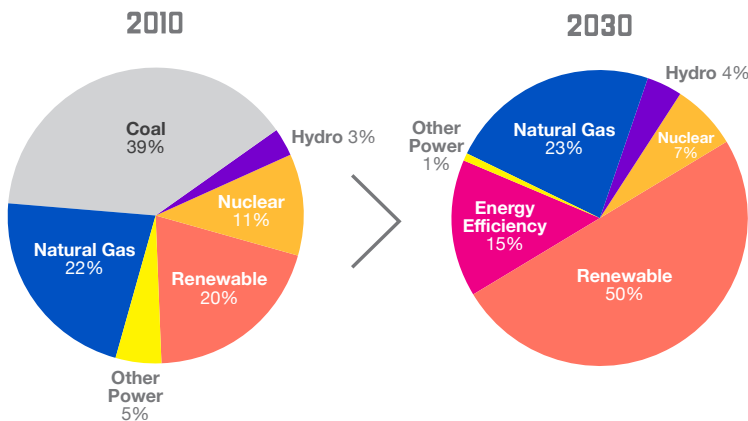
### CURRENT AND FUTURE LADWP ENERGY MIX

LA sources its renewable energy from a variety of projects including hydro, biogas, wind, solar and geothermal generation. LADWP is continually planning new projects to expand its renewable energy portfolio. As the chart below illustrates, solar projects will make up an increasingly large portion of renewable energy sources as LADWP reaches its 33 percent Renewable Portfolio Standard (RPS) target by 2020.

LA has also set ambitious local solar targets as part of its Sustainable City pLAN (the pLAN). The City benefits from almost 300 days of sunshine per year, and has enough rooftop space to hold over 5,500 MW of solar power.

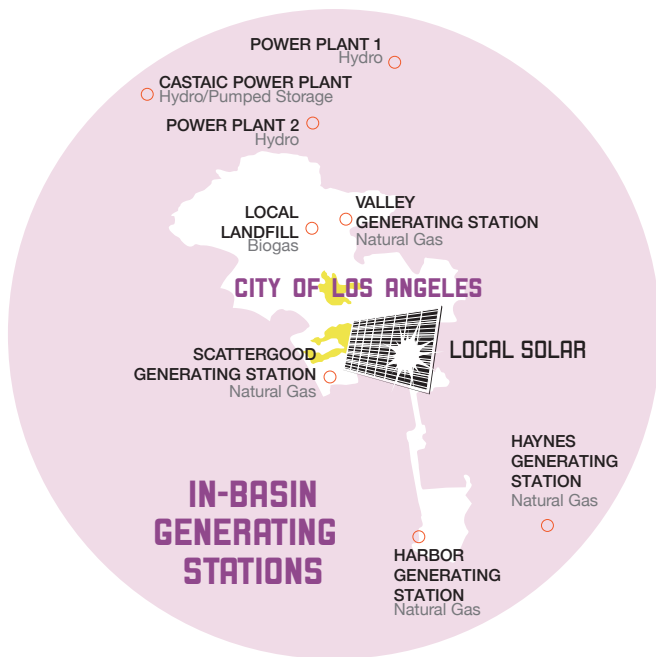


Given this abundant local resource, the pLAN calls for 900 to 1,500 MW of local solar photovoltaic power by 2025. LADWP currently offers two local solar programs, a feed-in-tariff program and a net energy metering program, with a third Community Solar program in development.



As previously detailed in **Question 19**, LA 2024 is exploring the mechanisms needed to be the first energy positive Games in history and solar is a key component of this plan.

## DIAGRAM A



### 56. SECURE AND RELIABLE POWER

The Los Angeles Department of Water and Power (LADWP) is regulated by a number of agencies to ensure a safe and reliable grid and to provide customers with power sourced from clean energy.

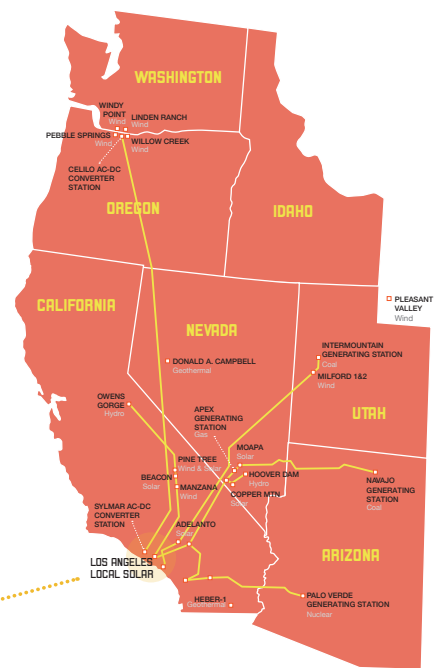
The Federal Energy Regulatory Commission (FERC) is an independent agency that regulates the interstate transmission of electricity, natural gas, and oil. In accordance with the Energy Policy Act of 2005, operators, owners, and users of the bulk power system must comply with FERC-approved reliability standards, including the North American Electric Reliability Corporation (NERC) and Western Electricity Coordinating Council (WECC) reliability standards.

These standards include requirements in the planning, designing, constructing, and cybersecurity protection of electrical facilities to ensure the safe and reliable operation of the electric grid. LADWP is compliant with both NERC and WECC standards.

LADWP also adheres to the California Energy Commission's (CEC) license/certification process. The CEC is the State of California's primary energy policy and planning agency. The CEC's 12-month, one-stop permitting process is a certified regulatory program under the California Environmental Quality Act (CEQA), which includes all requirements of state, local, or regional agencies, as well as federal agencies that issue permits for licensing new facilities.

As a publicly owned utility in the State of California, LADWP is required to use renewable energy resources to produce 40 percent of its power by 2024. LADWP will meet these goals as part of the California Renewables Portfolio Standard Program implemented by the CEC and enforced by the California Air Resources Board (ARB), which is part of the California Environmental Protection Agency.

If LA is awarded the 2024 Games, the Los Angeles 2024 Organizing Committee will ensure a strong working partnership with the LADWP and the regulatory agencies listed above.



### 57. EXPERIENCED POWER SUPPLY AND GENERATION

Located within the Western Interconnection, the Los Angeles Department of Water and Power (LADWP) is the largest municipal electric utility in the nation. In unincorporated areas of the county, other electric utilities provide power to residents and businesses, including several venues within the LA 2024 Games Concept. These venues are currently powered by Southern California Edison — the largest private entity providing power in Los Angeles County. LA 2024 will work closely with all utilities powering our Games Concept.

As shown in **Diagram A**, regional power stations across the Western Interconnection supply power to the Los Angeles basin. The utility's power mix consists of renewable energy, natural gas, nuclear, large hydro, and coal sources. In addition to a number of regional generating stations supplying the City, LADWP is responsible for inspecting, maintaining and operating local power infrastructure. This local infrastructure includes 16 plants for thermal or hydroelectric energy, over 15,000 transmission towers, and over 9,000 kilometers of transmission circuits. Additionally, the distribution system includes 162 distributing stations, 50,000 substructures, 126,000 distribution transformers, and over 320,000 distribution utility poles. For operations and maintenance, the power system budget is nearly USD 4 billion annually.

In 2014, LADWP updated its Integrated Resource Plan, which provides the department and City with a roadmap for eliminating coal while maintaining a reliable power supply in a cost-effective manner. Over the next 15 years, LADWP will rebuild and modernize its power grid.

With the passage of Senate Bill 350 in October 2015, utilities in California will need to source 50 percent of energy from renewable sources by 2030. By 2024, new energy projects and infrastructure will be built in California to expand access to renewable energy sources, including wind and solar projects. Additionally, a new renewable transmission line that connects Kern County to Los Angeles County will provide up to 2,000 MW of additional power transmission capacity and access to wind and solar resources. No additional permanent infrastructure is required to be built for the Games.

In collaboration with local utilities, LA 2024 is committed to showcasing long-term planning efforts, leveraging new technologies, and exploring renewable energy options that contribute to resilience and reliability long after the Games.



# 1.3.6 TELECOMMUNICATIONS

## 58. THE EPICENTER OF GLOBAL TELECOMMUNICATIONS TECHNOLOGY

LA 2024’s technology assets are second to none. Eleven of the top global technology firms are located in Los Angeles, California or on the US West Coast. LA 2024 will harness the intellectual firepower of these firms to help transform the the 2024 Olympic and Paralympic Games.

Most global ICT firms have offices, research and development units, and/or other significant presence in and around LA. This large and diverse ICT market employs more than 368,500 people and is growing everyday. Microsoft, Yahoo, Apple, IBM, and other long-established ICT companies employ a significant number of this local workforce. In line with the growth of this booming sector, Google is rapidly expanding its presence with the addition of 8,000 employees on a new 5.7 hectare campus. These companies provide both local and global products and services ranging from mobile communications, hardware development, software development, internet search capabilities and internet backbone/broadband communications hardware, to chip technology and online retailing and beyond.

The City of LA is pursuing large-scale broadband communications infrastructure improvements through a number of initiatives. CityLinkLA has created a catalog of all city assets applicable to broadband and is currently offering them under a uniform lease agreement. The City is putting Wi-Fi and cellular (LTE) into all of the Metro stations and lines, as well as Wi-Fi on to the two largest bus systems (Metro and DASH). Wi-Fi is offered along the city streets by a number of providers with more than 7,000 hotspots currently deployed. The current broadband speeds in LA average at around 55 Mbps and are expected to increase rapidly over time.

LA’s telecommunications industry is regulated at the US federal level by the Federal Communications Commission (FCC), at the state level by the Public Utilities Commission (PUC), and at the local level (through building permits and other methods) by the cities and the county.

The Federal Communications Commission (FCC) is mandated by the US Congress to manage the nation’s highly valuable frequency resource. In line with this responsibility, FCC allocates frequencies to various entities to serve their core operational needs. In licensing frequencies to these organizations, the FCC normally stipulates the terms of operations to include things like operational frequency, power level, antenna height above the terrain, mode of operation, etc. The mode of operation can be analog, digital, conventional, or trunked.

Organizations plan, design, implement and manage their own trunked radio infrastructure as per FCC licensing requirements. In other words, under license by the FCC, various organizations implement “trunked radio services” to meet their operational and functional requirements. It’s worth noting here that some organizations may decide to pool their resources (frequencies, funds, facilities, staffing, etc.) to build a shared trunked radio system that would support their operations.

## 59. EXTENSIVE, WORLD-CLASS TELECOMMUNICATIONS AND TECHNOLOGY INFRASTRUCTURE

In recent years, the United States telecommunications sector has been linked to the growth, innovation, and massive changes across all major industries. Major players in this industry span wireless and wired carriers, network equipment, infrastructure companies, and device manufacturers. Examples of key players in this space include AT&T, Verizon, T-Mobile, Sprint, Level 3 Communications and US Cellular.

The diagrams below provide a high-level overview of the extensive, world-class telecommunications and technology infrastructure in the United States. These diagrams focus on connectivity across infrastructure technologies and the penetration of providers.

### NUMBER OF PROVIDERS

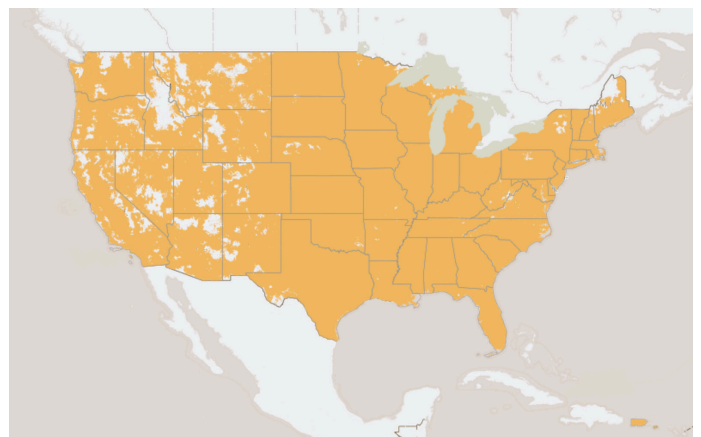
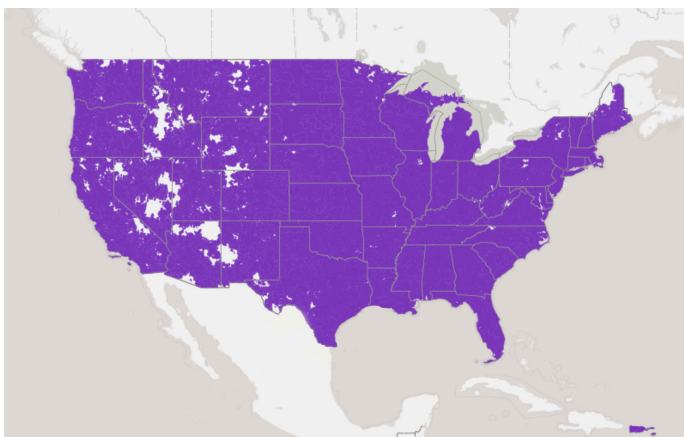
This map displays the number of different broadband providers offering service across the country, as well as the areas unserved by any provider. This map displays service if the reported maximum advertised download speed meets or exceeds basic broadband.

Examples:    

### TYPE OF TECHNOLOGY AVAILABLE

This map displays broadband technologies offered to end users (e.g., DSL, cable, wireless, fiber, etc).

Detail: Asymmetric XDSL, Symmetric XDSL, Other Copper Wireline, Cable Modem DOCSIS 3.0, Cable Modem Other, Fiber to End User, Terrestrial Fixed Wireless-Unlicensed, Terrestrial Fixed Wireless-Licensed, Terrestrial Mobile Wireless.



## 60. THE MOST DYNAMIC AND INNOVATIVE ICT ENVIRONMENT IN THE WORLD

The United States, and the State of California in particular, represents one of the most dynamic and innovative ICT environments in the world. There are numerous current and planned ICT initiatives across the country, for example:

- ◆ The White House Office of Science and Technology Policy’s (WTOSTP) work on data, cybersecurity, and other initiatives designed to improve ICT as it relates to cities.
- ◆ The MetroLab Network, a network of more than 20 city-university partnerships committed to bring together university researchers and city decision-makers to research, develop, and deploy “RD&D” technologically and analytically-based solutions to improve city infrastructure, services, and other public sector priorities.
- ◆ A wide variety of private initiatives also exist across the US ICT landscape. Participants such as Google, Apple, Qualcomm, Intel, IBM, and General Electric are working on driving technology forward for mobile, cloud, transportation, and other industries.

The City of Los Angeles was recognized in 2015 as the #1 Digital City by the US League of Cities, and as the leading city in the US working on cybersecurity, open data, and other ICT initiatives. LA is also a significant player in the developing Internet of Things (IoT), in mesh networks, and in using data and connectivity to deliver services.

In December 2015, Google and Mayor Eric Garcetti announced that Google Fiber will explore LA as the next market for the firm’s high speed internet service. The announcement follows the unveiling of AT&T’s plan to introduce its GigaPower fiber optic broadband service to LA. Fiber optics are the fastest form of broadband technology, offering speeds up to 1,000 megabits per second.

These announcements underline LA’s commitment to being America’s most connected and innovative city. These plans have the potential to offer affordable internet connectivity that is potentially hundreds of times faster than what is currently available to residences and small to medium-sized businesses in LA—which would be the nation’s largest market to date for both services. Access to high-speed internet is essential to the City’s future economic competitiveness, and will drive LA’s entertainment, tech, and entrepreneurial activity.

The City of LA is a leader in the adoption of ICT and a proactive partner of public and private entities looking to harness ICT to build smarter cities – LA 2024 will be the perfect partner for the IOC as it seeks to deliver a Games for the future.

## 61. A CITY CONNECTED

Los Angeles has a modern, fully mature telecommunications marketplace, well suited for its fast growing urban population. It is the largest municipal cellular market in the United States with widespread penetration of 4G (LTE) across the region and universal geographic access to 3G and 4G across the region.

Four major cellular operators exist at present – AT&T, Verizon, Sprint, and T-Mobile – all of whom have or are investing in infrastructure upgrades to support LTE, LTE-Advanced, and carrier aggregation. Most of these private companies are in the process of nearly doubling the number of macro and smaller cellular transceiver sites in the region.

LA aspires to being the most connected city in the nation and continues to invest toward achieving that goal. LA recently launched the first commercial deployment of LTE small-cell-enabled streetlight poles that will improve cellular connectivity on city streets. Additionally, the City is putting LTE and Wi-Fi into the Metro lines and stations as part of a larger set of improvements that include LAX airport. These upgrades will be completed by the end of 2016. By increasing connectivity on public transport, the City can rethink operations. For example, the LA Department of Transportation (LADOT) just launched a mobile payment app for LA DASH buses.

The City expects to see continuous high levels of investment into communications infrastructure for the foreseeable future. By 2024, LA expects widespread emergence of 5G (future versions of LTE) and other communications developments. Verizon is beginning field tests for its 5G technology (LTE advanced and carrier aggregation) and some level of commercial development is planned to begin in 2017.

If LA is awarded the opportunity to host the Olympic and Paralympic Games in 2024, the City and LA 2024 will leverage cutting-edge technology, widespread access to wireless services, and innovative partnerships to showcase the most technologically advanced Games. Many of the world’s leading technology companies are based in California and such proximity to these world-class innovators gives LA a unique opportunity to rethink Games-time connectivity.

## 1.3.7 MEDICAL SERVICES AND EMERGENCY RESPONSE

### 62. EXCEPTIONAL MEDICAL CARE

Los Angeles and the surrounding region are served by many of America’s premiere hospitals and medical facilities. Athletes, the Olympic family, and all spectators will be in close proximity to world-class medical care no matter where they compete, watch, or engage in the LA 2024 Olympic experience.

Area	Hospitals	Beds	Beds per 1,000 ppl	Source
City of Los Angeles	30	6,828	1.8	American Hospital Directory (per capita estimate based on current population estimates from Census)
Los Angeles County	90	24,282	2.4	California Healthcare Foundation
California	386	81,729	2.1	California Healthcare Foundation

## 63. HOSPITALS FOR THE GAMES

**TABLE 63: HOSPITALS**

Hospital Name	Hospital Type (Main, Teaching, Specialist)	Distance from Olympic Village (in km)	Distance to Closest Cluster or Venue (in km)	Public or Private	Number of beds	Departments by Specialty	Cluster/Venue
Ronald Reagan UCLA Medical Center	General Acute Care: Main + Specialist	0km	0km	Private	540	Level 1 Trauma Center, Emergency Services, Intensive Care, Neuropsychiatric Care, Surgical Care, Cardiac, Pediatrics	Coastal
Cedars Sinai Medical Center	General Acute Care: Main + Specialist	6.4km	6.4km	Private	886	Level 1 Trauma Center, Emergency Services, Sports Medicine, Orthopedic Center, Heart Center, Surgical Care	Coastal, Hollywood
LAC+USC Medical Center	General Acute Care: Teaching + Specialist	30.5km	8.0km	Public	676	Level 1 Trauma Center, Emergency Services, Burn Center, Level 3 Neonatal Intensive Care Unit, Neurotrauma Center	Downtown
Harbor UCLA Medical Center	General Acute Care: Teaching	30.7km	6.4km	Public	453	Level 1 Trauma Center, Emergency Services, Biomedical Research, Orthopedic Surgery, Surgical Care, Neurology	Stubhub/Port
Long Beach Memorial Hospital	General Acute Care: Main + Specialist	40.5km	14.5km	Private	458	Emergency Services, Surgical Care, Wound Center, Heart & Vascular Institute, Stroke Center, Imaging Center, Disaster Center	Stubhub/Port
Ventura County Medical Center	General Acute Care: Teaching + Specialist	90.4km	26.2km	Private	242	Level 2 Trauma, Emergency Room, Pediatric Specialty Care, Surgical Specialty Care	Casitas

## 64. A SAFE AND HEALTHY ENVIRONMENT

The Los Angeles County Department of Public Health (DPH) is the primary entity responsible for enacting and planning health-related programs. The County’s public health staff are world-class professionals who are adept at disease prevention, disease control, health promotion, health advocacy, and health improvement strategy.

Some of the DPH-led programs and activities that focus on the protection against illness, epidemic, and health-related emergencies include:

- ◆ Monitoring infectious diseases globally
- ◆ Managing an early warning electronic disease and laboratory reporting system
- ◆ Issuing health alerts to doctors, veterinarians, hospitals and laboratories
- ◆ Working to prevent and control infections acquired in healthcare settings
- ◆ Operating a state-of-the-art testing laboratory 24/7 for disease outbreaks
- ◆ Providing vaccines to the public to protect against preventable diseases
- ◆ Providing a comprehensive health emergency plan for rapid deployment of staff to provide medication, vaccines and resources, and
- ◆ Collaborating with local community to engage neighborhoods in preparedness planning

DPH also coordinates numerous programs and initiatives that promote community health, combat common health risks like obesity, ensure consumer product safety, and showcase leadership in health improvement. Public health agencies and public health professionals have worked together across multiple agencies at the local, state, and federal level to counteract outbreaks and ensure earlier detection and treatment.

In 2014, a small measles outbreak in LA and Orange County impacted about 40 people. LA actively worked with area hospitals, Orange County, and state and federal agencies to track the outbreak and provide information to the public. Following the 2014 Ebola outbreak in West Africa, heightened city monitoring activities and coordination efforts in response to global concerns showed that the LA healthcare and public health systems are well positioned and ready to respond to emerging diseases and epidemics. Lastly, DPH efforts have contributed to a significant decrease in smoking in Los Angeles County, which now has one of the lowest levels of smoking in California as well as the United States.

DPH is the only public health department in the nation with an established, daily partnership with the FBI. This unique partnership requires high levels of security clearance and quality public health expertise to effectively support rapid assessment of potential health-related terrorist or criminal acts.

## 65. STRONG PUBLIC HEALTH PARTNERS

The Los Angeles County Department of Public Health (DPH) is the agency responsible for protecting the health of the residents and visitors to Los Angeles County, and serves as the main coordination body to track, monitor, and counter epidemiological risks.

DPH actively monitors and controls communicable disease, conducts syndromic surveillance, and routinely performs other epidemiological assessments. DPH coordinates with hospitals, regional partners, the California Department of Public Health, and the Centers for Disease Control and Prevention (CDC) to share information and ensure that any emerging epidemiological risks are noticed and counteracted as quickly as possible.

The Centers for Disease Control and Prevention is one of the most advanced public health agencies addressing epidemiological risks in the world. LA public health professionals routinely work with the CDC to monitor and respond to local situations and to assist in national and international investigations and research.

LA is also home to the federal Biowatch Actionable Result program, alerting local and federal programs if biological agents are detected. This program is executed in coordination with DPH, the CDC, the Department of Homeland Security, the Federal Bureau of Investigation, and the Environmental Protection Agency.

During special events, the DPH works closely with its public safety partners, sharing threat information and performing surveillance of both natural and intentional biological threats. During such events, the Los Angeles region also pre-deploys its Joint Hazard Assessment Teams (JHAT) on site for atmospheric monitoring, response and mitigation.

The JHAT is a multi-agency, multi-discipline group of specialists with advanced technology and training for rapid reconnaissance to provide operational guidance to the Unified Command. The JHAT embeds detectors throughout the facilities to monitor and provide live streaming situational awareness and rapid investigation/identification of Chemical, Biological, Radiological, Nuclear, and Explosives (CBRNE) threats and critical hazards.

In the lead up to, and during the Games, LA 2024 will work in partnership with these groups to ensure a healthy environment for everyone.

## 66. STATE-OF-THE-ART EMERGENCY RESPONSE ASSETS AND INFRASTRUCTURE

The Los Angeles region has a state-of-the-art public safety response and recovery infrastructure.

The City's public safety Departments maintain Emergency Operations Guides memorializing emergency-related policies and procedures, incident checklists for specific disasters (including earthquakes, evacuation, wildfires, storms and floods), field level response activities, command level response and management activities, Department Operations Center responsibilities, Emergency Operations Center responsibilities, mutual aid processes, and military support of civil authorities.

The Los Angeles Police Department (LAPD) trains and works in conjunction with the Los Angeles Fire Department (LAFD), the Emergency Management Department (EMD), the Department of Transportation, Los Angeles World Airports, the Department of Recreation and Parks, and other city departments that have a role in emergency response. The Chief of Police is the permanent Chair of the Mayor's Emergency Operations Board, and the Commanding Officer, Counter-Terrorism and Special Operations Bureau, is a member of the City's Emergency Management Committee.

As a matter of policy, the LAPD, LAFD, and the Los Angeles Department of Transportation, work in Unified Command in order to manage the many major special events that occur frequently in LA. These events provide practical application training ground for the city departments to work together in Unified Command in preparation for the response to natural disasters.

Examples of recent events include:

- ◆ Academy Awards (annual)
- ◆ Los Angeles Marathon (annual)
- ◆ Los Angeles Lakers Championship Parade (basketball)
- ◆ Los Angeles Kings Championship Parade (ice hockey)
- ◆ Los Angeles Dodgers Play Off Games (baseball)
- ◆ Los Angeles Lakers and Los Angeles Kings Play Off Games
- ◆ President of the United States visits and other Very Important Persons visits
- ◆ 2015 Special Olympics World Games

In summary, LA's highly skilled and experienced public safety agencies and partners are well prepared to plan for major events in LA, respond to natural disasters and implement evacuations if required.





1.4

**COUNTRY  
ANALYSIS**



## 1.4.1 POLITICAL AND GOVERNANCE FRAMEWORK

### 67. A STRONG AND COORDINATED POLITICAL STRUCTURE

Historically, the governmental structure of the United States has proven effective in hosting successful Olympic and Paralympic Games. All levels of government are aligned behind the LA 2024 candidature, and binding agreements assure the effective coordination of governmental authorities. The City of Los Angeles will be the primary public authority responsible for the Games. The City will coordinate and act in partnership with the IOC, the USOC, the LA 2024 Organizing Committee, the United States, the State of California and other regional authorities.

#### UNITED STATES GOVERNMENT

The United States Constitution sets the framework for the government structure in the United States. It divides power into three branches of government:

1. The legislative branch (comprised of the 100 members of the US Senate and 435 members of the US House of Representatives) which makes laws.
2. The executive branch (led by the President) which carries out the laws.
3. The judicial branch (comprised of a network of courts, of which the Supreme Court is the highest court), which interprets the law.

#### STATE OF CALIFORNIA GOVERNMENT

The California Constitution similarly divides the government of California into executive, legislative and judicial branches. It also authorizes the establishment of counties and cities as subdivisions of the state. The Governor of California is responsible for executing the laws of California with assistance from executive officers and agencies. The California Assembly (80 members) and Senate (40 senators) are vested with statewide lawmaking powers.

#### COUNTY OF LOS ANGELES GOVERNMENT

Los Angeles County is charged with providing numerous services that affect the lives of all residents including law enforcement, tax collection, public health protection, public social services, and elections. A five-member Board of Supervisors governs the County of Los Angeles as its executive and legislative head.

#### CITY OF LOS ANGELES GOVERNMENT

The City of LA is a chartered city within the County of Los Angeles. The Mayor of LA holds executive authority to set policies and commit city resources, services and facilities. The Mayor also appoints the leadership of city departments and agencies, including those that will play key roles in the 2024 Games, such as the Los Angeles Police Department and the Los Angeles Department of Transportation.

The Los Angeles City Council, composed of 15 members, holds legislative powers that include the authority to acquire property, undertake infrastructure improvements, appropriate funds, and approve the City's budget.

As the lead governmental authority, the City will participate in nearly every aspect of the Games, including overseeing the completion of Games-related projects and the provision of public services.

### 68. POLITICAL PARTIES IN THE UNITED STATES

At the national, state and local/municipal levels of government in the United States, two political parties dominate all elections, legislation and decision making: the Democratic Party and the Republican Party. In general, elections in the US are won by plurality, or “winner-takes-all”, so there is no opportunity to form governing political coalitions. Cross-party cooperation often takes place through caucuses formed for specific issues, such as the Congressional Sportsmen's Caucus and the National Parks Caucus.

#### FEDERAL POLITICS

Currently, the House of Representatives is composed of 247 Republicans and 188 Democrats; the Senate comprises 54 Republicans, 44 Democrats, and 2 Independents, who caucus with Democrats. President Barack Obama is a Democrat.

#### CALIFORNIA OFFICES

In the state government, Democrats hold 78 of 120 seats in the legislature (26 of 40 in the Senate, 52 of 80 in the Assembly). Governor Edmund (“Jerry”) Brown Jr. is a Democrat.

#### LOS ANGELES POLITICS

Although local elections in California are non-partisan, currently about a third of voters in Los Angeles County register as Democrats compared to only one fifth of the voters who register as Republicans.



## 71. STRONG PARTNERSHIPS FOR A SUCCESSFUL GAMES

### GOVERNMENT PARTNERSHIPS

During the Candidature Process and beyond, cross functional “City Operations” teams as well as city, county and state park departments will plan and manage services from the City of Los Angeles and supporting jurisdictions for the Games. In addition, LA 2024 will work closely with city, state, regional and federal agencies with respect to the planning and delivery of transportation and security for the Games.

The athlete experience will be enhanced through early coordination with a variety of federal agencies (including the Department of Homeland Security, Immigration and Customs Enforcement, and the Departments of Labor and State). World-class healthcare services for the athletes, officials and the broader Olympic family will be provided by LA’s leading hospitals, physicians and healthcare providers in coordination with city and state agencies. First response care for spectators and visitors will similarly be administered through partnerships with city, county and state emergency services providers.

### NON-GOVERNMENT PARTNERSHIPS

LA 2024 will maintain a high level of public support by engaging organizations in the business community, particularly in the high-tech and start-up industries, the artistic community, environmental leaders, and civil society leaders. Local sports and entertainment professionals will also play a primary role in the planning and delivery of the Games. In particular, venue owners, such as the University of Southern California, University of California - Los Angeles, Anschutz Entertainment Group, Inc., and The Madison Square Garden Company will provide superb facilities and highly experienced staff support for the Games.

To insure the delivery of clean competitions, LA 2024 will consult with and seek advice from the USOC and USADA, who will be key partners throughout the planning and delivery phases.

## 69. FULL POLITICAL SUPPORT

TABLE 69: POLITICAL PARTIES

Political Party	Percentage of National Level Seats Held	Percentage of Regional Level Seats Held	Percentage of Local Seats Held	Position on the Staging of the Games in 2024 (support/opposition/neutral)
Democratic	45%	65%	77%	Support
Republican	55%	35%	23%	Support

#### Principle reasons for support/opposition

The promotion of sport and the Olympic ideals, and the opportunity to advance the Olympic Movement in the United States and around the world; to realize long-term social and sporting legacies and benefits for the host city, state and country.

## 70. FUTURE LA, CALIFORNIA AND US ELECTIONS

The following city, state and national elections will be held between February 2016 and the start of our proposed dates for the LA 2024 Olympic and Paralympic Games:

Date	Election
November 8, 2016	United States President United States Senate (34 of 100 members) United States House of Representatives (all 435 members) California Senate (20 of 40 members) California Assembly (all 80 members)
May 16, 2017	City of Los Angeles Municipal General Election (Mayor and 8 of 15 City Council members)
November 6, 2018	United States Senate (33 of 100 members) United States House of Representatives (all 435 members) California Governor California Senate (20 of 40 members) California Assembly (all 80 members)
November 3, 2020	United States President United States Senate (33 of 100 members) United States House of Representatives (all 435 members) California Senate (20 of 40 members) California Assembly (all 80 members) City of Los Angeles Municipal General Election (7 of 15 City Council members)
November 8, 2022	United States Senate (33 of 100 members) United States House of Representatives (all 435 members) California Governor California Senate (20 of 40 members) California Assembly (all 80 members) City of Los Angeles Municipal General Election (Mayor and 8 of 15 City Council members)

## 72. DELIVERING A LASTING LEGACY

The LA 2024 Organizing Committee will create an Olympic and Paralympic Legacy Department (OPLD) for the detailed planning and initial delivery of the legacy programs that flow from the 2024 Games. In its planning and delivery execution, the OPLD will partner with the Parks and Recreation Department of the City of Los Angeles and the LA84 Foundation, the principle non-government entity that has successfully managed the legacy programs generated by the endowment of the Los Angeles 1984 Olympic Games.

Since the LA84 Foundation has created world-class standards in the management and consistent delivery of legacy programs in youth sport development, the cultivation of coaches and sports/event management talent, and community-based sports development programs in Los Angeles, LA 2024 plans to build on the success of that model through its legacy planning. By broadening its outreach in partnership with the LA’s Parks and Recreation Department and the USOC, LA 2024 will help become a catalyst to expand the proven sports education and participation model within the City and across the country.

On the local level, LA84 has also created a significant legacy in the promotion of the Olympic Movement and its values through symposia and seminars on an annual basis. LA 2024 plans to extend and expand this legacy as well, drawing a broader academic and creative community into the mix to help examine the importance of the Olympic Movement to our world and explore the ways in which its inspiring stories can be more effectively communicated to civil society 24/7, 365 days a year.



On a national level, LA 2024 plans to partner with the USOC and US Paralympics to develop legacy plans that empower youth sports development outreach across the country through existing partnerships with multi-sport organizations, outlined in **Question 35**.

### 73. EXPERIENCED HOSTS PAPAL VISIT TO THE UNITED STATES 2015

The Papal visit to the United States in September 2015 drew more than a million attendees over the course of four days in three American cities (Washington, D.C., New York and Philadelphia). The visit was coordinated through the efforts of The World Meeting of Families – Philadelphia, a non-profit entity. The events in the three cities were collectively designated as a National Special Security Event (NSSE) by the Secretary of Homeland Security. This designation is reserved for major events in the US which require heightened security and the cooperation of law enforcement agencies and public safety officials at all levels (local, state and federal), including, among others, the Secret Service, Federal Bureau of Investigation, Department of Health and Human Services, Food and Drug Administration, and the Department of Defense. During any NSSE, the cooperating government agencies form a multi-agency commission and work together with the event organizers to provide a safe and secure environment for heads of state, other dignitaries, the event participants, and the general public. The 2002 Salt Lake City Olympic Winter Games were designated NSSE, and it is expected that the 2024 Olympic Games would receive NSSE designation as well.

### 2015 SPECIAL OLYMPICS WORLD GAMES

The 2015 Special Olympics World Games were hosted in Los Angeles from July 25 to August 2, 2015. A total of 165 countries were represented by approximately 6,500 athletes and 2,000 coaches, aided by 30,000 volunteers and drawing hundreds of thousands of spectators. LA 2015, the official Organizing Committee, was established as a non-profit entity.

Similar to the Papal visit, the World Games required government cooperation relating to security matters. The World Games were collectively designated by the Secretary of Homeland Security as a Special Event, with an assessment rating of SEAR II (a rating lower than an NSSE), which nevertheless produced close coordination between federal, state, and local authorities.

### ARRANGEMENTS FOR 2024 OLYMPIC GAMES

The LA 2024 OCOG will be independently organized as a 501(c)(3) non-profit entity. Similar to the non-profit entities which organized the Papal visit, the World Games and previous Olympic Games in the US, the OCOG will privately finance the Games through donations, corporate partnerships and suppliers, licensing and ticket sales in a nationwide marketing program. The OCOG will seek NSSE designation for the Games, and will work closely with all levels of government to ensure cooperation on all major security and logistical matters. The NSSE model has proven very effective as a platform for multi-agency engagements in securing major events.

## 14.2 ECONOMIC ANALYSIS

### 74. THE ECONOMIC STRENGTH TO DELIVER

The City of Los Angeles, the State of California and the United States of America can be reasonably expected to have the economic means to host the Games and derive benefits from doing so.

**Table 74** details past economic data and an economic forecast for the City of LA, LA County, the State of California, and the US.

LA 2024 has also commissioned an initial Games economic impact study to be jointly prepared by Loyola Marymount University’s Center for the Study of Los Angeles, and Beacon Economics, an

independent research and consulting firm dedicated to delivering objectively-based economic analysis. Preliminary analysis is demonstrating that there will be substantial positive economic and social impact driven by hosting the Olympic and Paralympic Games in Los Angeles in 2024; however, many inputs to the report will be provided through work completed in Stage 2 of the IOC process. The study is in progress and will be refined throughout the further development of LA 2024’s master planning and budgeting.



## TABLE 74: ECONOMIC DATA

### UNITED STATES

Year	Nominal GDP (\$ Billions)	Nominal GDP per capita	Annual inflation rate (US GDP Deflator)	Annual [Nominal] GDP growth rate
2006	13,855.9	46,279.1	3.1%	5.8%
2007	14,477.6	47,999.4	2.7%	4.5%
2008	14,718.6	48,406.9	1.9%	1.7%
2009	14,418.7	46,965.5	0.8%	-2.0%
2010	14,964.4	48,373.7	1.2%	3.8%
2011	15,517.9	49,802.1	2.1%	3.7%
2012	16,155.3	51,463.9	1.8%	4.1%
2013	16,663.2	52,710.0	1.6%	3.1%
2014	17,348.1	54,407.1	1.6%	4.1%
2015	17,951.6	55,859.7	1.0%	3.5%
2016*	18,617.3	57,461.6	1.3%	3.7%
2017*	19,469.0	59,606.4	1.8%	4.6%
2018*	20,452.1	62,116.1	2.0%	5.0%
2019*	21,504.5	64,795.2	2.0%	5.1%
2020*	22,597.1	67,554.2	2.0%	5.1%

Source of data: US Department of Commerce and Beacon Economics

### CALIFORNIA

Year	Nominal GDP (\$ Billions)	Nominal GDP per capita	Annual inflation rate (US GDP Deflator)	Annual [Nominal] GDP growth rate
2006	1,869.0	51,520.0	3.1%	6.2%
2007	1,952.0	53,358.0	2.7%	4.4%
2008	1,997.2	54,165.5	1.9%	2.3%
2009	1,915.7	51,638.2	0.8%	-4.1%
2010	1,964.6	52,611.8	1.2%	2.6%
2011	2,035.3	54,119.4	2.1%	3.6%
2012	2,124.1	56,041.3	1.8%	4.4%
2013	2,215.7	57,996.2	1.6%	4.3%
2014	2,305.9	59,820.9	1.6%	4.1%
2015	2,429.8	62,407.1	1.0%	5.4%
2016*	2,522.9	64,117.7	1.3%	3.8%
2017*	2,639.7	66,386.5	1.8%	4.6%
2018*	2,784.9	69,323.4	2.0%	5.5%
2019*	2,942.2	72,510.3	2.0%	5.6%
2020*	3,104.0	75,756.6	2.0%	5.5%

Source of data: US Department of Commerce and Beacon Economics

### LOS ANGELES COUNTY

Year	Nominal GDP (\$ Billions)	Nominal GDP per capita	Annual inflation rate (US GDP Deflator)	Annual [Nominal] GDP growth rate
2006	517.6	52,908.7	3.1%	5.9%
2007	545.6	55,810.5	2.7%	5.4%
2008	570.6	58,254.9	1.9%	4.6%
2009	546.3	55,710.7	0.8%	-4.3%
2010	550.0	55,959.6	1.2%	0.7%
2011	557.4	56,452.7	2.1%	1.3%
2012	581.6	58,421.7	1.8%	4.3%
2013	599.7	59,851.1	1.6%	3.1%
2014	626.9	62,217.9	1.6%	4.5%
2015	648.5	63,983.9	1.0%	3.4%
2016*	670.6	65,717.3	1.3%	3.4%
2017*	697.6	67,869.7	1.8%	4.0%
2018*	728.0	70,336.4	2.0%	4.4%
2019*	760.8	73,007.0	2.0%	4.5%
2020*	794.9	75,785.9	2.0%	4.5%

Source of data: US Department of Commerce and Beacon Economics

### CITY OF LOS ANGELES

Year	Nominal GDP (\$ Billions)	Nominal GDP per capita	Annual inflation rate (US GDP Deflator)	Annual [Nominal] GDP growth rate
2006	266.3	70,651.3	3.1%	6.7%
2007	286.4	76,097.7	2.7%	7.6%
2008	304.7	80,715.9	1.9%	6.4%
2009	286.3	75,688.9	0.8%	-6.0%
2010	294.4	77,584.4	1.2%	2.8%
2011	294.0	77,221.3	2.1%	-0.1%
2012	302.7	78,906.7	1.8%	3.0%
2013	321.9	83,061.9	1.6%	6.3%
2014	340.4	86,965.0	1.6%	5.8%
2015	349.0	88,187.5	1.0%	2.5%
2016*	362.1	91,003.9	1.3%	3.8%
2017*	378.0	94,421.2	1.8%	4.4%
2018*	395.8	98,296.2	2.0%	4.7%
2019*	415.0	102,479.5	2.0%	4.9%
2020*	435.1	106,840.0	2.0%	4.8%

Source of data: Beacon Economics

\* Projected

## 14.3 SAFETY AND SECURITY

### 75. A ROBUST RISK MITIGATION STRATEGY

The Chertoff Group has completed an analysis in accordance with ISO 31000 of the general risks and mitigation strategies associated with Los Angeles. Please reference the security analysis prepared by The Chertoff Group submitted separately.

### 76. A COMPREHENSIVE NETWORK OF SAFETY AND SECURITY RESOURCES

Los Angeles has a comprehensive network of security, police, and emergency services resources, which is further bolstered by regional, state, and national resources (see adjacent table). These agencies have robust working relationships and cooperate effectively when jurisdictions intersect. Furthermore, the State of California utilizes the Standardized Emergency Management System (SEMS), which greatly expands city access to state-wide resources in a state of emergency.

There are an additional 61,000 law enforcement officers in the state of California. At the national level, the National Guard manages state-specific reserves of military personnel, the Federal Bureau of

Investigation serves as the nation's prime federal law enforcement agency, the Secret Service offers physical protection to our nation's leaders and visiting foreign dignitaries, and Homeland Security focuses on preventing terrorism and enhancing security. These national agencies total approximately 300,000 additional security personnel. All these agencies will work together to maximize safety and security for the Games.

Force	Jurisdiction	Officers
Los Angeles Police Department (LAPD)	City	9,900
Los Angeles Fire Department (LAFD)	City	3,200
Los Angeles Sheriff's Department	County	9,200
California Highway Patrol (CHP)	State	7,500
California Paramedics <sup>1</sup>	State	4,900 <sup>1</sup>
California Emergency Medical Technicians <sup>1</sup>	State	10,900 <sup>1</sup>
California National Guard	State / National	22,900
<b>Total</b>		<b>68,500</b>

<sup>1</sup>: California can mobilize 20-25% of its state-wide resources in times of emergency

## 14.4 SUPPORT FOR THE GAMES

### 77. LA 2024 BENEFITS FROM OVERWHELMING SUPPORT

The people of Los Angeles overwhelmingly support the City's candidature for the 2024 Olympic and Paralympic Games. A telephone poll conducted in August 2015 found that 81 percent of Angelenos support LA's candidature, which followed a telephone poll conducted in October 2014 that indicated that 77 percent of Angelenos support LA 2024. That support extends across all age, gender, neighborhood and ethnic lines, including 83 percent support among young adults. Not only do Angelenos support the City hosting the Games, they also want to participate personally, as demonstrated by the impressive number of residents, almost 40 percent, who expressed interest in volunteering.

The Mayor of LA, Eric Garcetti, is personally leading LA's candidature with Chairman Casey Wasserman and CEO Gene Sykes. Securing the 2024 Games is a top priority for Mayor Garcetti's administration, as the Games Concept closely aligns with the long-term plans for the City and the region.

The political leadership of the City of LA is united behind LA 2024's candidature. The City Council unanimously voted (15-0) to support the LA 2024 candidature on September 1, 2015.

There is comprehensive, regional bipartisan support across the County of Los Angeles and Southern California to bring the 2024 Games to LA. The Los Angeles County Board of Supervisors unanimously voted (5-0) on September 17, 2013 to support LA's bid. A total of 21 members of the US Congress have signed a letter stating their enthusiastic support for bringing the 2024 Games to LA, while also expressing their desire to work with the City of LA and the USOC in pursuing a successful American bid. Ten Mayors from surrounding cities have also formally endorsed the bid.

LA 2024 has earned full support from the City's leading business groups, including the Los Angeles Area Chamber of Commerce, the Central Cities Association, the Valley Industry and Commerce Association, and the Los Angeles Business Council. These organizations, which represent many of the top companies in the US and the world, are an unprecedented asset to LA's candidature.

### 78. A UNITED COMMUNITY

There is currently no organized opposition to LA 2024.

The experience of the Los Angeles 1984 Games still resonates positively with the City's residents, with a highly visible and very active youth sports legacy playing out across the City almost daily. There are also over 1,000 Olympians, Paralympians and other elite athletes training in LA year-round. Los Angeles is a sports-minded city, so it is not surprising that it enjoys such an affirmative and spirited Olympic culture.

LA 2024 has planned an extensive program of community consultations, including meetings in each of the City's 15 council districts, to ensure the entire City continues to embrace the Games. LA 2024 is ensuring that all segments of the City's population are well informed and clearly understand the broad benefits that a third Olympic Games will bring to the community.

### 79. GAMES REFERENDUM REQUIREMENTS

The citizens of Los Angeles overwhelmingly support hosting the 2024 Games. There is currently no requirement or intention to carry out a referendum related to the Games. Under the Los Angeles City Charter, any future ordinance passed by the City Council to facilitate the Games could theoretically be reviewed by a referendum process; however, there is currently no public campaign, nominal or organized, to oppose LA's efforts to bid for the 2024 Games.

## 14.5 LEGAL FRAMEWORK

### 80. NO LEGAL OBSTACLES TO HOSTING THE GAMES

There are currently no legal obstacles to the organization of the Olympic and Paralympic Games in the United States.

### 81. US SPORTS LAW

There are many substantive areas of law that affect the regulation of sport in the US, including with respect to the promotion of, access to and participation in sport.

#### PROMOTION OF OLYMPIC SPORTS

The Ted Stevens Olympic and Amateur Sports Act authorizes the United States Olympic Committee (USOC) to organize, finance, and control the representation of the US in the competitions and events of the Olympic Games, the Paralympic Games, and the Pan-American Games, and to recognize national governing bodies for any sport represented at such Games.

#### ACCESS FOR INTERNATIONAL PARTICIPATION

The Immigration and Nationality Act allows international athletes and their support personnel (including coaches and family members) to receive visas to enter the US for a sports competition with an expedited visa consultation process.

#### ANTI-DISCRIMINATION LAWS

Comprehensive anti-discrimination policies have been codified in the US with respect to both Olympic sports (under the Ted Stevens Act) and school-based amateur athletic programs (under Title IX of the United States Education Amendments of 1972). These policies serve a dual purpose of prohibiting discrimination and encouraging the promotion of opportunities for historically underserved people to access amateur sports (e.g., women, racial minorities, and athletes with physical impairments).

#### ANTI-DOPING LAWS

Under the United States Anti-Doping Agency (USADA) Reauthorization Act, USADA is mandated with preserving the integrity of sport competition in the US by implementing anti-doping testing programs in amateur sports. USADA is a signatory to WADA's World Anti-Doping Code, and leads the US effort in combatting doping in sport.

In addition, US law enforcement agencies, operating under the Controlled Substances Act, rigorously enforce laws regarding possession and distribution of controlled substances (which include certain performance enhancing drugs such as anabolic steroids).

### 82. LA 2024 ENABLING LEGISLATION

We anticipate California's legislature will introduce legislation to express state support for Los Angeles's candidature to host the Olympic Games.

Existing California laws currently provide exemptions during Olympic Games time from 1) licensing requirements for otherwise lawfully practicing physicians from other jurisdictions to treat their teams and delegations (Business and Professions Code Section 2076.5.), and 2) for guns used in Olympic shooting competitions from the ban on assault rifles (Penal Code Section 30515(b)). LA 2024 will follow legislative developments, if any, to ensure that these existing exemptions are maintained.

### 83. US ACCESSIBILITY STANDARDS AND LEGISLATION

The OCOG will apply accessibility standards to the planning, design and construction phases based on the Americans with Disabilities Act (ADA), the Fair Housing Act, and the Rehabilitation Act under federal law, as well as the California Fair Employment and Housing Act, the Unruh Civil Rights Act, and the accessibility provisions of the California Civil Code, the California Code of Regulations, and California's Building Standards Code (Title 24). Taken together these laws prohibit discrimination on the basis of an impairment in all areas of public life, including employment, transportation, public accommodation, communications, education and other governmental sponsored activities.

#### PUBLIC TRANSPORT

All forms of public transit in Los Angeles (including city buses and rail transit) must comply with accessibility requirements, and, in certain instances, the provision of paratransit may also be required for commuters who are unable to independently use the public transit system.

#### ACCOMODATION AND VENUES

The ADA provides design and architectural requirements for new, modified, altered or temporary public accommodation buildings, and requires existing facilities to make changes that are "readily achievable" in order to meet accessibility standards.

In addition to the ADA, public accommodation buildings in LA are subject to Title 24 of the California Building Standards, which provide enhanced California-specific accessibility provisions.

Further, Section 504 of the Rehabilitation Act guarantees rights to people with an impairment to not be excluded from participation in, denied benefits by or otherwise be discriminated against on the basis of such an impairment by any recipient of federal financial assistance, including by airports that are underwritten by the federal government, and colleges and universities that benefit from direct or indirect federal financial assistance.





1.5

# FINANCING ANALYSIS



## 1.5.1 FINANCING STRATEGY

### 84. RESPONSIBLE

Los Angeles is a community that fosters innovation and sets new standards of excellence. The LA 2024 legacy begins by developing a fiscally responsible and sustainable Games Concept.

As noted in Olympic Agenda 2020, the IOC is seeking to promote the maximum use of existing facilities and venues with sustainable, long-term legacy plans. LA is in a unique position, as 97 percent of the planned competition and non-competition venues exist, are already planned as permanent venues by private investors, or will be temporary venues. This means that LA will only need to construct one additional permanent venue from the ground up. And, 80 percent of the world-class venues that will be used for the 2024 Games are different from the Los Angeles 1984 Games venues.

LA is honored to partner with two world-class universities, UCLA and USC, for our Village needs. High-quality housing already exists or is planned by the universities. LA 2024 and the City of LA will not bear the financial risk of building new Villages for the athletes or media. This approach of using existing facilities ensures certain delivery and allows LA 2024 to give even greater focus on enhancing the overall Games experience for the various stakeholders.

The City of LA has substantial infrastructure that complements the Olympic and Paralympic plan. The airport transformation, public transit expansion, and the significant number of existing/planned hotel and alternative accommodation, are all being funded by public and private entities, with projects well underway. The Olympic and Paralympic Games will help serve as a catalyst for the evolution of LA.

The sources of funding for the limited Games-dependent capital works and Olympic overlay will come in two forms:

1. OCOG revenue streams, such as contributions from IOC Broadcast Agreements and from TOP Partners, domestic sponsorships, Games ticketing revenue, and licensing/merchandising.
2. Non-OCOG investments by venue owners that are planned and underway, but will benefit the Olympic Movement and LA 2024.

For example:

- ◆ USC has announced that it is investing USD 270 million to renovate the Coliseum
- ◆ UCLA and USC continue to upgrade their housing and both are planning to add to the existing room/bed inventory ahead of 2024
- ◆ The Los Angeles Football Club has committed to build a new 22,000 seat football stadium adjacent to the Coliseum
- ◆ NBCUniversal Studios is building new sound stages that will be aligned to the needs of the IBC/MPC

In addition to a responsible budget and plan for the Games, LA 2024 has developed a risk management strategy, using three approaches to mitigate risk.

#### **Rigorous budgeting/strong project management:**

The most important part of the risk management strategy is to ensure careful budgeting and strong project management. LA 2024 will continue to make conservative estimates of the cost components of the projects. In addition, LA 2024's budget will include a 10-15 percent contingency to protect against unknowns during the planning process.

Similarly, LA is a mecca for sport and entertainment, and we anticipate strong demand for ticketing, hospitality, and sponsorship.

Both cost and revenue projections will be based on expert data analysis and experience from previous Olympic and Paralympic Games, and will continue to be tested with a variety of experts.

#### **Established event insurance addressing operating budget risks:**

Insurance has historically been used on projects as complex as the Olympic and Paralympic Games. The LA 2024 insurance program will include many types of insurance policies and bonds from institutions specializing in projects similar to the Olympic and Paralympic Games. Premiums for such insurance policies and bonds will be paid from private funds, including the LA 2024 operating budget and private developers and contractors who work

on the venues. Insurance coverage will extend to the City of LA on every policy.

LA 2024's insurance plan will include a number of additional policies that will protect against liability exposures during the Games and the potential for lost revenue. For example, should events be cancelled or disrupted due to uncontrollable circumstances, policies will be triggered to cover the loss of revenue and additional cost of rescheduling.

**Overarching excess coverage during the Games:**

The overarching policies will respond to the typical risks for large sporting events (e.g., injured visitors, property damage, terrorism) as well as the risks specific to LA (for example, LA 2024 will plan for comprehensive earthquake coverage that will cover costs should construction of the venues be delayed or become more expensive due to an earthquake).

LA 2024's strategy for risk management starts with our large amount of existing venues, which minimizes Games-dependent capital works. Combined with rigorous budgeting, a planned OCOG contingency, strong project management, relevant insurance against contractor works and disrupting events, and a city that is already investing in major infrastructure projects that will not be part of the OCOG budget, LA looks to once again transform the Games in this new era of sustainability and fiscal responsibility.

**85. PRUDENT**

One of LA 2024's greatest assets is the large amount of high quality sports facilities that either exist or are already planned. Therefore, Los Angeles will leverage these existing facilities from an operational perspective. We will use existing staff, processes, and technologies that will be enhanced for the Olympic and Paralympic Games, rather than investing from the bottom up.

In addition to IOC broadcast and TOP Partner contributions, the OCOG costs will be funded through the following sources:

**OCOG sponsorships:**

The North American sponsorship market is large: currently, sponsors spend over USD 15 billion annually.

**Olympic and Paralympic Games ticketing:**

Olympic ticketing has been a proven success in past US Games. The North American ticketing market is well developed and California is home to the world's top ticketing organizations and innovators who are consistently seeking to reinvent the entire game-day experience from purchase to post-game celebration.

**Licensed merchandise:**

Residents and visitors to North America currently spend close to USD 14 billion on sports licensed merchandise.

**Unique Olympic programs (e.g., Torch Relay, US Olympic Trials).**

**Various other sources, such as private donations.**

**The federal government is expected to provide additional support for select operational costs such as security.**

Los Angeles is a mecca for sport and entertainment, and we anticipate an exceptionally strong demand for ticketing, hospitality, sponsorship and licensing/merchandising that will be significant (but not the only) contributors to our funding plan.

**86. CONSERVATIVE**

LA 2024's candidature is completely privately financed. Within three weeks of our launch in September 2015 we secured USD 35 million in cash commitments from private donors, illustrating strong support from the LA business community. We will continue to raise additional funding through new private donors and partnerships to support our operations through September 2017. The budget estimates for the three stages of the Candidature Process are provided in the table below:

	Budget estimate
Stage 1	USD 10 - 15 million
Stage 2	USD 10 - 15 million
Stage 3	USD 20 - 25 million

LA 2024 is approaching our bid financing in exactly the same way we are approaching the development of our Games budget: prudently and responsibly.



# In Appreciation

The transformative power of the Olympic Movement  
has inspired us once again to envision a new future  
for our city, our country and our world.

As we close this first chapter  
of our Olympic quest, we want to express  
our appreciation to the IOC and the Olympic Family  
for the opportunity and inspiration that you have given us.



Mayor Eric Garcetti



Casey Wasserman



**LOS ANGELES**

CANDIDATE CITY  
OLYMPIC GAMES 2024



LA24.ORG