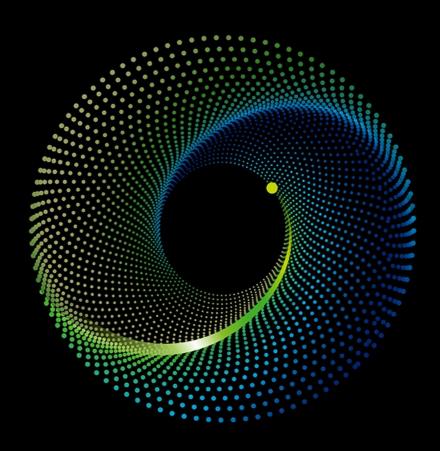
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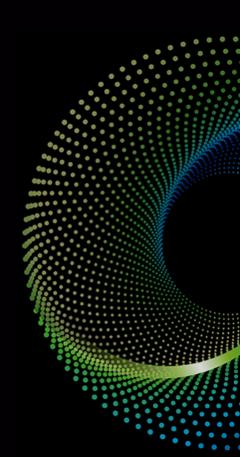
Have the winds changed?

The evolution of the studio production landscape – a case study of four cities in the US and internationally



Content

Introduction	3
The evolving content creation landscape	4
Methodology to assess each market	8
Major production hub market assessment	10
Call to action for content creators	19
Call to action for studio operators and investors	20



Introduction

Have the winds changed?

The evolution of the studio production landscape – a case study of four cities in the US and internationally

We set out to explore the studio production landscape, focusing on market, supply, and demand dynamics across four cities: Los Angeles (LA), New York City (NYC), London, and Vancouver. This media and entertainment market assessment is the next edition in our ongoing analysis of the studio production industry.

In our physical production studios case study (2021), we expanded our research from our initial analysis (2020) focused on NYC to understand the studio production dynamics of LA, Toronto, and London. In our 2021 media and entertainment market assessment, we determined that demand for production space across these locations will continue to outpace supply through at least 2025, providing key findings that can be applied to other filming locations and leveraged by stakeholders across the studio production value chain – streaming service providers and studios, real estate investors, and production facility operators.

In recent years, we have seen content production increase significantly – driven mainly by the growing number of streaming platforms. These services need to provide consumers with more content - either through licensing existing content or producing their own originals – as they fight for the attention and dollars of each consumer in an attempt to win (or at least, not lose) the "streaming wars." Streamers have allocated large portions of their content budgets to the production of original content as licensing costs have become increasingly expensive and content creators have pulled their produced content from aggregators onto their own platforms (e.g., Disney pulling Marvel content from Netflix onto Disney+). Additionally, the estimated number of US-scripted original series rose from 422 in 2015 to 559 in 2021 – a ~5% CAGR¹ – and Netflix's catalog share of original TV shows rose from 25% in 2020 to 39% in 2021².

This increased push for originals resulted in production companies requiring more physical space to film and tape content. While this need for space and limited available supply has resulted in capacity constraints across major film hubs – as evidenced through reports by FilmLA³ and the Mayor's Office of Media and Entertainment (MOME) in NYC⁴ and supported through our 2020 and 2021 assessments – shifting consumer preferences, substantial year-over-year real estate investment, and a projected growth deceleration of streaming services' content production budgets may ultimately close the gap between demand for space and supply of facilities in select locations. In the 17th edition of Deloitte's digital media trends survey, for example, we noted that watching TV and movies is the preferred entertainment method for the "Gen X-and-older" set; however, Gen-Z and Millennials may split their digital entertainment time more evenly across television and movies, video games, music, and user-generated content.

As of 2023, we have determined that demand for production space at soundstages is continuing to outpace supply in LA and NYC through 2025. With the influx of investment in the London and Vancouver markets, projected supply is estimated to meet anticipated demand by 2025. For all markets, however, we found there is opportunity for continued investment in high-end, purpose-built facilities as modern, bespoke studios are in high demand and the preferred option of content producers. These findings should be considered when assessing additional global filming locations and leveraged by content creators and real estate investors as they explore their go-forward real estate production strategies.

While opportunities exist for further investment in purpose-built studios, the content production landscape moving forward may look significantly different than it has over the past three years. Based on studio announcements⁵ and analyst projections⁶ that content output will either decrease in 2023 or the growth will be marginal compared to prior years', and Deloitte analysis that projected supply is estimated to meet demand in select filming hubs, the question stands: after years of year-over-year growth, have the winds changed for original content production? We explore this question and more in this studio production case study.

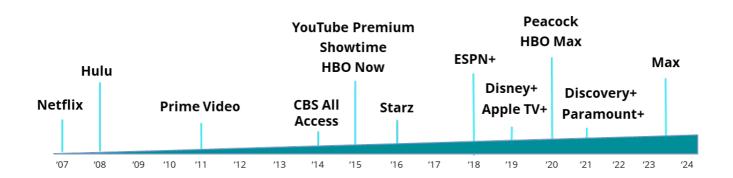
The evolving content creation landscape

As streamers attempt to gain market share and differentiate themselves through the production of original content, there will be an increased need for production space. As content spend growth levels off and market consolidation occurs, the amount of production space required will likely level off in tandem.

Over the past decade, traditional media companies recognized the need to evolve their business models so that they can own the consumer experience, thereby having a direct relationship with their customers. This direct-to-consumer push led to a rise in streaming services with seven prominent services launching over

the past five years in the United States (and two of those then merging): Apple TV+®* and Disney+ (2019), HBO Max and Peacock (2020), Discovery+ and Paramount+ (2021), and then HBO Max and Discovery+ merging into Max (2023) (Image 1).

Image 1: Prominent streaming service launch year



Consumers are now inundated with options for streaming services, forcing streamers to differentiate themselves with exclusive or original content.

Approximately 70% of consumers cite original programming as an important factor in deciding whether or not to subscribe to a service while 80% attribute available content as the driving factor in their decision to cancel a service⁷. For Gen-Z and Millennial consumers, 44% prioritize access to exclusive content as the main reason for subscribing to a service⁸. Streaming services recognize this need for original content and have been

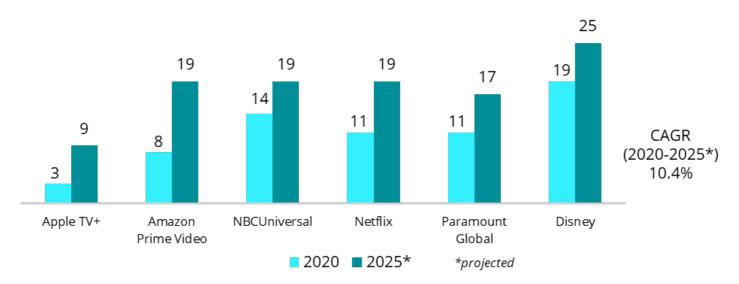
significantly increasing their year-over-year content budgets accordingly (Image 2)9 – with major streamers having spent \$6.5B in 2020 to \$9.6B in 2021 to \$13.8B in 2022, representing a 47% year-over-year increase from 2020 to 2021 and 43% increase from 2021 to 202210. The increased spend on production has driven up demand for studio soundstage space across major film hubs, causing a shortage of supply and spurring a surge of investment into purpose-built and converted facilities by content producers, studio owners, and real estate investors.

^{*} Apple TV+ is a registered trademark of Apple Inc.

While demand for studio soundstage space is expected to increase as streamers invest heavily to win market share, market analysis indicates that this growth will slow over time. Our analysis suggests that some markets will need additional soundstage supply, while announced supply in development in other markets will be enough space to cover anticipated demand. The significant year-over-year growth of content production spend is unsustainable, and a deceleration of growth is anticipated over the next few years¹¹. Additionally, market consolidation is expected to continue – as exhibited by HBO Max and Discovery+ combining into Max in May 2023 and Comcast CEO Brian Roberts telling investors that it is "more likely than not" to sell its 33% stake in Hulu to Disney¹² in 2024, potentially resulting in

further consolidation – which may have downstream implications to the amount of original content produced. Lastly, streamers have indicated a lower volume of content output¹³ moving forward, signifying a trend toward focusing on quality over quantity. Demand for studio soundstage space is not expected to decrease in the coming years. However, market factors suggest that the current growth rate of physical production space will level off, and the growth that does occur may be centered in particular cities and only for specific types of production facilities (i.e., purpose-built vs. conversions).

Image 2: Global content spend by media & streaming companies (\$B)





Global production hubs: A snapshot of prominent filming locations around the world

A love of film and television is a global phenomenon. Across the world, people of all ages consume film and television content as one of the most prevalent forms of entertainment and education. With the growing demand for original content globally (e.g., local-language content, local-market cultural content), production hubs have started and flourished in key locations around the world.

While film hubs exist in many countries, there are four hubs – outside of the North American and London markets we have already assessed – that we are paying close attention to as they mature (Image 3). These hubs are prominent production locations for their continents – South America, Africa, and Europe, respectively.

Image 3: Select prominent, global film production hubs



South America: Brazil – São Paulo

Spcine, a state-owned company in São Paulo, is focused on the development of the cinema, TV, games, and new media sectors. The company established an \$8M fund in the form of rebates to attract local and international productions to film in the city and state of São Paulo. Within a day of the fund opening, \$2M was allocated. Two of the first productions to access the rebate were for Paramount+ and Amazon Prime¹⁴, and this presence by streamers in Brazil may be indicative of both their and

Brazil's production strategies. The Brazilian president aims to invest just under \$1B in 2023 into the country's audiovisual sector. Regulation of global streaming services operating in Brazil, which may include quotas for Netflix, Amazon Prime, and others, is also on the administration's agenda. Brazil's current and forward-looking investment into the country's cultural scene and audiovisual industry coupled with São Paulo's favorable film subsidies and cash rebates¹⁴ make the market one to watch.

Africa: South Africa - Cape Town

Content producers have flocked to Cape Town for its terrain, diverse population, and financial incentives. Productions can quickly travel from mountainous to urban to tropical terrains from the metropolitan area. The population and workforce of Cape Town are composed of multiple cultures and backgrounds, enabling productions the ability to cast and hire diverse local residents. The financial incentives – across both production and postproduction industries – are quite strong¹⁵, attracting both domestic and foreign (nearby countries and those across the globe) to film in the region. The South African film industry generates an estimated \$600M-\$750M - with ~\$220M attributed to foreign film production, and Cape Town contributes the largest amount¹⁶. Streaming services are directly investing into the region to bolster the production industry – e.g., Netflix has pledged ~\$50M to the South African creative industry¹⁷. Lastly, major productions have chosen to film in Cape Town vs. film hubs closer to the producers' home markets, such as episodes of *Black* Mirror and portions of Mad Max: Fury Road.

Europe: Czech Republic – Prague

With the Czech Republic situated in the heart of central Europe, Prague is a natural destination for European content producers looking for production and postproduction services nearby. However, more so than just local productions, content producers from all over the world choose Prague as a filming destination due to its generous financial incentives, cinematic locations, and modern infrastructure. The Czech Republic offers a 20% rebate on qualifying Czech spending and a 66% rebate on withholding tax paid in the Czech Republic by international cast and crew – highly competitive rates to incentivize selecting a city within the country¹⁸. The architecture of the city enables productions to film both high-end period dramas and top-tier action films while also being able to double for other major European cities such as London and Paris. Prague's high-end soundstages are somewhat rare for the region. Barrandov Studios is a set of film studios in Prague – the largest film studio in the country and one of the largest in Europe - and contains MAX, Europe's largest soundstage at 43,000

square feet with an adjoining 39-acre backlot. Industry experts estimate that foreign TV series crews spent \$140M in the region in 2018, and that number may have risen in recent years¹⁸. Major productions have chosen to film in Prague, including *Spider-Man: Far From Home, All Quiet on the Western Front* (2022), and *The Grey Man,* Netflix's most expensive production ever at \$200M.

Europe: Hungary – Budapest

The Hungarian film industry is one of the most prominent in Europe – touted by some to be the secondlargest film production center on the continent. Hungary - and Budapest in particular - has attracted content producers from all over Europe and the world for its favorable financial incentives, picturesque cityscape and infrastructure, and federal support for the arts. The country offers a 30% tax rebate on productions filmed incountry, and production costs are estimated to be 30%-35% lower than in the United States or the United Kingdom¹⁹. Budapest in particular is used as a double for many European cities such as Paris, Amsterdam, Moscow, Berlin, and even other notable locations such as Buenos Aires. The city contains Origo Film Studios, the largest studio in Hungary with nine soundstages totaling 194,000 square feet as well as Mafilm Studios which has the largest outdoor tank in continental Europe¹⁸. Finally, Budapest has been chosen as the filming location for many high-end films such as Dune, Robin Hood (2018), Gemini Man, and Terminator: Dark Fate.

Investment in these locations may be 'the next frontier' for those looking to create a foothold and solidify their presence in the physical studio production market. While these hubs are of increasing importance to English-speaking and US-based content producers, we would be remiss to not callout filming hubs of financial and cultural importance farther away from US operations such as Mumbai, India (i.e., the home of 'Bollywood'); Beijing and Hong Kong, China; and Tokyo, Japan. For content producers and studio operators seeking to diversify their respective portfolios, these locations and content offerings should be greatly considered.

Methodology to assess each market

Market Assessment: There is a multitude of criteria to evaluate when determining how attractive a city is for content creation. A comprehensive list of these criteria allowed us to conduct an assessment at a granular level of our in-scope markets, including industry scale, talent ecosystem (both above- and below-the-line), financial incentives (e.g., national/local tax credits), production costs, creative needs, tech innovation, regulations, and

accessibility (Image 4). In this media and entertainment market assessment, we continue to find that LA, NYC, and London are desirable filming locations from the perspective of a content creator, and after assessing Vancouver for the first time, find it desirable as well. Each market fulfils the evaluation criteria – though to differing degrees and in unique manners.

Image 4: Deloitte's studio production market evaluation framework



Industry Scale

Total size and availability (quantification of cityspecific supply and demand) and robust film economy



Talent Ecosystem

Willingness of above-theline talent to shoot in the area; proximity to and availability of below-theline crew talent



Financial Incentives

Identification of tax incentives (e.g., production & postproduction credits) that reduce costs, attracting decision-makers



Production Costs

Stage & location costs (e.g., electricity, rental cost), cost of local talent & crew, and cost of travel & lodging



Creative Needs

Ability to meet physical requirements (location shooting, diverse landscapes, iconic sites) OR satisfy other creative needs



Tech Innovation

Presence of innovative technology that improves filming efficiency and quality (e.g., visual effects technology, virtual production)



Regulations

Any governance that may make filming more difficult or require more planning (e.g., labor unions, permits, zoning)



Accessibility

Ease of filming based on accessibility to location and navigation through city (e.g., public transportation, traffic)

Supply and Demand Dynamics: To quantify supply for soundstage square footage, we conducted an analysis of current soundstage supply as well as announced supply aimed to be operational by 2025 for each in-scope market. To quantify demand, we analyzed forward-looking content spend forecasts and historical production data.

Supply: Historical and announced supply included in our analysis focused on top-tier facilities — either those that are purpose-built or converted facilities that meet the standards of purpose-built spaces.

As our analysis aims to only include space utilized by higher-end film and television productions, our results may not match market-specific publications noting their total soundstage studio square footage metrics — which may include facilities targeted toward short-form video, commercials, photoshoots, and more.

Demand: Soundstage space demand was focused on productions with budgets that would allow for the rental of premier soundstages that we accounted for in our supply criteria. These productions were defined as those produced by larger studios, major streaming services, smaller studios known for higher-quality production content, and elite independent studios that consistently produce higher-quality content.

Following our previous two production hub market assessments, we continue to find that demand for soundstage space will increase in LA and NYC. As an update to our previous assessment, anticipated demand in London is estimated to be met with the projected supply through 2025, and given our analysis, we anticipate the same for Vancouver. That being said, it is expected that demand for purpose-built facilities will continue to remain high across all four markets and, therefore, the case for additional investment in high-quality soundstage space can be made for all in-scope locations.

Soundstage facilities: Understanding purpose-built and converted facilities

Soundstage facilities broadly fall into two categories:

1) those that are constructed for the purpose of soundstage production ("purpose-built"), and warehouse-type buildings that are repurposed for this use ("converted facilities"; "conversions"; "warehouses").

Purpose-built facilities, by their design, are more attractive for productions²⁰ as they contain the appropriate space, amenities, and other conveniences needed for a shoot. These are both expected and required for top-tier film productions, and include:

- Soundstage space: unobstructed, soundproofed space, typically with 2+ stages at 10K–15K+ square feet and 35'+ height-to-grid per facility; additional conveniences include the ability to join stages together and backlot access for outdoor shoots
- Support space: includes offices, makeup/hair rooms, mill space for set/prop/effects construction, postproduction workspace, and more
- Loading areas: vehicle access for loading equipment to and from stages
- Parking: substantial parking space for talent, crew, and production vehicles (e.g., talent trailers)
- Equipment: HVAC, power amps, lighting, and more
- Support services: on-site operators to assist with production needs

Larger, purpose-built studios often have strong, existing relationships with additional service providers (e.g., lighting, grip, craft services) that are necessary for production. Converted facilities often lack several or most of the above criteria. Space can be columnobstructed such that set construction is difficult, ceiling heights can be suboptimal, and additional space/parking/services can be sparse.

Productions tend to choose purpose-built facilities over conversions when available. Though purpose-built facilities are typically more expensive, cost is not a limiting factor that would lead a production to prioritize a conversion, as most cost savings will not be large enough to offset the reduced quality of filming in such a facility²⁰.



Major production hub market assessment

LA – The Content Production Capital of the World

LA is the global hub for filmmaking with the largest studio production market and most robust entertainment ecosystem in the world. Although LA boasts the largest amount of studio space in a single city, stages are still at capacity with occupancy rates ranging from mid-90% to 100% based on FilmLA assessments³ and Deloitte analysis. With ~400 certified soundstages²¹, 50+ studio production facilities²¹, and the most above-the-line and below-the-line talent across all production hubs²², the city provides content producers with the infrastructure necessary to create high-quality content at scale.

The content production industry in LA is subject to heavy regulation by considerable union presence and geographic restrictions – i.e., the 30-Mile Zone (TMZ)**,

a defined region used by labor unions which dictates pay rates. Shooting within the zone results in decreased union costs; shooting outside the zone is considered "on-location" and results in additional production costs. While tax incentives do exist as a means to incentivize production in LA and help offset the expenses arising from filming in such an expensive location, the incentives are less generous than those of other production hubs. However, in June 2023, California lawmakers extended the film and TV tax incentives program through 2030, made the tax credit refundable, improved safety regulations, and included a provision encouraging workforce diversity both on camera and behind the scenes. These recent changes show California's continued support at making the state the premier and most sought-after filming destination in the world²³.



** Thirty Mile Zones (aka "TMZ"; "Studio Zones") are regions defined and used by labor unions; beyond the zone, talent and crew are considered to be filming "on-location," incurring a wide range of additional production costs, including costs for crew travel and meals. According to the California Film Commission³, LA's Studio Zone is centered on the intersection of La Cienega and Beverly, but different unions may define their zones slightly differently. Building new soundstages within the TMZ can be challenging due to a shortage of industrial real estate, increasing demand, and increasing prices.

Investment Activity:

Recent and ongoing investments into LA studio and soundstage space have primarily been net-new builds of purpose-built facilities (Image 5)¹⁰. While most of these investments occurred within the TMZ, we have started to see increased development on the outer edges of the zone into some areas like Santa Clarita due to space constraints. Additionally, expansions of existing facilities within the TMZ are occurring. Traditional real estate and private equity investment groups are the primary drivers of this increased and upcoming investment into studio space, but independent owners and content creators are not sitting idly by as space is being purchased, upgraded, and expanded.

Content producers, independent studios, and investors alike have poured investment into converting space, expanding existing studios, and building new purposebuilt soundstages across LA from Santa Clarita to Manhattan Beach. Based on our analysis of the current supply and pipeline along with projected demand for film and episodic content needs, we anticipate little to no available soundstage space – with occupancy nearing 100% through 2025 (Image 6)¹⁰.

Image 5: Total Soundstage Pipeline Square Footage by Facility Type – Los Angeles

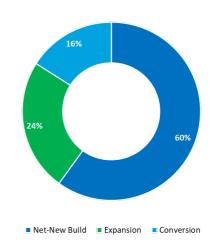
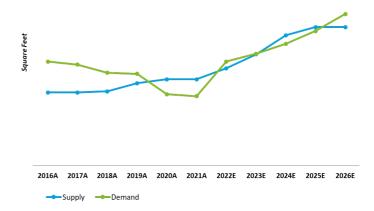
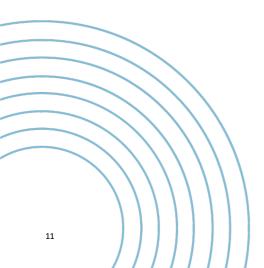


Image 6: Total Soundstage Square Feet Supply and Demand – Los Angeles





NYC - The Media Capital of the World

NYC has been and remains one of the global capitals for the filming industry, providing the most above- and below-the-line talent (outside of LA) along with a robust entertainment ecosystem that spans all creative services from pre- to postproduction. While New York has historically provided beneficial tax incentives for television and film production and postproduction, the state has significantly increased its incentives to compete with other filming locations – such as California and Georgia. Tax incentives in the Empire State increased from \$420M to \$700M per year through 2034 along with other provisions²⁴, significantly surpassing California's \$330M per year credit²⁵ and making inroads against Georgia's uncapped credit – estimated to be \$1.3B in 2022²⁶.

Despite the improved tax credit, NYC is the most expensive location to film in as the cost of labor, tax on goods and services, and cost of goods are some of the highest in the country. Small-to-midsize productions may have a difficult time justifying to studios and investors the need to film in NYC, utilizing other cities like Vancouver as a 'makeshift' NYC with its downtown areas and commercial buildings. However, NYC is the preferred filming destination of many above-the-line talent, so incurring this cost is seen as 'a cost of doing business' for many productions. Additionally, and similar to LA, NYC is subject to geographic union restrictions. The New York Studio Zone is a 25-to-30-mile radius (varies by union/guild/organization) with its center in Columbus Circle defining where workers can work 'locally.' Filming outside of the radius incurs significantly higher rates for services and has historically influenced where studios are built, converted, and expanded.



Investment Activity:

The majority of recent investment into NYC studio and soundstage space has been in the form of net-new builds (Image 7)10. There is limited space in the heart of NYC for new builds; therefore, studio operators and investors have started constructing facilities in commutable locations to NYC - including Long Island, upstate New York, and New Jersey. While many of these facilities are within the 25-to-30-mile Studio Zone, we have seen a few players choose to operate outside of this zone, preparing to incur additional labor and talent costs moving forward, in exchange for more land at a cheaper cost. Netflix's massive facility at Fort Monmouth, New Jersey, costing ~\$850M over nearly 300 acres²⁷, is a prime example of cost-benefit decisions studio investors are making in the proximal NYC area. Expansions and conversions are also occurring in NYC - most of which are happening within the Studio Zone.

Both content creators (e.g., Netflix) and non-content creators (i.e., investment firms and existing independent studios) are continuing to invest in NYC – with supply projected to double by 2025. While many projects are underway or proposed, this projection is largely driven by massive new builds ranging from 750,000 square feet to 1.5M square feet. Based on our analysis, including these new builds, we anticipate that soundstage availability in NYC will be extremely limited – with occupancy averaging near 100% through 2025 (Image 8)¹⁰.

Image 7: Total Soundstage Pipeline Square Footage by Facility Type – New York City

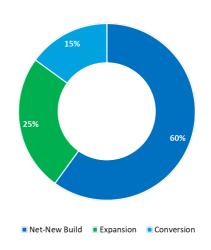
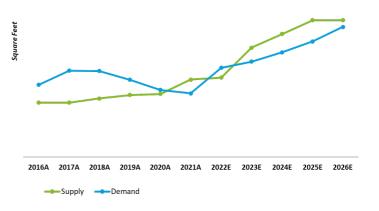


Image 8: Total Soundstage Square Feet Supply and Demand – New York City





London – The Content Production Capital of Europe

London has established itself as a prominent, global filming hub based on its generous tax incentives, volume of below-the-line talent, and being a primarily English-speaking hub in Europe. London's tax incentives are known worldwide for their transparency and beneficial nature – top of which is that there is no cap on the amount of tax relief that can be claimed²⁸. Most of the UK's industry jobs are located in London, and the country has an estimated 228,000 employees working in the industry across sectors such as film, unscripted television, children's television, animation, visual effects, games, and more. There is an estimated growth rate of 5% for industry jobs, adding 64,000 additional jobs by 2025²⁹.

Despite this growth of industry employees, some project London to experience a talent shortage of 40,000 workers by 2025²⁹. European workers may continue to encounter issues traveling and working due to Brexit, which could further exacerbate the potential talent shortage in London. London is also an expensive city, leading to high production costs. Although the high cost of filming is partially offset by strong tax incentives, international productions – including those from the United States – must also account for exchange rates which have historically been unfavorable (though the Pound has weakened in recent years).



Investment Activity:

The supply of soundstage and studio space in London is projected to grow substantially through 2025 – primarily driven through net-new builds of purpose-built facilities (Image 9)¹⁰. Unlike LA and NYC, London is not restricted by union zones, leading studio investors to build and expand facilities outside the metro London area. According to Deloitte analysis, roughly two-thirds of all proposed facility space is located outside of the M25 – a major road encircling most of greater London many use to signify the 'heart' of London vs. the outskirts – all composed of net-new builds or expansions. Within the M25, roughly half of all proposed studio space are netnew builds while the remaining half are expansions and conversions.

The significant investment into studio and soundstage space over the past few years and through 2025 is following many years of investment inactivity. Despite a projected talent shortage, this influx of supply is expected to outpace demand, and based on our analysis, we anticipate that capacity utilization is expected to average 50% through 2025 (Image 10)¹⁰. However, with this influx of preferred, purpose-built facilities, there is potential that projects that would have otherwise been filmed in other parts of Europe may now shift to London given the newfound, high-end stage availability.

Image 9: Total Soundstage Pipeline Square Footage by Facility Type – London

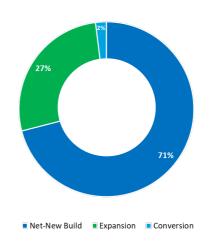
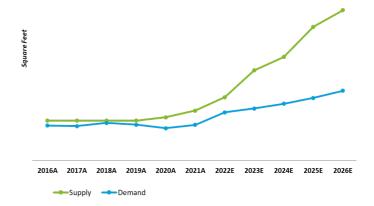
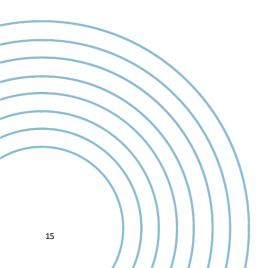


Image 10: Total Soundstage Square Feet Supply and Demand – London





Vancouver – The 'Hollywood of the North'

Vancouver is a prominent North American filming hub – benefiting from being a lower-cost alternative to LA and NYC while being geographically close to LA. The city boasts federal and local financial incentives in the form of stackable and uncapped tax credits that exceed most US incentives. A historically beneficial exchange rate for American productions filming in Canada add to the economic benefits of filming in Vancouver. The varied geography of the metropolitan area – making various sceneries accessible within a short drive from the city center – incentivize productions to base their filming in Vancouver. Lastly, Vancouver is well supported by an entertainment workforce and ecosystem – especially in regard to postproduction companies (e.g., visual effects and animation) that call Vancouver home.

While there is a burgeoning entertainment workforce, Vancouver maintains a portion of the available belowthe-line talent compared to other hubs — especially the prominent hubs of LA and NYC. This talent availability does limit the number of films able to be produced without flying in and housing talent which becomes increasingly expensive for productions. Despite this workforce limitation, Vancouver has become a top choice for content producers, causing demand to increase year over year.



Investment Activity:

The favorable conditions for filming have attracted a significant amount of investment into Vancouver, and an increasing amount in the surrounding metro area. With a growing economy not limited to studio production, real estate in Vancouver has become particularly scarce and expensive. Industrial availability in the metro area dropped to a record low of 0.8% in Q3 2022 and the average asking lease rate rose to a new high of \$20.67 per square foot, which was up 9.2% quarter-overquarter³⁰. This real estate limitation is incentivizing investors and content creators to build, expand, and convert facilities farther and farther away from the city center. While transportation and ancillary costs increase with filming in a more remote location, productions have multiple tax incentives (e.g., a 'distant location' incentive^{31,32}) to justify utilizing studios outside of the metro area.

With a large number of net-new builds and expansions recently completed with more on the way (Image 11)¹⁰, we anticipate that supply currently exceeds demand and will continue to do so through 2025. However, it is important to note that purpose-built stages are the preferred studio and soundstage space of content producers – most experts noting that they would pay a premium for the opportunity to use such a space vs. a warehouse conversion²⁰. In Vancouver, we project demand to surpass the available supply of purpose-built facilities now and through 2025 (Image 12)¹⁰.

Image 11: Total Soundstage Pipeline Square Footage by Facility Type – Vancouver

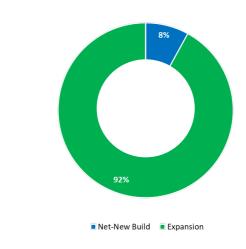
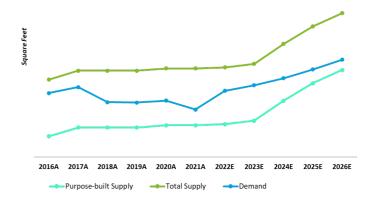


Image 12: Total Soundstage Square Feet Supply and Demand – Vancouver





Our purpose-built studios have been at 100% occupancy the last 7 – 8 years.

Managing Director of a Vancouver
 Film Production Center



The WGA and SAG-AFTRA strikes and their impact on the Entertainment industry

On May 2, 2023, the Writers Guild of America (WGA) formally went on strike for the first time since 2007-2008. WGA, representing ~11,500 screenwriters³³, and the Alliance of Motion Picture and Television Producers (AMPTP), a trade association representing more than 350 American television and film production companies³⁴, were unable to reach a mutually agreeable contract³⁵. The negotiation points spanned categories such as minimum pay, streaming residuals (domestic and foreign), writers' room terms, pension and health care, and the use of artificial intelligence in the screenwriting process³⁶. More recently, on July 14, 2023, the American actors' union (Screen Actors Guild - American Federation of Television and Radio Artists) also went on strike as they were unable to reach a mutually agreeable contract with the AMPTP³⁷, marking the first time both organizations were on strike concurrently since 1960³⁸.

What does this mean for the entertainment industry? The writers' strike 15 years ago lasted 100 days and cost the California economy around \$2B (or \$2.8B today adjusted for inflation). This time the financial toll may be even greater. As many as 20,000 workers across 600 productions could be out of work, according to the AMPTP. Overall, the strike threatens roughly \$81B in direct wages from 800,000 jobs in the film and TV industry³⁹.

Right from the beginning of the writers' strike, the entertainment industry saw major changes. Typically, the first to go in a strike are late night shows. Given this, marketers scrambled to find new marketing tactics to gain publicity for upcoming movies and TV shows⁴⁰. Additionally, major studios reassessed their budgets and production plans. Disney, for instance, set a target of around \$30B on content spend for this year. However, the strikes may change things. The walkouts may reduce Disney's cash spend on content for the balance of the year, former CFO of Disney Christine McCarthy said⁴¹. While the outcome of the strikes is uncertain, it is clear that the shutdown of productions is currently impacting the physical studio production industry. However, we expect content producers to require large amounts of studio space for a period of time once productions resume as they have after previous unprecedented events such as the '07 writers' strike, the last recession, and COVID-19.



Call to action for content creators

Content creators should continue to look to secure studio spaces in the LA and NYC markets in advance to overcome competition for space. Competition in these markets is expected to be heightened due to ongoing constrained supply and the projected demand, further exacerbated by the writers' and actors' strike. Outside of these markets, content creators may have a better opportunity to negotiate rates due to a potential outpacing of supply compared to projected demand.

In our prior analyses of the physical studio production market, we determined that content creators – across the NYC, LA, London, and Toronto markets – would benefit from having strategies in place to guarantee that they had access to studio facilities in anticipation of constrained supply. These strategies included securing long-term leases with existing facilities, establishing relationships with operators of new facilities to secure leases prior to the facilities opening their doors, and even building their own facilities to be used at their discretion. While this recommendation holds true for two of the markets in this assessment (LA and NYC), there is the potential that content creators may feel less of these pressures in other markets (such as London and Vancouver).

In LA and NYC, we anticipated that content creators would run into supply constraint issues as studio occupancy in those markets was projected to be near 100% through 2025. Those occupancy projections were determined prior to the writers' and actors' strikes. As the strikes resulted in significant production delays, we anticipate that supply constraints will be further intensified in a similar manner to how COVID-19 delays caused a backlog of productions that needed to be taped or filmed. The anticipated production backlog may have additional implications to other US production hubs such as Atlanta, Georgia, Albuquerque, New Mexico, and more.

In London and Vancouver, we projected that the influx of supply would be able to meet the anticipated demand. While the US-based WGA and SAG-AFTRA strikes may have cross-border implications to production schedules, it is expected that the disruption to productions in the United Kingdom and Canada will be less severe than those experienced in the United States^{42,43}. When the net-new supply is in the market, content creators may have more opportunity to negotiate lease terms – assuming supply does in fact outpace demand. This room for negotiation will be particularly salient for converted/warehouse facilities as a significant amount of the net-new supply will be purpose-built studios. With productions preferring the higher-end, purpose-built facilities, the converted spaces will become more available - potentially giving the 'upper-hand' to content creators in negotiations. If the studio operators for converted facilities need to lower their rates to remain competitive with purpose-built studios, we may see productions with tighter budgets (i.e., productions that otherwise could never afford to film in studio space) entering the market.



Call to action for studio operators and investors

Studio operators and investors should prioritize their resources and capital into building and acquiring, or expanding and upgrading existing facilities into, high-end, purpose-built studio production facilities. While certain production hubs are projected to have a surplus of supply compared to demand, the market for high-end studios exists across every market as these facilities remain the top-choice for content producers. The influx of additional purpose-built studios may result in an exodus of needing-to-film in converted/non-high-end studios. Those who own non-high-end studios may explore repurposing their space for alternative revenue-generating opportunities.

In our previous case study, we outlined four modes of entry into the physical studio production market for studio operators and investors to choose from:

- <u>Conversion</u> of an existing structure (e.g., warehouse) into a production facility.
- 2. <u>Greenfield</u> development of a new, purpose-built facility.
- 3. <u>Expansion/upgrade</u> of an existing studio facility into a larger and/or higher-end version.
- 4. <u>Acquisition</u> of an existing facility without the need to conduct major renovations.

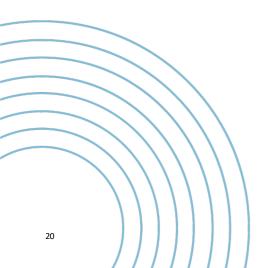
Based on the influx of investment activity over the past few years – especially in the purpose-built market – option No. 1 may no longer be financially desirable for studio owners and investors to consider. We anticipate content producers deprioritizing converted facilities if newer, purpose-built facilities are available – as content producers prefer these facilities and are willing to spend a premium to film in them²⁰. While the total supply of studio space in London and Vancouver is anticipated to meet projected supply through 2025, there is still a

market for high-end studios in these hubs — as exhibited by the analysis that demand in Vancouver is estimated to outpace supply of purpose-built studios. In filming hubs where capacity is estimated to be near 100% through 2025, such as LA and NYC, the case for additional purpose-built facilities is that much stronger.



With the new development of purpose-built stages, warehouses will go back to being warehouses. Studios will only want to film in purpose-built stages.

Managing Director of a North American Film
 Production Center



Studio operators and investors who currently own converted facilities – or lower-end purpose-built ones – have revenue-generating opportunities if their spaces go unleased by long-term content producers. Operators and investors should explore leasing/renting their facilities out to:

- 1. Corporate renters to shoot short videos used for internal and external corporate publicity, training, and more;
- 2. Social media users looking to create personal videos (e.g., cooking tutorials) for social media distribution;
- 3. Advertising firms needing space to shoot short videos for TV or online advertising;
- 4. Photographers requiring space for personal or commercial photography shoots;
- 5. Music video producers and artists filming videos to match music productions; and
- 6. Gaming companies seeking open space for motion capture filming.

In the event the original content production winds have in fact changed and content creators will start investing less in original content year-over-year, these opportunities exist for all studio operators and investors currently in the physical studio production market – from converted studio owners to those in the purpose-built facility market.

It is critical to determine where you are on your media and entertainment and studio production journey. As consumer preferences, content creators' strategies, and global filming and production hubs continue to evolve, stakeholders in the studio production value chain face a unique set of challenges that we are equipped to address. Whatever your goals are, we can help tackle your toughest challenges as you navigate this complex – yet exciting – industry.

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