

SB 743 AND NEWHALL RANCH'S NET ZERO EMISSIONS PROJECT:

IMPACTS ON THE GHG EMISSIONS THRESHOLD AND IMPLICATIONS FOR GREENFIELD DEVELOPMENT IN LOS ANGELES

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I. INTRODUCTION

California legislators have long assumed that greenfield development¹ is environmentally harmful and unsustainable, as it induces more driving and increases greenhouse gas (GHG) emissions. As a result, California's land use policies have encouraged transit-oriented development (TOD), which presumably promotes transit ridership over driving. That assumption overlooks notable exceptions and fails to consider how recent development trends and environmental requirements for land use projects push for greater GHG reductions and sustainable design. This note first identifies the shortfalls of a recent state bill—Senate Bill 743 (SB 743)²—which exclusively promotes TODs and illustrates how well-designed greenfield development has the potential for greater sustainability.

Implemented in January 2018, SB 743 is one of the most comprehensive revisions to the California Environmental Quality Act (CEQA)³ since the 1990s.⁴ The bill will change the traffic metric in CEQA review from Levels of Service (LOS), which measures congestion, to Vehicles Miles Traveled (VMT), which measures the number of miles traveled by vehicles. This

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1. Greenfield is "an undeveloped or agricultural tract of land that is a potential site for industrial or urban development." *Greenfield*, DICTIONARY.COM, <http://www.dictionary.com/browse/greenfield> (last visited Mar. 7, 2018).

2. S.B. 743, 2013-2014 Leg., Reg. Sess. (Cal. 2013). The bill was enacted in 2013 and implemented this year.

3. The California Environmental Quality Act is a statute enacted in 1970 that requires state and local agencies to identify significant environmental impacts of land use projects within their jurisdiction and to avoid or mitigate those impacts, if feasible. State and local agencies will conduct environmental reviews of proposed land use and transportation projects and provide or deny approval upon their discretion. See *Frequently Asked Questions About CEQA*, CAL. NAT. RES. AGENCY, <http://resources.ca.gov/ceqa/more/faq.html> (last visited Mar. 5, 2018).

4. See Melanie Curry, *After 4 Years, Key Rule Requiring Development to Account for New Miles Driven Moves Forward*, STREETS BLOG (Nov. 28, 2017), <https://cal.streetsblog.org/2017/11/28/after-4-years-key-rule-requiring-development-to-account-for-new-miles-driven-moves-forward/>.

change aims to reduce driving, the greatest source of GHG emissions,⁵ by streamlining the approval process for TODs and making greenfield or suburban development more difficult.⁶ However, SB 743 may not achieve the GHG reduction goals to the extent many predict. For instance, TODs have gentrified neighborhoods surrounding transit stations, thus displacing transit riders and decreasing transit ridership.⁷ Additionally, the increased access to transit from a TOD alone will not reduce driving as long as driving remains a faster and more convenient alternative.⁸

As the alternative, well-designed greenfield development has become increasingly sustainable due to today's environmental standards and development patterns. An article published by the Urban Land Institute reported that master-planned communities "[offer] the most practical, affordable, and achievable chance to build without sprawl, given its potential to create large-scale, conserved open lands and sustainable modern infrastructure."⁹ Greenfield development has become distinguishable from "sprawl"¹⁰ in part because of CEQA's rigorous environmental review process. CEQA review requires project proponents to provide all of the information necessary for the local government to determine whether a project will have an environmental impact. If any member of the public disagrees with the local government's approval, the decision can be challenged through litigation.¹¹ This process provides an environmental check on land use projects and is one avenue in which environmental groups or individuals can demand greater sustainability. For instance, Newhall Ranch, a recent \$13 billion, 21,500-unit, mixed-use development set to house and provide jobs for approximately 60,000 residents in the Santa Clarita Valley, was litigated for twenty years before obtaining approval as the first net zero emissions greenfield project of its scale.¹² This note will detail

5. *Drive Less and Drive Clean*, COOLCALIFORNIA.ORG, <http://www.coolcalifornia.org/article/drive-less-and-drive-clean> (last visited Mar. 5, 2017) (finding that driving accounts for thirty-eight percent of GHG emissions).

6. *See supra* note 3.

7. Tracy Jeanne Rosenthal, *Transit-Oriented Development? More Like Transit Rider Displacement*, L.A. TIMES (Feb. 20, 2018, 4:05 AM), <http://www.latimes.com/opinion/op-ed/la-oe-roenthal-transit-gentrification-metro-ridership-20180220-story.html>.

8. *See* Jun Yang et al., *The Effects of Subway Expansion on Traffic Conditions*, ENV'T DEV. 6, 16 (Aug. 2015), <http://www.efdnitiative.org/sites/default/files/publications/efd-dp-15-22.pdf>.

9. Jim Heid, *Greenfield Development Without Sprawl: The Role of Planned Communities*, URBAN LAND INST. 1 (July 2012), https://uli.org/wp-content/uploads/2012/07/GreenfieldDev.ashx_.pdf.

10. The term "sprawl" here refers to the massive greenfield development that took place from the 1960s through the 90s. Examples include Westlake Village, Rancho Santa Margarita, Irvine, Aliso Viejo, Summerland (Las Vegas, NV), Reston (VA) and The Woodlands (TX).

11. While CEQA's initial purpose was to provide local agencies a way to evaluate the environmental impacts of a project, CEQA has also been abused by non-environmental groups; "Not In My Backyard (NIMBY) opponents and special interests such as competitors and labor unions seeking non-environmental outcomes. Only 13 percent of CEQA lawsuits were filed by groups with a track record of prior environmental advocacy, such as the Sierra Club." Jennifer Hernandez, *New CEQA Study Reveals Widespread Abuse of Legal Process by 'Non-Environmentalists'*, PLANNING REPORT (Dec. 21, 2015), <https://www.planningreport.com/2015/12/21/new-ceqa-study-reveals-widespread-abuse-legal-process-non-environmentalists>.

12. Jeff Collins, *Will the 21,500-Home Newhall Ranch Project Be California's Greenest Development?*, ORANGE CTY. REGISTER (Dec. 4, 2017, 10:09 AM), <https://www.ocregister.com/2017/12/03/work-begins-on-21500-home-project-with-ambitious-goals-to-combat-climate-change/>; *see also* Jeff Collins, *Newhall Ranch by the Numbers*, ORANGE CTY. REGISTER (Dec. 3, 2017, 8:41 AM),

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Newhall Ranch's GHG Reduction Plan and show how this project achieved net zero emissions. Additionally, this note will argue that not all greenfield development is "sprawl," as suburban areas in Los Angeles County transition into more "urban-like" environments that offer greater walkability and mixed-use development.¹³

To achieve GHG reduction goals in the fight against climate change, it is worthwhile to examine all the options for new development. While the current assumption is that greenfield development increases GHG emissions, both well-designed planned communities and urbanizing suburban communities also have the potential of promoting GHG reduction goals while addressing California's housing shortage.¹⁴ This note proposes to reevaluate the presumptions regarding greenfield development and transit-oriented development in light of today's regulations and land use development patterns.

II. CALIFORNIA'S GHG STANDARDS AS PART OF GLOBAL CLIMATE CHANGE INITIATIVES

California's GHG reduction policies are part of the global community's fight against climate change. Thus, it is important to first understand the global context that influences California's air quality regulations. In 2015, 195 countries committed to reducing or mitigating GHG emissions "well below 2°C."¹⁵ Even though President Trump withdrew the United States from the Paris Agreement,¹⁶ China and India (the world's first and third highest GHG emitting nations respectively) will soon exceed their set targets in the 2015 Paris Agreement.¹⁷ Meanwhile, the global business community has recognized climate-related risks and opportunities

<https://www.ocregister.com/2017/12/03/newhall-ranch-by-the-numbers/>. Net zero emissions means that all the GHGs emitted in the project's life term (starting from construction) is reduced or offset through mitigation measures, such as planting trees or funding carbon capture technology; *Why 'Net Zero Emission by 2050?' An Explainer*, GENERATION YES, https://www.generationyes.com.au/why_net_zero (last visited Mar. 7, 2018).

13. This trend is not limited to Los Angeles County. See Emma Kantrowitz, *How Metropolitan Suburbs Are Blurring the Lines Between Urban and Suburban*, CBRE: BLUEPRINT (Dec. 21, 2017), <https://blueprint.cbre.com/urban-suburbs-and-the-role-they-play-in-the-urban-built-environment/>.

14. See generally Heid, *supra* note 9.

15. *Paris Agreement*, EUROPEAN COMMISSION, https://ec.europa.eu/clima/policies/international/negotiations/paris_en (last visited Mar. 3, 2018). The Intergovernmental Panel on Climate Change (IPCC) reported that "if global temperature rise exceeds 2 degrees Celsius, climate-related risks like wildfires, sea level rise, and crop failure will be magnified." Jeremy Berke, *Earth Will Likely Warm Way Beyond the Crucial Tipping Point that the Paris Agreement Was Meant to Avoid*, BUSINESS INSIDER (Dec. 15, 2017, 1:09 PM), <http://www.businessinsider.com/paris-agreement-not-on-track-climate-change-2017-12>.

16. E.g., Kevin Liptak, *WH: US Staying Out of Climate Accord*, CNN (Sept. 17, 2017, 1:21 PM), <https://www.cnn.com/2017/09/16/politics/trump-paris-climate-deal/index.html>.

17. The Editorial Board, *China and India Make Big Strides on Climate Change*, N.Y. TIMES (May 22, 2017), <https://www.nytimes.com/2017/05/22/opinion/paris-agreement-climate-china-india.html>; see also *China, India Slow Global Emissions Growth, Trump's Policies Will Flatten US Emissions*, CLIMATE TRACKER (May 14, 2017), <http://climateactiontracker.org/news/278/China-India-slow-global-emissions-growth-Trumps-policies-will-flatten-US-emissions.html>.

and has accordingly taken efforts to reduce GHG emissions.¹⁸ For instance, over 300 global companies—including 50 in the United States—have adopted science-based targets to reduce GHG emissions.¹⁹

However, reducing GHG emissions is only the start. To prevent global temperatures from rising more than two degrees Celsius, “as stipulated in the Paris Agreement of 2015, worldwide emissions must hit ‘net zero’ emissions no later than 2090.”²⁰ After this target is reached, GHG emissions must go “net negative” by removing more carbon from the atmosphere than is emitted.²¹ *The Economist* reports that “no scenarios are at all likely to keep warming under 1.5°C *without greenhouse-gas removal*” [emphasis added].²² In other words, even though policies and private initiatives reducing GHG emissions are catching on, in the future this may be the minimum. GHG removal will eventually become an issue of the future. For these reasons, California’s air and land use regulations are likely to move—at the very least—towards greater GHG reduction and potentially demand net zero emissions in the future.²³

III. SB 743: THE SWITCH FROM LEVELS OF SERVICE (LOS) TO VEHICLE MILES TRAVELED (VMT)

As transit ridership in Los Angeles County continuously decreases and more people buy cars, the increasing number of cars on the road has amplified concerns of congestion and the resulting increase in GHG emissions.²⁴ To reduce GHG emissions from driving, SB 743 replaces a traffic measure called LOS, which measures congestion on roadways and intersections, with VMT, which measures the number of miles traveled by

18. Climate risks on private companies fall into two general categories: (1) *transition risks*, which involve “changes in law, policy, technology and markets related to the transition to a lower-carbon energy supply”; and (2) *physical risks*, “damage to fixed assets, like buildings and property, or supply chain disruptions that can result from extreme weather events or changes in water availability.” *Climate Related Financial Disclosures*, CTR. CLIMATE & ENERGY SOLUTIONS, <https://www.c2es.org/content/climate-related-financial-disclosures/> (last visited Mar. 5, 2018).

19. Science-based targets set thresholds for private companies to cut back on their GHG emissions to help transition into a lower carbon economy. Some companies that have adopted these targets are CVS Health, HP Inc., Nestlé, Tesco, Gap Inc., NIKE, Inc. and Levi Strauss & Co. See *Companies Taking Action*, SCI. BASED TARGETS, <http://sciencebasedtargets.org/companies-taking-action/> (last visited Mar. 5, 2018).

20. *Greenhouse Gases Must Be Scrubbed from the Air*, *ECONOMIST* (Nov. 16, 2017), <https://www.economist.com/news/briefing/21731386-cutting-emissions-will-not-be-enough-keep-global-warming-check-greenhouse-gases-must-be>. Even if we meet the two degrees Celsius requirement, a new report estimates that global temperature will increase 3.2 degrees Celsius above pre-industrial levels by the end of the century, which is well above the two degrees Celsius initiative in the Paris Agreement. Berke, *supra* note 15.

21. *Id.*

22. *Id.*

23. See *an Idea Whose Time Has Come: Why Net Zero Emissions Is the Way of the Future*, CLIMATE REALITY PROJECT (Apr. 23, 2015, 9:00 AM), <https://www.climateRealityproject.org/blog/idea-whose-time-has-come-why-net-zero-emissions-way-future>.

24. Matt Tinoco, *Transit Ridership Is Falling Because Angelenos Keep Buying Cars*, *UCLA Report Says*, *CURBED* L.A. (Jan. 31, 2018, 12:03 PM), <https://la.curbed.com/2018/1/31/16950224/metro-ridership-decline-stats-car-ownership-study>.

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vehicles.²⁵ This means that if people drive to and from a proposed project by vehicle, then the project can have an environmental impact since it generates GHG emissions. These trips are already accounted for under CEQA's initial studies for air quality analysis,²⁶ but SB 743's implementation will require a separate VMT analysis.²⁷ With some additional requirements, SB 743 creates the presumption that TODs will not have a significant impact on VMT and exempts qualifying TODs from conducting a VMT analysis.²⁸ On the contrary, projects that require discretionary approval and are located in areas without access to transit will be required to conduct a VMT analysis.

A. LOS VS. VMT: THE DIFFERENCES AND WHY THEY MATTER

1. How the VMT Metric Favors TOD Over Greenfield Development

LOS, the historically used traffic metric in traffic impact studies, measures vehicle delay or congestion on roadways and at intersections.²⁹ Since LOS measures how much a project will increase congestion, its impacts are generally mitigated by increasing roadway capacity³⁰ (i.e. adding lanes or widening streets³¹). However, because already built-out areas usually

25. In 2018, California will adopt S.B. 743 by revising CEQA Guidelines and cities will be required to phase in S.B. 743 for statewide implementation by January 1, 2020. See *SB 743 Implementation*, CAL. DEP'T TRANSP., <http://www.dot.ca.gov/hq/tpp/sb743.html> (last visited Mar. 7, 2018). S.B. 743 will not apply to projects that do not require discretionary land use approval; have an overriding consideration; are located in a by-right zoning area; or qualify for a CEQA categorical exemption. Tina Kim, *How S.B. 743 Will Impact Land Use Projects and Why Transit-Oriented Development May Not Reduce Driving in Los Angeles*, USC BUS. LAW ADVISOR (July 2018) (on file with author).

26. See Rick Jarvis & Christine Crowl, *Changes Ahead for CEQA Traffic Studies: How Your City Can Prepare Now*, WESTERN CITY (Oct. 1, 2016), <http://www.westerncity.com/Western-City/October-2016/Changes-Ahead-for-CEQA-Traffic-Studies-How-Your-City-Can-Prepare-Now/>.

27. While the Governor's Office of Planning and Research provided guidelines on setting VMT thresholds, lead agencies are allowed to set their own VMT thresholds as long as they meet GHG reduction goals in California's air quality legislation. GOVERNOR'S OFFICE OF PLANNING & RES., TECHNICAL ADVISORY: ON EVALUATING TRANSPORTATION IMPACTS IN CEQA 6 (Nov. 2017), http://opr.ca.gov/docs/20171127_Transportation_Analysis_TA_Nov_2017.pdf.

28. S.B. 743 exempts projects located within "transit priority area[s]," which is an area located "within one-half mile of an existing or planned major transit stop" or a "stop along an existing high quality transit corridor." *Id.* at 4.

29. LOS is represented as a letter grade from A through F (e.g. LOS A represents completely free-flowing traffic and LOS F represents highly congested conditions). Jim Ortbal et al., Memorandum, *Transportation Policy Update Required by State Law – LOS to VMT*, CITY OF SAN JOSE 2 (June 16, 2017) <https://www.sanjoseca.gov/DocumentCenter/View/71078>. However, local governments and agencies will likely continue using the LOS metric despite S.B. 743. Since lead agencies have the discretion to use LOS for all projects for transportation planning or entitlement review, a lead agency can still require using the LOS metric for projects, such as freeways and road widening projects, if included in its General Plan or Regional Transportation Plan and Sustainable Communities Strategies. Kim, *supra* note 25.

30. The Times Editorial Board, *If California Is Serious About Climate Change, the Car Can't Be King of Our Roads*, L.A. TIMES (Dec. 16, 2017, 5:00 AM) <http://www.latimes.com/opinion/editorials/la-ed-ceqa-vmt-20171216-story.html>.

31. When lanes are added or roads are widened to reduce congestion, particularly at peak hours, additional drivers take advantage of the improved conditions, rendering the mitigation measure ineffective. For example, if a lane was added on a freeway and reduces congestion at peak hours, people who had previously (1) driven at other non-peak hour times; (2) taken other routes of travel; or (3) other modes of travel decide to drive at those hours. PAUL SORESENSEN ET AL., MOVING LOS ANGELES: SHORT-TERM POLICY OPTIONS FOR IMPROVING TRANSPORTATION 27 (Rand Corp. 2008) (ebook).

cannot widen roads or add lanes for cars, projects can be blocked, thus inhibiting infill development or TOD.³² As a result, LOS generally favors greenfield or suburban development where land is more available and impacts on congestion are minimal.³³ SB 743 sought to change this by switching the traffic metric to VMT, which measures the number of miles traveled by vehicles. VMT is a function of how many motorized vehicle trips are taken, the distance of those trips, and how many people are in a vehicle.³⁴ Switching to VMT will make driving constitute an environmental impact. As such, suburban or greenfield projects will have to account for the increased car travel they bring³⁵ and “[adapt the] current mitigation methods for this new measure of impact.”³⁶ The result will make development in suburban or greenfield areas more difficult.³⁷

2. Different Metrics, Different Mitigation

Under the LOS metric, adding roadway capacity (i.e. adding lanes and widening roads) is the primary mitigation measure.³⁸ But under the VMT metric, adding roadway capacity will attract more vehicles to the road, which will increase VMT and lead to an environmental impact.³⁹ The mitigation for traffic impacts under the new VMT metric includes improving transit, creating better bike access, locating affordable housing near transit, calming traffic, and limiting parking.⁴⁰ Thus, the VMT metric exclusively promotes other modes of transportation to driving. However, this may become an outdated and regressive measure, as autonomous, driverless electric vehicles develop and potentially become a preferred form of personal transportation.⁴¹ In that future, streets and highways will not only be necessary, but imperative. Thus, while the VMT metric aims to reduce GHG emissions, it should be evaluated in light of forthcoming technological changes, especially considering that the new metric can deter certain kinds of housing development and possibly add to the housing and infrastructure deficit in California.⁴²

32. Kim, *supra* note 25.

33. *Id.*

34. See *Executive Summary: Resolution Modifying Transportation Impact Analysis*, S.F. PLANNING DEP'T 6 (Mar. 3, 2016), http://commissions.sfplanning.org/cpcpackets/Align-CPC%20exec%20summary_20160303_Final.pdf.

35. Curry, *supra* note 4.

36. Kim, *supra* note 25 (citing WSP PARSONS BRINCKERHOFF, SB 743 IMPLEMENTATION 3 (May 2016) (conducted for the City of San Diego), <https://www.sandiego.gov/sites/default/files/pc-mobility-workshop-part2.pdf>).

37. *Id.*

38. Jarvis & Crowl, *supra* note 26.

39. *Id.*

40. Curry, *supra* note 4.

41. *Self-Driving Cars: The Future of Personal Transportation*, CONSUMER TECH. ASS'N, <https://www.cta.tech/About/Lets-Go-Humans/The-Future-of-Self-Driving-Cars.aspx> (last visited Mar. 8, 2018).

42. McKinsey Global Institute reported that 3.5 million homes are needed by 2025 to close the housing gap in California. McKinsey Global Institute, *A Tool Kit to Close California's Housing Gap: 3.5 Million Homes by 2025*, MCKINSEY & CO. (Oct. 2016), <https://www.mckinsey.com/global-themes/urbanization/closing-californias-housing-gap>.

B. POSSIBLE SHORTCOMINGS OF SB 743 IN PROMOTING GHG GOALS

1. Proximity to Transit May Not Increase Transit Ridership as Much as Expected

SB 743 aims to streamline the approval process for TOD or infill development to encourage higher transit use and reduce driving.⁴³ However, with the existing transit services and rail infrastructure, TOD may not encourage greater transit ridership because driving is still the faster and more convenient option, making it difficult for transit to compete.⁴⁴ Transit ridership has decreased by 17% since 2013 for several reasons.⁴⁵ First, driving to work tends to be on average twenty-two minutes faster in nearly every metropolitan area. Commuting to work by car is “far quicker than using a bus or train, taking less than half as long in some places.”⁴⁶ One research study found that “43.3 percent of jobs in the Los Angeles metropolitan area can be reached by car within 30 minutes. By contrast, only 0.7 percent of jobs can be reached by transit within 30 minutes.”⁴⁷ Second, the car offers significantly better mobility options. For instance, the average Los Angeles commuter can reach “60 times (not 60 percent, but 6,000 percent)” as many jobs by car than by transit.⁴⁸ The majority of jobs and places simply “cannot be conveniently accessed by transit.”⁴⁹ Lastly, fuel costs have been inexpensive, and when fuel costs are cheaper, more people opt to drive.⁵⁰ In sum, the car is the superior alternative to transit in terms of time, mobility, and convenience. Until transit services improve or driving becomes more expensive—through measures such as congestion pricing⁵¹—people will choose to drive their cars. As a result, TOD may not promote GHG reduction goals as much as expected. In fact, in cities around the world, increasing density in city center (or downtown) areas has worsened traffic and “lengthened work trip travel times.”⁵² Los Angeles is not going to be an exception.⁵³

43. Kim, *supra* note 25.

44. Yang et al., *supra* note 8.

45. Tinoco, *supra* note 24.

46. Mike Maciag, *Riding Transit Takes Almost Twice as Long as Driving*, GOVERNING (Feb. 2017), <http://www.governing.com/topics/transportation-infrastructure/gov-transit-driving-times.html>.

47. Wendell Cox, *Los Angeles Traffic: Likely to Worsen With Higher Densities*, NEW GEOGRAPHY (Mar. 2, 2017), <http://www.newgeography.com/content/005552-los-angeles-traffic-likely-to-worsen-with-higher-densities>.

48. Wendell Cox, *Connecting the Dots by Transit in Los Angeles?* NEW GEOGRAPHY (Mar. 7, 2018), http://www.newgeography.com/content/005900-connecting-dots-transit-los-angeles?utm_source=feedburner&utm_medium=email&utm_campaign=Feed%3A+Newgeography+%28Newgeography.com+-+Economic%2C+demographic%2C+and+political+commentary+about+places%29.

49. Cox, *supra* note 47.

50. A survey by Metro found that 19% of former riders stopped using Metro because their travel patterns changed, 18% said the buses were too slow, 12% said it was too hard to get to and from transit, and 11% said that service was generally unreliable. Matt Tinoco, *Metro's Declining Ridership, Explained: Ridership Is Down Nearly 20 percent since 2013*, CURBED L.A. (Aug. 19, 2017, 1:00 PM).

51. Congestion pricing are fees imposed on drivers that drive on congested roads during rush or peak hours. Adam Mann, *What's up with That: Building Bigger Roads Actually Makes Traffic Worse*, WIRED (June 17, 2014), <https://www.wired.com/2014/06/wuwt-traffic-induced-demand/>.

52. See Cox, *supra* note 47.

53. See *id.*

Furthermore, living or working close to transit has at best an “indirect role” in reducing car use.⁵⁴ Other equally important factors impact a person’s decision on whether to drive or take transit. A study by Daniel Chatman published in the *Journal of the American Planning Association* attributed “lower auto ownership and use in TODs” not from transit, but rather from other factors, such as “lower on- and off-street parking availability; better bus service; smaller and rental housing; more jobs, residents, and stores within walking distance; proximity to downtown; and higher subregional employment density.”⁵⁵ The study found that “other factors—from parking to mixed-use development—may have just as valuable a role.”⁵⁶ These results suggest that sustainability policies need to go beyond initiatives aimed at encouraging TODs (such as SB 743) and examine other factors to encourage transit use.⁵⁷

Additionally, encouraging TOD has had counterproductive effects because TOD projects usually take place in high density areas, where new development raises the prices of surrounding real estate⁵⁸ and consequently pushes transit riders away.⁵⁹ The majority of riders of public transportation are low-income residents.⁶⁰ TODs, which neighboring low-income residents cannot afford to live in, gentrify the area and displace the transit riding population.⁶¹ According to a recent UCLA-Berkeley study, transit-adjacent neighborhoods in L.A. gentrify at higher rates than in other neighborhoods.⁶² Another study correlated “the arrival of higher-income households to L.A.’s transit-adjacent neighborhoods with the loss of transit riders,” and the Center for Urban and Regional Policy reported that this is a national trend.⁶³ Furthermore, although gentrification could not be conclusively linked to the decline in transit ridership, “there are plenty of indicators that show such neighborhood change might be linked [to] transit declines.”⁶⁴

However, some argue that encouraging TODs increases housing supply, thereby making housing more affordable. Unless subsidized, TODs will likely make housing affordable for the higher income bracket, instead of the transit riding demographic. Downtown Los Angeles has experienced “waves

54. Kim, *supra* note 25 (citing Eric Jaffe, ‘Transit’ Might Not Be Essential to Transit-Oriented Development, CITYLAB (June 10, 2013), <https://www.citylab.com/equity/2013/06/transit-might-not-be-essential-transit-oriented-development/5851/>).

55. *Id.*

56. *Id.*

57. *See id.*

58. Joel Kotkin, *U.S. Cities Have a Glut of High-Rises and Still Lack Affordable Housing*, FORBES (Aug. 31, 2017), <https://www.forbes.com/sites/joelkotkin/2017/08/31/high-rise-glut-affordable-housing/2/#3667c7411b71>.

59. Rosenthal, *supra* note 7.

60. *Id.*

61. *Id.*

62. *Id.*

63. *Id.*; San Francisco and Oakland have already adopted the VMT metric. *See* Curry, *supra* note 4. In 2015, a UC Berkeley study found that that over a quarter of San Francisco’s neighborhoods are at risk for displacement, and by 2030, San Francisco, Oakland, “and many other Bay Area communities may realize that their neighborhood has turned the corner from displacement risk to reality.” Richard Florida, *This Is What Happens After a Neighborhood Gets Gentrified*, ATLANTIC (Sept. 16, 2015), <https://www.theatlantic.com/politics/archive/2015/09/this-is-what-happens-after-a-neighborhood-gets-gentrified/432813/>.

64. Tinoco, *supra* note 24.

of new fancy apartments” that have led to the area’s highest vacancy rate in nearly two decades at 12%.⁶⁵ In September 2017, the median price of a one-bedroom apartment in Downtown L.A. was \$2,500 per month.⁶⁶ Evidently, these prices are not affordable for most of the transit-riding demographic.

2. Jobs and Recreation Are Not Concentrated in Downtown L.A.

One assumption is that “[s]treamlined infill development will allow more people to live closer to where they work and play, saving time for other activities.”⁶⁷ However, the jobs in Los Angeles are not concentrated in the city center (Downtown) where transit services are most prominent. Over the past half-century, jobs have dispersed in clusters throughout the Southern California Association of Governments (SCAG) region.⁶⁸ Los Angeles, like many other metropolitan areas, has followed a polycentric development pattern, which means that the region is “no longer defined by a single downtown or city center but instead has developed multiple centers of economic activity.”⁶⁹ Most of the job growth has taken place in the suburbs, and in 2014 over 70% of the jobs were located in the suburbs in Los Angeles County.⁷⁰ In fact, for the majority of American cities, three out of four jobs are located outside the city center, including the central business district.⁷¹ Furthermore, as jobs move to the suburbs, offices are not concentrating in the city center.⁷² Instead many Angelenos are reverse commuting, from

65. Bianca Barragan, *Downtown LA Vacancy Rate Hits 17-year High*, CURBED L.A. (Sept. 15, 2017), <https://la.curbed.com/2017/9/15/16316040/downtown-la-high-vacancy-rate-rent>

66. *Id.*

67. *Frequently Asked Questions Regarding the Proposed Updates to the CEQA Guidelines*, STATE OF CAL. GOVERNOR’S OFFICE OF PLAN. AND RES. 3 (Nov. 2017), http://www.opr.ca.gov/docs/20171127_FAQs_Nov_2017.pdf.

68. Kevin Kane, *In Los Angeles, the Geography of Where People Work Has Been Experiencing Rapid Change*, LSE US CTR.: USAPP, <http://blogs.lse.ac.uk/usappblog/2017/02/22/in-los-angeles-the-geography-of-where-people-work-has-been-experiencing-rapid-change/> (last visited Mar. 7, 2018). The SCAG region “encompasses six counties (Imperial, Los Angeles, Orange, Riverside, San Bernardino and Ventura) and 191 cities in an area covering more than 38,000 square miles.” *About SCAG*, S. CAL. ASS’N OF GOV’T, <http://www.scag.ca.gov/about/Pages/Home.aspx>.

69. Kane, *supra* note 68. The general perception of what “the city” has been limited to the city center. However, one *Bloomberg* article states that “commentators may be missing the new reality” of the convergence between suburbs and urban areas “because so many of the intellectual elite live in a few highly distinctive major cities—New York, London or San Francisco—or in ‘urban adjuncts,’ such as Berkeley, California, or Cambridge, Massachusetts.” These are “isolated outposts, not the future for most of the West. Think instead of how the urban and suburban areas of Atlanta, Dallas, Houston and Orlando really don’t differ that much.” With this blur of urbanism into the suburbs, offices are no longer so thirsty for downtown locations. See Tyler Cowen, *Cities and Suburbs Are Becoming Pretty Similar*, BLOOMBERG VIEW (Oct. 11, 2017), <https://www.bloomberg.com/view/articles/2017-10-11/cities-and-suburbs-are-becoming-pretty-similar>.

70. Wendell Cox, *Suburbs (Continue To) Dominate Jobs And Job Growth*, NEW GEOGRAPHY (May 25, 2016), <http://www.newgeography.com/content/005264-suburbs-continue-dominate-jobs-and-job-growth>.

71. Shlomo Angel & Alejandro M. Blei, *The Spatial Structure of American Cities: The Great Majority of Workplaces Are No Longer in CBDs, Employment Sub-Centers, or Live-Work Communities*, 51 CITIES 21, 32 (2016).

72. Katie Pearce, *Lab Report: The New Urban-Suburban Blob*, CITYLAB (Oct. 12, 2017), <https://www.citylab.com/design/2017/10/lab-report-urban-suburban-blob/542712/>.

Downtown to jobs in the suburbs.⁷³ In fact, traffic analysis studies for projects in suburban or greenfield areas typically account for high reverse commutes.⁷⁴ For example, Daryl Zerfass, a principal at traffic consultant company Stantec Inc., stated that “there’s a very high reverse commute shown in the models for Santa Clarita Valley. It’s pretty common for cities when they do their general plans to take very optimistic projections of commercial and employment growth that they have in an area that is developing The housing leads the jobs.”⁷⁵

Furthermore, while Downtown L.A. has many recreational and entertainment attractions,⁷⁶ the same is true for other areas throughout L.A. County, which includes beaches, museums, and retail centers.⁷⁷ For example, L.A.-based developer Rich Caruso has taken traditional malls and redeveloped them into “lifestyle centers” for suburban communities that never had one, such as Americana at Brand in Glendale and Calabasas Commons.⁷⁸ Part of the region’s attractiveness is due to these tourist and recreational destinations, which means that residents in Downtown L.A. may decide to go to the beach or other parts of L.A. and vice versa.⁷⁹ Since these attractions are not concentrated in Downtown, the movement of people will not be contained to the city center simply due to the fact that they live there.

3. Trip Origination

The switch to VMT as the new traffic measure may be problematic for GHG reduction goals partially because the new VMT analysis will not account for trip origination.⁸⁰ Trip origination is the origin of the destination of the trips that will be made to and from the project site.⁸¹ These to and from destinations of the projected trips are a significant factor in calculating the actual VMT. For example, an office building next to a transit station may be exempt from the VMT analysis.⁸² However, not all the visitors and workers

73. See Kim, *supra* note 25; see also Douglas P. Shuit, ‘New Economy’ Puts Commuting Paths in Reverse, L.A. TIMES (Apr. 9, 2000), <http://articles.latimes.com/2000/apr/09/news/mn-17642>.

74. Telephone Interview with Daryl Zerfass, Principal of Transportation Planning & Traffic Engineering, Stantec (Jan. 26, 2018).

75. *Id.*

76. Jade Conroy, *The Renaissance of Downtown Los Angeles*, TELEGRAPH (Oct. 15, 2015), <https://www.telegraph.co.uk/travel/destinations/north-america/united-states/california/los-angeles/articles/The-renaissance-of-Downtown-Los-Angeles/>.

77. Lana Law, *16 Top-Rated Tourist Attractions in Los Angeles*, PLANET WARE, <http://www.planetware.com/tourist-attractions-/los-angeles-us-ca-la.htm> (last visited Mar. 8, 2018).

78. These “lifestyle centers” are intended to be “gathering places, places that provide opportunities for walking, and venues for spontaneous social interaction long associated with urban centers. Rich Caruso has built two of these centers in the Los Angeles suburbs of Calabasas and in Thousand Oaks. For instance, Calabasas Commons provides “the illusion that the center is less a brand-new mall than a somewhat sanitized version of a well-preserved central district in a small European town.” It was intended to be “a community center, with streets, ample places to sit, and many sidewalk cafes, and was designed to perform the civic functions of a traditional Main Street,” providing “if not exactly a downtown, at least a simulacrum of one.” JOEL KOTKIN, *THE NEXT HUNDRED MILLION*, 97–98 (2010).

79. Telephone Interview with Daryl Zerfass, *supra* note 74.

80. *Id.*

81. *Id.*

82. *Id.*

at this office building will take transit.⁸³ Many will opt to drive from a great number of areas throughout the County, and there will be trips made from everywhere.⁸⁴ Traffic consultant Daryl Zerfass explains that “when you have a VMT-only analysis, all the transportation consultant is going to be asked to do is to come up with the average VMT for the workers. The sites-specifics, as to where they are coming from, are not going to be a part of that.”⁸⁵ Before SB 743, estimating the trip origination was a main part of the traffic study.⁸⁶ However, now a VMT-only analysis does not comprehensively include site-specifics and may not be an accurate representation of the actual GHG emissions.

4. Induced Demand

The main purpose of encouraging TODs is to increase transit ridership, thereby reducing driving and lowering GHG emissions. However, increases in transit ridership does not necessarily translate to less driving because of induced demand. For example, when a new transit line is built, more people decide to ride, resulting in more space on the road.⁸⁷ But since there is less traffic congestion, those who usually did not drive decide to drive.⁸⁸ Thus, even if TOD residents take transit, induced demand may encourage other people to drive to capitalize on the improved road conditions. As a result, in the long-term, “the direct transit-traffic link is tenuous at best.”⁸⁹ For example, Beijing has added at least one new subway line every year since 2007, and by 2020, the city will have opened thirty new subway lines; however, increasing access to transit has not made a significant impact in relieving traffic congestion.⁹⁰

5. Discussion

In conclusion, a project's location near transit, by itself, is not enough to assume that the project will reduce driving and thereby help promote GHG reduction goals, particularly in a polycentric region such as Los Angeles. With the existing transit infrastructure and services, the car is still the superior alternative. In addition, TOD has a gentrifying effect that displaces transit riders, and even if there are any increases in transit ridership, induced demand may stifle the benefits of freer roads. Jobs and recreation are also dispersed throughout L.A. and the mobility offered by transit is limited. As a possible solution, some argue that policies should expand transit systems

83. *Id.*

84. *Id.*

85. *Id.*

86. *Id.*

87. See Mann, *supra* note 51.

88. *Id.*; see also Eric Jaffe, *Public Transit Does Not Have to Reduce Traffic Congestion to Succeed*, CITYLAB (Oct. 7, 2018), <https://www.citylab.com/solutions/2015/10/public-transit-does-not-have-to-reduce-traffic-to-succeed/409447/>.

89. *Id.*

90. A research study found that the primary reason for this situation in Beijing is because the car is the superior alternative to transit due to the low cost of private vehicles; the poor service and crowding of subway cars; and the more convenient “door-to-door” commute for private cars (in terms of travel speed, comfort, and privacy). See Yang et al., *supra* note 8.

by connecting these dense employment centers to each other.⁹¹ However, building a rail system that has equal mobility of the automobile “would require from half to three-quarters world megacity gross domestic products, *each year*.”⁹² Thus, massive transit expansion and “a vision of Los Angeles without the automobile” is not a realistic option.⁹³ To encourage more transit use, either transit services and infrastructure must improve, which is largely dependent on political will and the budgets of local and state governments, or driving must become more expensive (through measures such as congestion pricing⁹⁴) so that transit can compete with the convenience and mobility of the car. Until then, policies that exclusively encourage TOD, such as SB 743, may not significantly reduce driving as expected.

IV. NEWHALL RANCH: A NET ZERO EMISSIONS PROJECT

A. AB 32 AND CEQA

Well-designed greenfield projects, particularly planned communities, are distinguishable from “sprawl” because of CEQA’s environmental impact report (EIR) requirements and GHG reduction regulations. The EIR must provide all information necessary for a lead agency to decide whether the project will have any environmental impacts and ensure that projects will comply with environmental regulations. The approval process also requires a project to weigh environmental and community concerns, which can place a project at risk of litigation and delay.⁹⁵ A project that requires discretionary approval and survived CEQA review means that it has met the demands set by environmental regulations. The following requirements are why Newhall Ranch, a planned community, became a net zero emission project and why future developments must demonstrate considerable levels of GHG reduction to obtain discretionary approval.

The California Global Warming Solutions Act or Assembly Bill 32 (AB 32) requires California to reduce GHG emissions to 1990 levels by 2020.⁹⁶ AB 32 also requires the California Air Resources Board (CARB) to adopt rules for the major sources or categories of GHG to achieve the maximum technologically feasible and cost-effective reductions before January 1, 2011.⁹⁷ In 2016, California legislators passed Senate Bill 32 (SB 32) to require a statewide GHG reduction by 40% below 1990 levels by 2030.⁹⁸

91. See Cox, *supra* note 48.

92. *Id.*

93. *Id.*

94. Laura Bliss, *Could Congestion Pricing Finally Work for New York City?*, CITY LAB (Jan. 18, 2018), <https://www.citylab.com/transportation/2018/01/could-congestion-pricing-finally-work-for-new-york-city/550958/>

95. Interview with Allan D. Kotin, Land Consultant, Allan D. Kotin & Assoc., in L.A., Cal. (Nov. 8, 2017) (on file with author).

96. See Rachel Medina & A. Dan Tarlock, *Addressing Climate Change at the State and Local Level: Using Land Use Controls to Reduce Automobile Emissions*, 2 SUSTAINABILITY 1742, 1747 (2010) <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.664.851&rep=rep1&type=pdf>.

97. *Assembly Bill 32 Overview*, CAL. AIR RES. BD., <https://www.arb.ca.gov/cc/ab32/ab32.htm> (last updated Aug. 5, 2014).

98. CAL. HEALTH & SAFETY CODE § 38500 *et seq.*

AB 32's and SB 32's GHG reduction goals have been enforced through CEQA,⁹⁹ which regulates any environmental impact from a land use or transportation development project. CEQA's regulations limit how much a project can impact the environment (such as emitting GHG or harming an endangered species) without mitigating it. A lead agency, which is the public agency primarily responsible for approving a project,¹⁰⁰ must identify the significant environmental impacts and avoid or mitigate those impacts, if feasible.¹⁰¹ This means the project proponent must identify all of the environmental impacts from the start of construction to the end of the life-term of the project (demarcated by an "X" number of years).¹⁰² If the environmental impacts are significant, then they must be mitigated to "less-than significant" levels to the extent feasible.¹⁰³ All this information is prepared in an Environmental Impact Report (EIR) or a Negative Declaration.¹⁰⁴

B. EIR: SIGNIFICANT ENVIRONMENTAL IMPACTS AND THRESHOLDS OF SIGNIFICANCE

The EIR identifies and examines all significant environmental impacts¹⁰⁵ and any feasible alternatives that can lessen those environmental impacts and "feasibly attain most of the basic objectives" of the project.¹⁰⁶ GHG emissions are deemed to have a significant environmental impact and must

99. See Medina & Tarlock, *supra* note 96, at 1749.

100. *How Is a Lead Agency Determined Where More Than One Public Agency is Involved?*, CAL. NAT. RES. AGENCY, http://resources.ca.gov/ceqa/flowchart/lead_agency.html (last visited Mar. 8, 2018).

101. See *Offsets and CEQA: Mitigating Impacts via Offsite Credits*, CLIMATE ACTION RESERVE 4 (Oct. 16, 2013), http://www.climateactionreserve.org/wp-content/uploads/2009/05/Using-Offsets-for-CEQA-Compliance_10-16-13.pdf.

102. CEQA thus forces land use and development project proponents what effect the project will have on the project in *future years*. This type of litigation is meant to "force people to think about what the world will look like in 50 years and the strategy recognizes that some degree of climate change will be a reality and that we need to start grappling with its impacts." See Medina & Tarlock, *supra* note 96, at 1751.

103. See CEQA Guidelines, Cal. Code of Regs. tit. 14 § 15382 (2007). Feasible means "capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social, and technological factors." CEQA Guidelines, Cal. Code of Regs. tit. 14 § 15364 (2007).

104. An Environmental Impact Report (the "EIR") is an informational document which will inform the public agency decision-makers and the public of the following: (1) the significant environmental effects of a project; (2) the possible ways to minimize significant effects; (3) the reasonable alternatives to the project. A Negative Declaration is "a document that states upon completion of an initial study, that there is no substantial evidence that the project may have a significant effect on the environment." *Lead Agency Decision to Prepare EIR or Negative Declaration*, CAL. NAT. RES. AGENCY, http://resources.ca.gov/ceqa/flowchart/lead_agency/EIR-ND.html (last visited Mar. 8, 2018).

105. CEQA Guidelines defines a "significant effect on the environment" as "a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project, including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance." CEQA Guidelines, Cal. Code of Regs. tit. 14 § 15382 (2007).

106. The EIR will usually provide a range of feasible alternatives to the project, which may include alternative approaches, sites, or both; these choices are at the discretion of the project proponent. See Amanda Lekszulín et al., *CEQA Practicum: Project Objectives, Alternative Analysis, and CEQA Findings*, ASCENT ENVIRONMENTAL 4, 22–25 (Apr. 2013), http://ascentenvironmental.com/files/5713/7228/6106/CEQA_Practicum_Project_Objectives_Alternatives_Analysis_and_CEQA_Findings.pdf.

be mitigated through feasible GHG reduction measures until the environmental impact is not significant.¹⁰⁷ A project can emit GHG emissions and not have an impact if it is under the “threshold of significance” (“significance threshold”).¹⁰⁸ While CEQA Guidelines set significance thresholds, public agencies may also adopt and rely on their own thresholds, provided the decision is “supported by substantial evidence.”¹⁰⁹

C. EXCEPTIONS TO CEQA REVIEW

1. Overriding Considerations

There are some instances in which a project proponent does not have to mitigate or meet the significance threshold. For instance, even though a project will have a significant environmental impact, local agencies may elect to approve the project anyways if there is an overriding consideration.¹¹⁰ The public agency has the authority to approve a project despite the environmental impacts if there are other competing public objectives (including legal, technical, social, and economic factors) that the project will accomplish.¹¹¹ For example, if a public agency deemed that an area was in serious need of affordable housing, it could still approve the project despite its environmental impacts due to this overriding consideration.

2. By Right Zoning

A second example occurs where an agency offers a proposal for affordable housing. Public agencies may adopt what are called “by-right” zoning areas in their general plans. They streamline the approval process for development by not requiring CEQA review.¹¹² On September 29, 2017, the Governor approved SB 35, which mandates that a city or county adopt a general plan which reserves by-right zoning areas to build housing.¹¹³ Projects located in these areas do not have to obtain discretionary approval from the local agency.

3. CEQA Categorical Exemptions

Categorical exemptions in CEQA are “descriptions of types of projects which the Secretary of the Resources Agency has determined do not usually have a significant effect on the environment.”¹¹⁴ There are several classes of

107. *See generally Comtys. for a Better Env't v. City of Richmond*, 184 Cal. App. 4th 70 (2010).

108. CEQA Guidelines, Cal. Code of Regs. tit. 14 § 15064.7 (2007).

109. *Id.*

110. An overriding consideration is “a statement of the lead agency’s views on the ultimate balancing of the merits of approving a project despite its environmental damage.” *Lead Agency Adopts a Statement of Overriding Considerations*, CAL. NAT. RES. AGENCY, http://resources.ca.gov/ceqa/flowchart/la_soc.html (last visited Mar. 8, 2018).

111. *Id.*

112. *See* Carol Galante & Carolina Reid, *Expanding Housing Supply in California: A New Framework for State Land Use Regulation*, 1 J. CASE STUDY RES.: A PUB. OF THE CTR. FOR CAL. REAL EST. 1, 7 (2016) http://ternercenter.berkeley.edu/uploads/CCRE_Journal_-_Expanding_Housing_Supply_in_California_-_A_New_Framework_for_State_Land_Use_Regulation.pdf.

113. CAL. GOV'T CODE § 65913.4 (2016).

114. *Is the Project Categorically Exempt?*, CAL. NAT. RES. AGENCY, <http://resources.ca.gov/ceqa/flowchart/exemptions/categorical.html> (last visited Mar. 8, 2018).

categorical exemptions, outlined in CEQA's Guidelines. For example, "existing facilities" under the Class 1 exemption will not require discretionary approval.¹¹⁵

D. HOW AN AMBIGUOUS THRESHOLD OF SIGNIFICANCE FOR GHG EMISSIONS LED TO A NET ZERO PROJECT

CEQA review allows project opponents to challenge the approval for a project, and for Newhall Ranch, GHG emissions was one area that posed a particularly high risk. Since GHG emissions are deemed to have a significant environmental impact, a project must be mitigated (if feasible) to a "less than significant" level. However, when Newhall Ranch submitted its EIR, how much a project proponent must mitigate to meet the "less-than-significant" threshold was ambiguous for GHG emissions.¹¹⁶ In the GHG context, there is no uniformly accepted standard for GHG emissions, such as a specific numeric amount or a percentage that most commercial or residential projects can apply. This is because "various types of significance thresholds for measuring climate change impacts are acceptable under CEQA."¹¹⁷ For instance, one standard for thresholds of significance are those that air districts have set for GHG emissions.¹¹⁸ Another threshold is AB 32, which requires California to reduce its GHG emissions to 1990 levels by 2020 and continue reductions beyond 2020.¹¹⁹ In addition, on April 29, 2015, Governor Brown's Executive Order B30-15 also set GHG emissions target for 2030 at 40% below 1990 levels.¹²⁰ Furthermore, pursuant to Senate Bill 375 (2008), the California Air Resources Board also established GHG reduction targets for metropolitan planning organizations (MPOs) to achieve targets based on land use patterns¹²¹ and transportation systems specified in Regional Transportation Plans and Sustainable Community Strategies.¹²² In sum, this non-exhaustive list illustrates the complicated nature in determining the legal standard for GHG emissions.

115. *Id.*

116. See generally Alan Murphy, *Greenhouse Gas and Climate Change Impacts: CEQA Practice Tips*, PERKINS COIE (Apr. 17, 2014), <https://www.californialandusedevelopmentlaw.com/2014/04/17/analyzing-climate-change-impacts-under-ceqa-some-practice-tips/>.

117. *Id.*

118. *Evaluating Greenhouse Gas Emissions as Part of California's Environmental Review Process: A Local Official's Guide*, INST. FOR LOCAL GOV'T 4 (Sept. 2011), http://www.ca-ilg.org/sites/main/files/file-attachments/resources_CEQA-GHG_Guide_9-19-11_FINAL_1.pdf.

119. A.B. 32 requires reducing "approximately 15 percent below emissions expected under a 'business as usual' scenario." CAL. AIR RES. BD., *supra* note 97. The Intergovernmental Panel on Climate Change defines a "business as usual" baseline case as "the level of emissions that would result if future development trends follow those of the past and no changes in policies take place." Nilmini Silva-Send, *What is Business-As-Usual? Projecting Greenhouse Gas Emissions at the Regional Level*, EPIC ENERGY BLOG (July 24, 2015), <https://epicenergyblog.com/2015/07/24/what-is-business-as-usual-projecting-greenhouse-gas-emissions-at-the-regional-level-2/>.

120. *California Climate Change Executive Orders*, CA.GOV, http://www.climatechange.ca.gov/state/executive_orders.html (last visited Mar. 8, 2018).

121. *Senate Bill 375 – Regional Agencies and Data in Target Setting*, CAL. AIR RES. BD., <https://www.arb.ca.gov/cc/sb375/mpo/info-2018.htm> (last reviewed Aug. 13, 2014).

122. *Sustainable Communities*, CAL. AIR RES. BD., <https://www.arb.ca.gov/cc/sb375/sb375.htm> (last visited Mar. 8, 2018).

Through CEQA, environmental and non-environmental groups have frequently litigated land use projects, challenging whether the project complied with environmental regulations and sometimes requiring greater impact mitigation. The cost and risk of CEQA litigation have led projects to delay construction or to give up the project entirely. As the Office of Planning and Research explicitly stated, “thresholds of significance are not a safe harbor under CEQA; rather, they are a starting point for analysis . . . the determination of significance is ultimately a ‘judgment call.’”¹²³ If the project proponent does not meet the threshold, the project is exposed to significant risk. As Allan Kotin, a land consultant stated, “[T]he ultimate determination on whether you can or cannot build is that litigation takes time. If you keep the litigation long enough, the project will die. A lot of projects are killed that way. It’s the time cost and fragility of the development opportunity that makes CEQA so dangerous.”¹²⁴ CEQA litigation can range from a year to a few decades.¹²⁵ This risk was particularly true for Newhall Ranch due to the ambiguous threshold of significance for GHG emissions.

Newhall Ranch’s EIR was litigated for over 20 years due to CEQA litigation.¹²⁶ The California Supreme Court decision invalidated Newhall Ranch’s GHG analysis because the Court believed it fell short in demonstrating how the project-specific 31% reduction in emissions is consistent with AB 32 Scoping Plan’s state-wide 29% reduction goal. The Court mentioned a variety of options representing the threshold, any one of which could be perfectly legal and another project may use. Absent a clear uniform GHG threshold, taking any one of those options would have been an experiment for Five Point Holdings, the developer of this project, because these options had not been tried or run through the court system yet.¹²⁷ George Muhlsten, the leading attorney representing Five Point Holdings, explained that Five Point Holdings was

in a circumstance where the [California Supreme] Court said, here are three possible standards you could meet, and we didn’t know whether any of those will be upheld by the Supreme Court. If you choose anything other than zero [net emissions], you can quantify what the cost is, but you can’t quantify the risk. If you lose on that option, you’re back to square zero, and you lost 1, 3, 5 or 20 years or the entire project” [emphasis added].¹²⁸

123. GOVERNOR’S OFFICE OF PLANNING & RES., *supra* note 27, at 5.

124. Kotin, *supra* note 95.

125. *Id.*

126. Bianca Barragan, *Huge Newhall Ranch development in Santa Clarita Valley Will Bring 21,500 units to LA County*, CURBED L.A. (July 24, 2017), <https://la.curbed.com/2017/7/24/16020654/newhall-ranch-santa-clarita-valley-housing>.

127. Telephone Interview with Marc T. Campopiano, Partner, Latham & Watkins LLP (Oct. 19, 2017).

128. Interview with George J. Muhlsten, Partner, Latham & Watkins LLP, in L.A., Cal. (Oct. 19, 2017).

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As a result, Newhall Ranch chose to eliminate the risk of litigation altogether by spending \$100 million in off-site mitigation measures to become the largest net zero emission development in the nation.¹²⁹

E. NEWHALL RANCH HAS PROVEN NET ZERO EMISSIONS IS
“FEASIBLE”

Newhall Ranch is a pioneer because it is the first net zero emissions planned community. It is a \$13 billion mixed-use project, providing 21,500 homes¹³⁰ for 60,000 residents and future businesses with 11.5 million sq. ft. of commercial space, eleven parks, nineteen recreation centers, seven new schools, four fire stations, and one new library.¹³¹ While the scale of Newhall Ranch is unlike that of most developments, its net zero GHG reduction plan may have precedential value for future projects of similar scale and arguably for smaller projects, as well.

A project proponent must mitigate to meet the significance threshold when the mitigation measure to reducing GHG emissions is *feasible*. David Pettit, Senior Attorney at the Southern California Air Program for the National Resource Defense Council, stated:

[W]e've now seen – at least on the Newhall Ranch scale – that a net zero GHG development is feasible, this has now set a legal standard, a legal minimum, in my opinion, for a large scale project to be net zero. From the environmental standpoint that's a really good development [emphasis added].¹³²

Furthermore, David Pettit also stated that net zero will become expected from smaller scale developments (more traditional developments of over 100 units), as the cost of renewable energy decrease.¹³³ By 2020, renewable energy costs will be consistently cheaper than fossil fuels costs in the next few years, according to a report by the International Renewable Energy Agency.¹³⁴ Smaller developers may be expected to go net zero as renewable energy costs become increasingly financially feasible.

129. *Landmark Village and Mission Village Re-Approved by LA County Supervisors*, BUS. WIRE (July 18, 2017), <https://www.businesswire.com/news/home/20170718006481/en/Landmark-Village-Mission-Village-Re-Approved-LA-County>.

130. Susan Abram, *'Tremendous' Newhall Ranch Deal Paves Way for \$13 Billion Project After Years of Battles*, L.A. DAILY NEWS (Sept. 25, 2017), <https://www.dailynews.com/2017/09/25/tremendous-newhall-ranch-deal-paves-way-for-13-billion-project-after-years-of-battles/>.

131. Jeff Collins, *Newhall Ranch by the Numbers*, ORANGE CTY. REGISTER (Dec. 3, 2017), <https://www.ocregister.com/2017/12/03/newhall-ranch-by-the-numbers/>.

132. Telephone Interview with David Pettit, Senior Attorney, Natural Resource Defense Council (Nov. 14, 2017).

133. *Id.*

134. Dominic Dudley, *Renewable Energy Will Be Consistently Cheaper Than Fossil Fuels By 2020, Report Claims*, FORBES (Jan. 13, 2018), <https://www.forbes.com/sites/dominicdudley/2018/01/13/renewable-energy-cost-effective-fossil-fuels-2020/#133698e4ff2e>; see Emma Roehringer Merchant, *IRENA: Global Renewable Energy Prices Will Be Competitive With Fossil Fuels by 2020*, GREENTECH MEDIA (Jan. 16, 2018), <https://www.greentechmedia.com/articles/read/irena-renewable-energy-competitive-fossil-fuels-2020#gs.qN2fbRo>.

Furthermore, net zero emission buildings are a “nascent trend” that continues to gain traction, especially in California, which leads with 154 Zero Net Emission (ZNE) buildings that are in progress or already completed.¹³⁵ A report by the National Business Initiative states that “ZNE buildings are no longer solely demonstration projects and market outliers owned by public entities. Today’s list includes a wide-range of mainstream building types and ownership that reflect a more universal trend of ZNE adoption.”¹³⁶ While feasibility is dependent on a number project-specific factors, as renewable and energy efficient technology improves, net zero emissions may become feasible for a diverse spread of sizes and scales in retail, commercial, and residential spaces in the near future.

V. HOW NEWHALL RANCH WENT TO NET ZERO

Due to these legal requirements and litigation risks, Newhall Ranch became a net zero emissions project that offset all of its GHG emissions. Since Newhall Ranch is a greenfield development, it is built from ground up. Thus, the design of this community is able to implement sustainable features and capitalize on current energy efficient equipment and renewable energy technology at full scale. The following details how Newhall Ranch achieved net zero emissions under CEQA and demonstrates the potential of how greenfield development can be sustainable.

A. BACKGROUND: CEQA MITIGATION MEASURES: OFFSETTING GHG EMISSIONS

CEQA’s Guidelines provide a menu of options to offset GHG emissions through off-site and on-site mitigation measures. On-site mitigation measures reduce the amount of GHG emissions at the facility site. These measures include using higher efficiency heaters, steam generators and boilers; using renewable energy; reducing water use to reduce the GHG from water pumping and processing; reducing waste to reduce the energy associated with waste handling and processing; and more.¹³⁷ Off-site mitigation measures offset the project’s on-site GHG emissions by mitigating GHG emissions emitted outside the project.¹³⁸ For example, in the Local and Regional Mitigation program, air districts allow entities to supply

135. The total ZNE building population tracked by the National Business Initiative has grown by 74% since just last year, particularly in the ZNE emerging category. *2016 List of Zero Net Energy Buildings*, NEW BUILDINGS INST. 3 (Oct. 13, 2016), https://newbuildings.org/wp-content/uploads/2016/10/GTZ_2016_List.pdf.

136. *Id.*

137. *Greenhouse Gas Mitigation and CEQA*, SANTA BARBARA CTY. AIR POLLUTION CONTROL DIST. 3–4 (Apr. 2015), <https://www.ourair.org/wp-content/uploads/ghg-mitigation-and-ceqa.pdf>.

138. A development’s total GHG emissions cannot be completely offset by mitigating solely through on-site measures. On-site measures are limited to mitigating the GHG emissions that a building will produce. However, other sources of GHG emissions that are not emitted from the building, such as from construction, people driving, etc. also constitutes as part of the cumulative GHG emissions that may have a significant impact. This is why off-site mitigation measures may be required. While off-site mitigation measures do not mitigate the GHG emitted from the project, the effects of GHG emissions “extend well beyond an air basin’s boundaries. Emissions of GHGs in one location can produce effects on the other side of the globe,” which is why off-site mitigation is an acceptable form of GHG mitigation. *See id.* at 2; *see also* Interview with George J. Mhlsten, *supra* note 128.

funds for local GHG reduction programs (i.e. planting trees, installing alternative fuel stations and alternative transit systems, retrofitting homes and old buildings with energy saving devices, etc.).¹³⁹ In addition, the California Cap-and-Trade program is a state program that uses the AB 32-directed Scoping Plan, which caps the amount of GHG emissions that specific industries can emit.¹⁴⁰ Facilities subject to the cap are able to trade these “allowances” to emit GHGs. Facilities are required to obtain an “allowance,” which dictates the amount of GHG emissions they are allowed to emit, either through purchasing at auction or through freely allocated “industry assistance” allowances from CARB. Lastly, GHG Protocols and Registries provide GHG credits available through the Cap-and-Trade program and Registries for entities purchasing credits.¹⁴¹

B. NEWHALL RANCH'S NET ZERO GHG REDUCTION PLAN

Newhall Ranch mitigated 53% of its GHG emissions on-site. For any project, even if the project implements every mitigation measure that is technologically feasible regardless of cost, it cannot offset all of its GHG emissions on-site. As a result, Newhall Ranch offset 47% of its emissions through off-site mitigation measures. It is also important to note the percentage distribution between off-site and on-site measures: 53% on-site and 47% off-site. When selecting the mitigation measures, project proponents try to adopt a politically acceptable mix of off-site and on-site measures.¹⁴² For instance, even if all of a project's emissions were offset only by off-site measures, it would be disfavored by local governments and local communities.¹⁴³ Whether a plan is politically acceptable is dependent on past mitigation trends and local concerns.¹⁴⁴

Additionally, the CEQA review process provides lead agencies, environmental groups, and community groups an opportunity to ensure that the GHG reduction measures are legitimate. Since off-site measures occur outside the project, over time there has been increasing debate, questions, and controversies concerning whether those measures were actually effective in reducing GHG emissions.¹⁴⁵ The more the mitigation moves away from a well-controlled regulatory setting, the less certainty there is about the offset.¹⁴⁶ To avoid this potential controversy, instead of buying offsets, Newhall Ranch directly invested in projects, such as a local forest conservation project and a United Nations sponsored program, to avoid the potential concerns on whether the mitigation measure will actually reduce GHG emissions.¹⁴⁷ The following details the on-site and off-site mitigation

139. See *Greenhouse Gas Mitigation and CEQA*, *supra* note 137, at 4.

140. See *id.* at 5–6.

141. See *id.* at 6.

142. Telephone Interview with Marc T. Campopiano, *supra* note 127.

143. *Id.*

144. *Id.*

145. *Id.*

146. *Id.*

147. In addition, when selecting off-site measures, project proponents also have to be mindful of potential conflicts of additionality. Additionality means that if the mitigation was going to take place anyway even without the direct investment, the project does not receive any credit for the offset. For

measures set out in the EIR for Landmark Village, one of the two villages that was approved for Newhall Ranch.¹⁴⁸

1. On-site Mitigation

a. *Zero Net Energy Buildings and Electric Vehicles*

Newhall Ranch consists of zero net energy for commercial and residential buildings through energy efficient improvements coupled with on-site renewable energy generation, such as solar photovoltaic systems or wind-driven electricity generators.¹⁴⁹ In addition, swimming pool heating in “private recreation centers . . . shall be designed and constructed to use solar water heating or other technology with an equivalent level of energy efficiency”¹⁵⁰ The project also contributed to a building retrofit program¹⁵¹ and will install residential electric vehicle (EV) chargers for each residence and will “provide a \$1,000 subsidy for purchasing an zero emission vehicle for 50 percent of the project site’s residences.”¹⁵² Commercial buildings will also have EV chargers for parking spaces.¹⁵³

b. *Transportation Demand Management Plan*

Newhall Ranch’s Transportation Demand Management (TDM) Plan was designed to reduce the project’s VMT and encourage residents, workers, and visitors to take alternative transportation modes to driving through various measures.¹⁵⁴ The TDM Plan consists of fifteen VMT reduction strategies that will reduce Newhall Ranch’s VMT by 15.6%.¹⁵⁵

One measure was to integrate affordable and below market rate housing to provide “greater opportunity for lower income families to live closer to job centers and achieve jobs/housing match near transit.”¹⁵⁶ Approximately 21% of the housing within Landmark Village would be below market rate housing, with just 12% affordable to an average of 75% below the area median income.¹⁵⁷

The project’s Pedestrian Network will directly connect to all existing and planned pedestrian facilities both within and adjacent to the project, while minimizing any barriers to pedestrian access, such as walls, steep slopes, or inclines.¹⁵⁸ The Pedestrian Network will connect to existing development

example, if a farmer was going to buy machinery that reduced GHG emissions because it was required by law or because it was broken, then providing funding for the machinery would not be given credit to the project proponent. *Id.*

148. *Landmark Village*, *supra* note 129.

149. *Greenhouse Gas Emissions Technical Report: Landmark Village, Los Angeles County, California*, RAMBOLL ENVIRON 59 (Oct. 2016), <http://file.lacounty.gov/SDSInter/bos/supdocs/115374.pdf>.

150. *Id.* at 61.

151. *Id.* at 56.

152. *Id.* at 62.

153. *Id.* at 69.

154. *Id.* at 71.

155. *Id.*

156. *Appendix E: Fehr & Peers Transportation Demand Management Program Technical Memorandum*, in RAMBOLL ENVIRON, *supra* note 149, at 4.

157. *Id.* at 5.

158. *Id.*

surrounding the project and to a network of off-street trails that links areas of residential development with areas of commercial development, schools and open space, and in total reduce VMT by 2%.¹⁵⁹

Traffic calming strategies will be implemented, which include design elements that reduce motor vehicle speeds and improve pedestrian and bicyclist safety to encourage people to walk or bike instead of drive.¹⁶⁰

The project's transit network expansion consists of extending local transit service to major rail transit centers and other areas within a project site and improved pedestrian access to transit facilities (e.g., sidewalk/crosswalk safety enhancements and/or bus shelter improvements).¹⁶¹ Santa Clarita Transit plans to extend existing bus routes to connect Landmark Village to major transit centers such as the Santa Clarita or Newhall Metrolink Stations.¹⁶² These planned transit enhancements are estimated to increase the existing transit system network coverage by 80%.¹⁶³

In addition, the project has programs so that residents do not commute during peak or rush hour.¹⁶⁴ For example, there is an alternative work week or telecommute program that results in fewer commute trips.¹⁶⁵ In addition, the Required Commute Trip Reduction Program implements multiple VMT reduction strategies such as ride-sharing, marketing, preferential parking and end-of-trip facilities.¹⁶⁶

The remaining strategies are as follows: (1) the School Bus Program; (2) the Transit Fare Subsidy for Employees discounting daily or monthly public transit passes; (3) the Carshare Program providing "on-site availability of car-share vehicles throughout the project site, such as Zipcar or a Newhall Ranch-specific fleet"; (4) the NEV & Electric Bicycle (E-bike) Strategy, implementing a travel network for NEVs and e-bikes; (5) the Mobility Hubs, which are "one-stop centers for transit, rideshare meeting, car share, bicycle repairs," etc.; (6) the Tech-Enabled Mobility, which is a one-stop website for Newhall Ranch transportation information; (7) the Comprehensive Commute Planning, which includes "on-demand rideshare matching, real-time transit arrivals, bicycle route mapping, shared ride reservations, traffic information, etc."; (8) the Bikeshare, which provide available "bikeshare bicycles throughout the project site"; and (9) the Transit Fare Subsidy, which provides "discounted public transit passes to below market rate households."¹⁶⁷

c. *Other On-site Mitigation Measures*

159. *Id.*

160. *See id.* at 5–6.

161. *Id.* at 6.

162. *Id.*

163. *Id.* at 7.

164. *See id.* at 7–9.

165. *Id.*

166. *Id.*

167. *See Attachment: Newhall Ranch Transportation Demand Management Plan, in Appendix E: Fehr & Peers Transportation Demand Management Program Technical Memorandum, in RAMBOLL ENVIRON, supra note 149, at 24–27.*

Other on-site mitigation measures for reducing GHG emissions also include funding the following: (1) Traffic Signal Synchronization, which reduces the project's VMT by about 3%; (2) the Electric School Bus Program, which replaces or converts Compressed Natural Gas (CNG) buses to electric buses; and (3) an Electric Transit Bus Subsidy, which subsidizes \$100,000 per bus for replacing diesel or compressed natural gas transit buses with electric buses.¹⁶⁸

2. Off-site Mitigation

a. *GHG Reduction Plan*

Newhall Ranch's GHG Reduction Plan has many novel and notable features. First, the project will work with a leading developer of forest carbon offset projects to fund forest sequestration activities, such as planting new trees, improving forest management and avoiding de-forestation.¹⁶⁹ The project also will fund a United Nations sponsored program that provides clean-burning stoves in Africa (Zambia and Malawi, in particular).¹⁷⁰ More than three billion people burn wood for fuel or use inefficient stoves, which significantly contributes to GHG emissions and leads to "four million premature deaths annually due to the particulate matter pollution in households."¹⁷¹ Lastly, the project will seek to reduce methane emission from livestock on dairy farms in California and the United States by funding methane capture and destruction equipment.¹⁷²

b. *Other Off-site Mitigation Measures*

Additionally, the project funded the Off-site Building Retrofit Program, which includes improving the energy efficiency for existing buildings (i.e. cool roofs, solar panels, solar water heaters, smart meters, energy efficient appliances, energy efficient windows, insulation, and water conservation measures);¹⁷³ Carbon Credits, which will "fully mitigate the related construction and vegetation change GHG emissions";¹⁷⁴ and off-site EV Chargers.¹⁷⁵

168. RAMBOLL ENVIRON, *supra* note 149, at 71–73.

169. *Appendix F: Newhall Ranch Greenhouse Gas Reduction Plan*, in RAMBOLL ENVIRON, *supra* note 149, at 4.

170. *Id.* at 5.

171. *Id.*

172. Methane is the second most prevalent GHG emitted in the United States, and agriculture is the second largest source of methane emissions in the U.S. California has "the most dairy cows in the country" and the "highest aggregated dairy methane emissions due to the methane emitted from the livestock." *Id.* at 6.

173. *See Appendix G: Newhall Ranch Building Retrofit Program*, in RAMBOLL ENVIRON, *supra* note 149.

174. RAMBOLL ENVIRON, *supra* note 149, at 73.

175. *Id.*

VI. CHARACTERIZING GREENFIELD DEVELOPMENT AS “SPRAWL” – AN OUTDATED ASSUMPTION

A. CALIFORNIA’S ENVIRONMENTAL REGULATIONS

Greenfield development is often uniformly criticized as “sprawl.”¹⁷⁶ However, it is important to distinguish the “sprawl” and well-designed greenfield development such as Newhall Ranch, which adhered to environmental regulations, obtained approval, and survived litigation challenges. Furthermore, project proponents face risks from ambiguous legal standards, such as the GHG emissions significance threshold, which eventually led Newhall Ranch to take the most risk-averse option available: net zero emissions. Newhall Ranch exemplifies how CEQA review has allowed local governments and environmental groups to promote GHG reduction goals and environmentally check new development.

B. THE BLURRING OF SUBURBAN AND URBAN BOUNDARIES

The *Los Angeles Times* criticized Newhall Ranch as unsustainable development because “it is still sprawl,” which “will put tens of thousands of new residents far from job centers and mass transit, leading to more driving, more traffic and more pollution. . . . Cities have to grow inward — with more infill development, more density and more housing closer to jobs and transit.”¹⁷⁷ This critique relies on the assumption that Newhall Ranch will increase the distance from homes to job centers, thereby making more people drive and increase GHG emissions.¹⁷⁸ This premise is outdated considering demographics and development patterns of Los Angeles in the past few decades.

First, Newhall Ranch is not a development built in the middle of nowhere; it is surrounded by urbanized areas, such as Santa Clarita Valley, which is the third most populated city in L.A. County,¹⁷⁹ and San Fernando Valley.¹⁸⁰ While Newhall Ranch is called a greenfield project, it can be characterized as an in-fill project, as it is part of a general development trend in which the lines between suburban and urban areas are becoming more and

176. One definition of “sprawl” is “the rapid expansion of the geographic extent of cities and towns, often characterized by low-density residential housing, single-use zoning, and increased reliance on the private automobile for transportation.” John P. Rafferty, *Urban Sprawl*, ENCYCLOPÆDIA BRITANNICA, <https://www.britannica.com/topic/urban-sprawl>.

177. The Times Editorial Board, *Is Newhall Ranch a New Model of Sustainable Sprawl? Absolutely Not*, L.A. TIMES (Sept. 28, 2017), <http://www.latimes.com/opinion/editorials/la-ed-newhall-ranch-20170928-story.html>.

178. It is also worth noting that one of the variables in traffic impacts studies is to show the proximity to employment through the SCAG region. Job-housing balance is a significant factor when determining a project’s VMT. The more employment that is close by, the higher probability that people will live and work there in the same general vicinity; the better the job-housing balance, the more reduction in VMT the project can achieve. This is another way in which CEQA review “checks” the environmental impacts a project produces. See Telephone Interview with Daryl Zerfass, *supra* note 74.

179. *Population*, CITY OF SANTA CLARITA, <http://www.santa-clarita.com/city-hall/departments/community-development/demographics/population> (last visited on Mar. 8, 2018).

180. *Id.*

more blurred.¹⁸¹ Newhall Ranch is part of the “urban fabric” of Los Angeles¹⁸² and increasingly so, as suburbs experience greater growth and density.

Additionally, NIMBY-ism,¹⁸³ which has impeded much-needed residential development in urban centers, has raised rents and property values.¹⁸⁴ While city centers become increasingly expensive, people are moving to the suburbs.¹⁸⁵ However, the urban lifestyle is still popular and in demand. As a result, “suburban towns and developers are increasingly catering those looking for a more walkable, denser community.”¹⁸⁶ Suburbs are taking on more “urban-like” characteristics that in-fill development advocates often promote, such as mixed-use development and greater walkability.¹⁸⁷ One reason for the urbanization of the suburbs has been because millennials are moving to the suburbs.¹⁸⁸ An article from *Bloomberg* stated that “for millennials, the suburbs are the new city, and employers chasing young talent are starting to look at them anew.”¹⁸⁹ Older millennials starting families and taking out mortgages have looked to getting jobs in the suburbs,¹⁹⁰ and in response, “suburbs are increasingly going to try to adopt urban sensibilities to attract these migrating 30-somethings.”¹⁹¹

These once “sprawling” areas are now experiencing an “end to sprawl” and are transitioning into urbanity, which includes more walkability and transit.¹⁹² Many new employees want to be in be “walkable urban places

181. Interview with Allan D. Kotin, *supra* note 95.

182. *Id.*

183. NIMBY is an acronym for “Not In My Backyard.” Community groups often oppose new development projects in their neighborhoods, thus inhibiting development. Elizabeth Chou, *This Affordable Housing Bill Signed by Gov. Brown Could Be a NIMBY-Killer in LA*, L.A. DAILY NEWS (Sept. 29, 2017), <https://www.dailynews.com/2017/09/29/will-this-affordable-housing-bill-signed-by-gov-brown-be-a-nimby-killer-in-la/>.

184. Cowen, *supra* note 69.

185. Patrick Sisson, *The New American Suburb: Diverse, Dense, and Booming*, L.A. CURBED (Oct. 12, 2016), <https://www.curbed.com/2016/10/12/13255596/suburb-urban-planning-millennial-immigration-report-baby-boomer>.

186. *Id.*

187. These “urban suburbs” have been forming in major metropolitan areas in much of the world and “often act as a mirror to the larger city—providing similar amenities, mass transit, restaurants, retail and more—while offering their own sense of place . . . many of these towns have their own centuries-long history and evolved alongside the city, rather than because of it.” Kantrowitz, *supra* note 13.

188. Patrick Clark & Rebecca Greenfield, *Suburban Offices Are Cool Again*, BLOOMBERG NEWS (Oct. 11, 2017), <https://www.bloomberg.com/news/articles/2017-10-11/suburban-offices-are-cool-again>. The population growth is not limited to only millennials. Demographer Wendell Cox also found that millions of seniors have moved to the suburbs and exurbs throughout the country. Wendell Cox, *Millions More Seniors in Suburbs and Exurbs*, NEW GEOGRAPHY (Feb. 7, 2018), <http://www.newgeography.com/content/005874-millions-more-seniors-suburbs-and-exurbs>.

189. Clark & Greenfield, *supra* note 188.

190. *Id.*

191. Justin Fox et al., Opinion, *Driving the Suburban Resurgence*, BLOOMBERG (Aug. 25, 2017, 6:00 AM), <https://www.bloomberg.com/view/articles/2017-08-25/millennials-are-driving-the-suburban-resurgence>. An article on *Bloomberg* stated that “[m]any employers, hoping to attract millennials as they age, are trying to marry the best of urban and suburban life, choosing sites near public transit and walkable suburban main streets . . . what’s desired downtown is being transferred to suburban environments to attract a suburban workforce.” Clark & Greenfield, *supra* note 188.

192. Many new employees want to be in be “walkable urban places where they can walk out and have lunch options,” and companies that want to attract new employees are moving to areas that fill this

where they can walk out and have lunch options,” and this demand has made companies that want to attract new employees to move suburban areas that offer these environments.¹⁹³ One researcher who surveyed the country’s most populous thirty metropolitan areas noted this major shift “from car-friendly suburbs to foot-friendly urban areas is as significant . . . as the closing of the American frontier in the 1890s. One indicator of that change is the development of pedestrian-friendly city centers in the suburbs.”¹⁹⁴ For instance, what is now known as “Silicon Beach,” was once “sprawl” in West Los Angeles thirty years ago. Today, it boasts an economic and tech boom, is one of the most walkable communities in Los Angeles,¹⁹⁵ and is home to a new Metro line that is currently under construction.¹⁹⁶

In addition, as job-housing balances improve in once sprawling areas, new developments such as Newhall Ranch have already achieved an almost on-par job-housing balance from the beginning of the project.¹⁹⁷ Not only are job centers dispersed throughout the SCAG region, but these once suburban areas also demonstrate potential urbanity that can be environmentally desirable. The presumption now is that greenfield development produces higher VMT, but presumptions can and ought to change. Facing a future of population growth, a severe housing shortage, and a growing economy, it is worthwhile to consider a future that attempts to reduce GHG emissions by considering well-planned greenfield development and transforming existing suburban areas towards greater sustainability.

VII. CONCLUSION

Two legal developments have significantly impacted GHG regulations: SB 743 and Newhall Ranch. This article evaluated these two developments in order to impose questions on the assumptions regarding how TOD and greenfield projects can impact GHG emissions. This article aims to challenge the blanket assumptions that TOD is the superior option in achieving GHG emission reduction by assessing the various factors involved in coming to an accurate analysis. Project-specific conditions should be evaluated to determine whether TOD or a greenfield or suburban project will be the better option in achieving GHG reduction goals. Furthermore, reducing the dependency on cars and the resulting GHG emissions is a challenging issue, particularly for an automobile dependent region such as Los Angeles. While policies that encourage TOD may reduce driving, they fail in addressing mobility – the key factor that determines whether one will drive or take other modes of transportation.¹⁹⁸ However, the existing transit infrastructure and

demand. Daniel C. Vock, *Some Cities Are Spurring the End of Sprawl*, GOVERNING (June 17, 2014), <http://www.governing.com/topics/urban/gov-end-of-sprawl.html>.

193. *Id.*

194. *Id.*

195. See Maureen Farrell, *The Silicon Beach Boom?*, FORBES (May 20, 2011), <https://www.forbes.com/sites/maureenfarrell/2011/05/20/the-silicon-beach-boom/#f9d63cea5170>; see also *Cities in California*, WALKSCORE, <https://www.walkscore.com/CA/> (last visited Mar. 8, 2018).

196. *New Metro Line to Serve LA's "Silicon Beach,"* TRAVELSKILLS (Mar. 1, 2016), <http://travelskills.com/2016/03/01/new-metro-line-serve-las-silicon-beach/>.

197. See Heid, *supra* note 9, at 16; see also Interview with George J. Mhlsten, *supra* note 128.

198. Mobility is “the ability to travel where you want when you want, to connect to places in the

services do not provide the mobility necessitated in a polycentric city such as Los Angeles and remain an inferior alternative to the car in time, convenience and comfort. Furthermore, expanding transit and rail to provide the same mobility as the automobile would be an ideal option, but local and state governments are unlikely to foot the astronomical bill. Despite the challenges, well-planned greenfield development with sustainable features may provide a more realistic alternative that promotes walkability and mixed-use development while providing affordable housing.

Newhall Ranch provides a window into this alternative type of development as a distinguishable greenfield project from “sprawl.” Because Newhall Ranch was built from the ground up, it was able to comprehensively implement sustainable design features and capitalize on recent renewable energy and energy efficiency technology. Furthermore, CEQA’s EIR requirements, the approval process and the possible litigation by environmental or community groups have provided ways to ensure that land use projects comply with environmental regulations. Additionally, the urbanization that suburbs are undergoing also warrants recognition that suburban or greenfield projects may reduce driving as these areas achieve greater job-housing balances and cater to millennials’ demands for walkable and urban environments. This transition and the fact that Los Angeles has had a historical development pattern consisting of dispersed job centers should impose questions on whether growth should be contained in the city center. In conclusion, this note hopes to encourage legislators, local governments and communities to plan growth in the long-term, recognize the increasingly dissipating lines between “urban” and “suburban” and look towards opportunities that embrace the *entire* Los Angeles metropolitan region.

metro area you might want to go.” Angel & Blei, *supra* note 71.