Incorporating Transportation Topics into the Land Use Curriculum

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ABSTRACT: Land use and transportation are intricately linked. Transportation intersects with some of the most important issues covered in the land use law curriculum, including among others the wisdom of "Euclidean" zoning ordinances that mandate the segregation of uses, the advantages and disadvantages of ad hoc land use decision-making processes in which local officials have enormous discretion and leverage over landowners, the political economy of land use decisions, the interaction between land use and climate change policy, and questions about racial segregation, gentrification and displacement.

Strangely, however, transportation issues are largely neglected in the existing land use curriculum. While concerns about parking and traffic are ever-present in land use disputes, land use casebooks generally treat these concerns as straightforward issues that require little analysis. After all, everyone understands how frustrating it is to get stuck in traffic. But considering how predominant traffic and parking concerns have become in land use practice, teachers may find it useful to probe a bit more deeply into transportation questions in the land use course. After all, land use lawyers often find to their chagrin that they spend relatively little time dealing with juicy constitutional issues like the takings clause and far more time addressing hyperbolic, fact-free predictions of impending traffic nightmares from new development.

This symposium contribution offers three ideas about how transportation may be incorporated into the land use curriculum. First, teachers should consider introducing an analysis of "traffic impact studies" into the existing coverage of discretionary land use controls such as subdivision review. Traffic impact studies are among the most important tools used in land use planning today, and although they are often treated as inscrutable and given enormous deference by courts, they are actually incredibly simplistic documents filled with dubious assumptions that reflect an ideological preference for the automobile. Students will

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find "going under the hood" of a traffic study to be highly illuminating. Second, teachers may find it useful to discuss California's potentially epochal recent shift in measuring traffic impacts from "level of service" to "vehicle miles traveled." This discussion will help students see the disconnect between good policy and good politics when it comes to addressing issues like climate change and housing affordability. Third, I suggest a new approach toward teaching the "new urbanism," a planning movement that seeks to re-imagine the relationship between urban planning and transportation. This approach relies less on the conventional "case method" of law teaching and more on studying critical texts that raise doubts about traditional land use planning practices while also introducing difficult questions of race and inequality that surround efforts to reform those practices.

Integrating transportation into the land use curriculum in the manner I describe will hopefully have several beneficial outcomes: first, it will better prepare students to deal with transportation issues in practice; second, it will enrich and deepen the coverage of some of the more arid parts of the land use curriculum, such as the standard of judicial review applied to "quasi-judicial" land use decisions; and third, it will permit the course to branch out into areas that are often neglected in the conventional land use curriculum, such as the debate over gentrification.

I. INTRODUCTION

It is well known that land use and transportation are intrinsically linked. Early urban settlements emerged along rivers or at ports where trade flowed by boat. Cities were compactly developed because most mobility was by foot. The railway, streetcar, and automobile enabled today's more sprawling suburban development. A vast literature now exists exploring the complex interactions between land use and transportation, or the "Land Use Transportation Interaction" ("LUTI").[1]

As David Schleicher observes, LUTI models tend to focus on market conditions in isolation and rarely consider the effects of government regulation.[2] In fact, however, land use and transportation policy have enormous impacts on observed land use and transportation patterns. Where local governments mandate large homes on big lots and segregate residential from commercial uses, as is common throughout the United States, cities tend to assume a development pattern in which everything is sufficiently far from everything else that owning a car becomes a necessity. Cities then have to ensure that people can easily get where they need to go by car – so they mandate wide, long roads that let people drive fast, and require builders of new development to provide large quantities of free parking. These policies have the effect, in turn, of encouraging still more driving, as people are more likely to drive where driving and parking are more convenient. Spreading the city outwards with ample parking lots, wide roads and large lots also makes it less convenient for people to walk or bike, and reduces the feasibility of transit, so driving becomes the only game in town, and land use policies must do still more to ensure driving is convenient. In this way, our cities are increasingly designed around the demands of cars rather than the demands of people.[3]

What's more, transportation issues absolutely dominate the political debate about land use today. Throughout the country, residents are extraordinarily resistant to new development, especially housing, and their anxieties about new growth frequently manifest in the form of complaints about traffic and parking. Residents commonly cite local traffic congestion and parking as among their most significant concerns about new growth, and public meetings to debate new development are overwhelmed by

1. On this vast literature, see generally David Schleicher, *How Land Use Law Impedes Transportation Innovation*, *in* EVIDENCE AND INNOVATION IN HOUSING LAW AND POLICY 38 (Lee Anne Fennell & Benjamin J. Keys eds., 2017). For some representative examples, see generally Michael Wegener, *Land-Use Transport Interaction Models*, *in* HANDBOOK OF REGIONAL SCIENCE (Manfred M. Fischer & Peter Nijkamp eds., 2019); Bert van Wee, *Viewpoint: Toward a New Generation of Land Use Transport Interaction Models*, 8 J. TRANSP. & LAND USE 1 (2015).

2. *See* Schleicher, *supra* note 1, at 39–40.

3. *See generally* Gregory H. Shill, *Should Law Subsidize Driving?*, 95 N.Y.U. L. REV. 498 (2020) (describing "path dependency" that has made cities ever more dependent on automobiles and land use planning ever more centered on the automobile).

conversations about traffic.[4] As one article puts it: "In many rapidly growing areas, citizens perceive traffic congestion as the greatest public problem, outdistancing crime, the economy and housing shortages. . . . Traffic congestion now constitutes a predominant motivating factor behind recent growth control movements in rapidly growing states such as California, Florida and New Jersey."[5] That observation was written 30 years ago but could easily have been written yesterday.

It should come as no surprise to learn, then, that transportation intersects with some of the most important issues covered in the land use law curriculum, including among others the wisdom of "Euclidean" zoning ordinances that mandate the segregation of uses, the advantages and disadvantages of ad hoc land use decision-making processes in which local officials have enormous discretion and leverage over landowners, the political economy of land use decisions, the interaction between land use and climate change policy, and questions about racial segregation, gentrification and displacement.

Strangely, however, transportation issues are largely neglected in existing land use courses. While concerns about parking and traffic are ever-present in land use disputes and appear throughout the published cases that fill up land use "casebooks," the books rarely foreground these concerns, treating them as fairly straightforward complaints that require little analysis.[6] After all, everyone knows how frustrating it is to get stuck in traffic. But students are in for a big surprise when they enter practice and find that rather than mastering the analysis of appellate cases, they are expected to deal with traffic studies and parking requirements on a daily basis instead.

This contribution describes some ways that transportation issues can be usefully incorporated into the land use curriculum. In particular, I discuss three strategies: 1) teachers should consider introducing an analysis of "traffic impact studies" into the existing coverage of discretionary land use controls such as subdivision review; 2) teachers may find it useful to discuss California's potentially epochal shift in considering traffic impacts from "level of service" to "vehicle miles traveled;" and 3) I suggest a somewhat new approach to

4. *See* KATHERINE LEVINE EINSTEIN, DAVID M. GLICK & MAXWELL PALMER, NEIGHBORHOOD DEFENDERS: PARTICIPATORY POLITICS AND AMERICA'S HOUSING CRISIS 87, 117–18 (2020) (68 percent of negative comments on requests for variances were about parking, and one quarter of negative comments on new development were about traffic).

5. Robert H. Freilich & S. Mark White, *Transportation Congestion and Growth Management: Comprehensive Approaches to Resolving America's Major Quality of Life Crisis*, 24 LOY. L.A. L. REV. 915, 917–18 (1991).

6. For this work, I examined several of the major casebooks in the field. *See generally* DANIEL P. SELMI, JAMES A. KUSHNER, EDWARD H. ZIEGLER, JOSEPH F. DIMENTO & JOHN D. ECHEVERRIA, LAND USE REGULATION (5th ed. 2017); DAVID L. CALLIES, ROBERT H. FREILICH & SHELLEY ROSS SAXER, LAND USE CASES AND MATERIALS (7th ed. 2017); STEWART STERK, EDUARDO M. PEÑALVER & SARA C. BRONIN, LAND USE REGULATION (2d ed. 2016); ROBERT C. ELLICKSON, VICKI L. BEEN, RODERICK M. HILLS, JR. & CHRISTOPHER SERKIN, LAND USE CONTROLS (4th ed. 2013).

teaching the "new urbanism," a planning movement that seeks to re-imagine the relationship between urban planning and transportation.

Integrating transportation into the land use curriculum in the manner I describe will hopefully have several beneficial outcomes: first, it will better prepare students to deal with transportation issues in practice; second, it will enrich and deepen the coverage of some of the more arid parts of the land use curriculum, such as the standard of judicial review applied to "quasi-judicial" land use decisions; and third, it will permit the course to branch out into areas that are often neglected in the conventional land use curriculum, such as the debate over gentrification.

II. TRAFFIC STUDIES AND JUDICIAL REVIEW OF LAND USE DECISION MAKING

One very useful way to incorporate transportation into the land use curriculum is to have students read and analyze portions of a traffic impact analysis ("TIA"), also known as a traffic study. Essentially, traffic studies estimate the amount of traffic a new project is predicted to create.[7] Traffic studies are often critically important at several phases of the land use entitlement process, such as reporting a project's environmental impacts, making a discretionary determination on a project such as subdivision review or approval of a conditional use permit, determining appropriate mitigation measures for a project, and calculating impact fees to be assessed against a project.[8]

There are two main reasons why traffic studies are such important parts of the land use process. First, as traffic has become one of the predominant issues in local politics, cities face political pressure to either deny projects that will increase traffic or insist that developers mitigate the traffic impacts of their projects. As a result, cities increasingly rely upon ad hoc, discretionary

7. For a sampling of some of the literature dealing with TIAs, see generally Kristina M. Currans & Kelly J. Clifton, *Exploring ITE's* Trip Generation Manual*: Assessing Age of Data and Land-Use Taxonomy in Vehicle Trip Generation for Transportation Impact Analyses*, 118 TRANS. RSCH. PART A: POL'Y & PRAC. 387 (2018) (exploring the ITE's data and classification methods); Kristina M. Currans, *Issues in Trip Generation Methods for Transportation Impact Estimation of Land Use Development: A Review and Discussion of State-of-the-Art Approaches*, 32 J. PLAN. LITERATURE 335 (2017) (reviewing trip generation methods and potential problems associated with them); Adam Millard-Ball, *Phantom Trips: Overestimating the Traffic Impacts of New Development*, 8 J. TRANSP. & LAND USE 31 (2015) (evaluating the issues posed by overestimation in trip generation).

8. *See, e.g.*, City of Maywood v. L.A. Unified Sch. Dist., 145 Cal. Rptr. 3d 567, 616–20 (Cal. Ct. App. 2012) (describing use of traffic study in environmental impact report); Golf Course Assocs., L.L.C. v. New Castle Cnty., No. 15A-02-007JAP, 2016 WL 1425367, at *2–3 (Del. Super. Ct. Mar. 28, 2016) (describing county's subdivision review process, including requirement of a traffic study to assess traffic impacts); Valley Props., Inc. v. City of Lowell Zoning Bd. of Appeals, Nos. 260767, 262795, 2005 WL 1371846, at *15–16 (Mass. Land Ct. June 10, 2005) (planning board's decision to approve project was supported by substantial evidence because traffic study showed traffic impact of project would be minimal); Pierson Andrews, Nollan *and* Dolan*: Providing a Roadmap for Adopting a Uniform System to Determine Transportation Impact Fees*, 25 BYU J. PUB. L. 143, 151 (2011) (describing use of traffic studies to determine impact fees).

review procedures in which they can evaluate the specific impacts of projects and extract concessions to mitigate those impacts from the developer seeking an approval. But cities cannot use their discretionary power to make purely political decisions because of a second development, which is that courts have increasingly required cities to support their decisions with factual evidence rather than just politics when they review projects on an ad hoc, discretionary basis.[9] Traffic studies allow cities to thread the needle between these two imperatives. Armed with the traffic study, the city can assuage concerns of residents about the impact of new development, pressure a developer to undertake more mitigation measures in order to placate angry neighbors, and satisfy a reviewing court that its decision has sufficient factual support. Courts routinely lean on traffic studies when determining whether a jurisdiction acted properly in a discretionary context.[10]

Despite the importance of the traffic study throughout the land use process, a student could emerge from an entire three-credit land use course with no real understanding of what traffic studies are, why they are significant, or how to read one. In my land use class, as described below, I assist students in critically reviewing a traffic study. There are a number of different points in the curriculum when this exercise can be useful, but I assign it in conjunction with a discussion of subdivision review and judicial standards of review of land use decisions.[11] Organizing the material this way educates students about traffic studies while also using the traffic study as a platform for students to better understand the process of subdivision approval and the nature of judicial review of land use decisions. An additional benefit,

9. *See* Dolan v. City of Tigard, 512 U.S. 374, 388–91 (1994) (holding that the Federal Constitution's takings clause requires development exactions to be quantified and proportional "to the impact of the proposed development"). In *Dolan* and its other cases dealing with development "exactions," which are concessions requested by a local agency in exchange for issuing a development permit, the Supreme Court has strongly implied that it will apply heightened scrutiny only to exactions imposed in "adjudicative" settings, where local agencies make ad hoc, discretionary determinations on particular projects. *See id.* at 385, 391 n.8; Nollan v. Cal. Coastal Comm'n, 483 U.S. 825, 835–37 (1987)*; see also* Koontz v. St. Johns River Water Mgmt. Dist., 570 U.S. 595, 628 (2013) (Kagan, J., dissenting) (speculating that "maybe" the majority opinion adopts the rule that the exactions doctrine only applies in adjudicative settings). The Supreme Court's heightened scrutiny of exactions sought in a discretionary context is consistent with a similar trend in state law to apply heightened scrutiny to discretionary decisions. *See, e.g.*, Uintah Mountain RTC, L.L.C. v. Duchesne Cnty., 127 P.3d 1270, 1275 (Utah Ct. App. 2005) (applying substantial evidence standard to discretionary decision on conditional use permit). I discuss the distinction between adjudicative or "quasi-judicial" decisions and legislative decisions further. *See infra* notes 15–19 and accompanying text.

10. For example, see the discussion of *Blue Ridge Co. v. Town of Pineville*, 655 S.E.2d 843 (N.C. Ct. App. 2008) in notes 23–31 and accompanying text; *see also* cases cited *supra* note 8 (collecting cases in which court considered jurisdiction's reliance on traffic studies).

11. Traffic studies are also used in many other types of land use decisions, such as conditional use permits, variances, and environmental impact reporting, and so can usefully be incorporated into any of those areas as well. The next Part discusses how traffic studies can be integrated into a lesson on environmental impact reporting.

described below, is that critically examining a traffic study will help students understand the limitations of these studies and give students confidence that they can interpret highly technical information (a critical skill in practice, where very technical studies are common). Indeed, students quickly grasp that beneath the technical gobbledygook, traffic studies represent a very profound political and ideological project that should not be uncritically accepted.

Section A below describes the conventional approach to teaching subdivision review and quasi-judicial decision-making. Section B then shows how introducing analysis of an actual traffic study can enrich that experience.

A. "QUASI-JUDICIAL" DECISION MAKING: THE CONVENTIONAL APPROACH

Any time a developer proposes to subdivide a parcel into separate lots, the jurisdiction will generally undertake a highly particularized ad hoc review of the subdivision, including an evaluation of the infrastructure, services, utilities, and so forth.[12] The jurisdiction may also place conditions on the approval of the subdivision to ensure that the subdivision meets the jurisdiction's standards, such as requiring the dedication of streets within the subdivision to the city or payment of a fee to mitigate traffic impacts.[13] Needless to say, traffic is a major part of subdivision review, and so jurisdictions will often rely on traffic studies to evaluate traffic impacts and calibrate appropriate mitigations.[14]

The land use class tends to focus, of course, on the legal aspects of subdivision review, and here traffic studies can be especially helpful. Technically speaking, subdivision review falls within a class of land use decisions referred to as "quasi-judicial" or adjudicative, as opposed to decisions that are considered quasi-legislative.[15] Although in practice this distinction is quite difficult to draw, in general terms a legislative decision is an enactment with broad, prospective applicability, whereas a quasi-judicial decision is a decision that applies narrowly to a particular landowner or set of facts. For example, the enactment of a general plan or zoning ordinance that sets out permitted land uses throughout the city would clearly be a legislative

12. *See, e.g.*, SELMI ET AL., *supra* note 6, at 97–137 (discussing the process of subdivision review).

13. *See, e.g.*, STERK ET AL., *supra* note 6, at 115–17; Andrews, *supra* note 8, at 150.

14. *See, e.g.*, Golf Course Assocs., L.L.C. v. New Castle Cnty., No. 15A-02-007 JAP, 2016 WL 1425367, at *2–3 (Del. Super. Ct. Mar. 28, 2016) (describing county's subdivision review process, including requirement of a traffic study to assess traffic impacts), *aff'd*, 152 A.3d 581 (Del. 2016); Valley Props., Inc. v. City of Lowell Zoning Bd. of Appeals, Nos. 260767, 262795, 2005 WL 1371846, at *15–16 (Mass. Land Ct. June 10, 2005) (planning board's decision to approve project was supported by substantial evidence because traffic study showed traffic impact of project would be minimal).

15. On the legislative/quasi-judicial distinction generally, see SELMI ET AL., *supra* note 6, at 252–62; see also Kenneth A. Stahl, *Reliance in Land Use Law*, 2013 BYU L. REV. 949, 1000–05.

decision.[16] On the other hand, a landowner's application for a variance, which is an exemption from the zoning ordinance due to a particular hardship that the landowner would suffer if the zoning ordinance were strictly applied to them, is an example of a quasi-judicial decision.[17] Between those two more obvious examples lies a grey area, but subdivision review clearly has all the hallmarks of quasi-judicial action and is so considered in most places.

As land use courses tend to emphasize, the legislative/quasi-judicial distinction is legally important because courts treat these kinds of decisions differently. Courts are very deferential towards legislative decisions, rarely applying any meaningful scrutiny or procedural safeguards to these kinds of actions. Courts consider legislative decisions to be essentially questions of policy that are subject only to the minimal protections of the *political* rather than the *legal* process, such as the requirement that meetings be open to the public.[18] Quasi-judicial proceedings, on the other hand, require heightened judicial scrutiny. Because cities are in a sense adjudicating the property rights of landowners, these decisions generally cannot be purely political. Normally, cities must support a quasi-judicial decision with written findings supported by "substantial evidence."[19]

In recent years, the U.S. Supreme Court has become more involved in micro-managing certain categories of quasi-judicial decisions. In the context of "exactions," where cities demand that developers provide the city with certain benefits in exchange for the city granting a land use approval (a common occurrence in subdivision review), the Court has held that the demand must be closely related and proportional to the impact of the development, and the city must also *quantify* the impact of the development so that it can determine whether the exaction is sufficiently proportional to the impact.[20]

Enter the traffic study. Though traffic and parking generate huge amounts of political controversy, neighbors' subjective fears of traffic are generally insufficient to qualify as "substantial evidence," and certainly do not

16. *See, e.g.*, Friends of Frederick Cnty. v. Town of New Market, 120 A.3d 769, 780 (Md. Ct. Spec. App. 2015).

17. *See, e.g.*, Topanga Ass'n for a Scenic Cmty. v. County of Los Angeles, 522 P.2d 12, 19 (Cal. 1974).

18. *See, e.g.*, Coniston Corp. v. Vill. of Hoffman Estates, 844 F.2d 461, 468 (7th Cir. 1988) ("The Constitution does not require legislatures to use adjudicative-type procedures, to give reasons for their enactments, or to act 'reasonably' in the sense in which courts are required to do . . . .").

19. *See, e.g.*, STERK ET AL., *supra* note 6, at 533–45.

20. *See* Dolan v. City of Tigard, 512 U.S. 374, 391 (1994) (holding that the Federal Constitution's takings clause requires exactions to be quantified and proportional "to the impact of the proposed development"). In *Dolan* and its other exactions cases, the Supreme Court has strongly implied that these requirements only apply to exactions imposed in a quasi-judicial proceeding, rather than a legislative one. *See* Koontz v. St. Johns River Water Mgmt. Dist., 570 U.S. 595, 612–13 (2013); Nollan v. Cal. Coastal Comm'n, 483 U.S. 825, 835–37 (1987).

count as the kind of quantification the Supreme Court expects in exactions cases.[21] If the city commissions a traffic study, however, it can specifically quantify the amount of traffic that a project is anticipated to generate and calculate a mitigation that is appropriately proportional. In general, then, traffic studies are accepted by courts as substantial evidence that will justify denying a project on the grounds that it will generate too much traffic, or justify a traffic-mitigation measure as sufficiently proportional to the quantified impact of the development.[22] Alternatively, developers can use traffic studies to show that a denial was not supported by substantial evidence.

Existing casebooks generally illustrate these concepts by the traditional method of excerpting an appellate case. As an example, consider *Blue Ridge Co. v. Town of Pineville* in the Selmi casebook.[23] In this case, a landowner's application to create a new residential subdivision was rejected in part on the grounds that it would cause too great an increase in local traffic.[24] The court found that the denial was not supported by substantial evidence.[25] A traffic expert testified before the town council that the anticipated increase in traffic generated by the new development would not increase traffic volume on local roads sufficiently to "exceed minimum traffic capacity standards."[26] The only evidence in the record that supported the traffic concerns was testimony from neighbors of the project about anticipated noise and decreased traffic flow.[27] However, "[t]he residents did not rebut [the expert's] testimony with mathematical studies or any other factual basis to establish that the increase in traffic would adversely affect the community."[28] Therefore, the court held that there was insufficient evidence in the record to support the denial.[29]

Blue Ridge usefully illustrates the nature of judicial review in quasi-judicial proceedings. When municipalities act legislatively, they are permitted to be influenced by political considerations such as neighborhood opposition to a new project, even if that opposition is not empirically supported; but when municipalities act in a quasi-judicial capacity, they must base their decision on actual evidence, and set forth that evidence in findings of fact that a court can

21. *Cf.* Uintah Mountain RTC, L.L.C. v. Duchesne Cnty., 127 P.3d 1270, 1276 (Utah Ct. App. 2005) (concluding that neighbors' subjective fears are not "substantial evidence").

22. See, for example, the discussion of *Blue Ridge Co. v. Town of Pineville*, 655 S.E.2d 843 (N.C. Ct. App. 2008), discussed *infra* at text accompanying notes 23–31; Valley Props., Inc. v. City of Lowell Zoning Bd. of Appeals, Nos. 260767, 262795, 2005 WL 1371846, at *15–16 (Mass. Land Ct. June 10, 2005) (describing how the planning board's decision to approve project was supported by substantial evidence because traffic study showed traffic impact of project would be minimal); Andrews, *supra* note 8, at 144.

23. *See* SELMI ET AL., *supra* note 6, at 106–11 (discussing *Blue Ridge Co.*).

24. *Blue Ridge Co.*, 655 S.E.2d at 848–49.

25. *See id.* at 848–49.

26. *See id.* at 848.

27. *See id.*

28. *Id.*

29. *See id.* at 848–49.

review. The heightened standard of review puts a premium on having expert testimony or some objective evidence other than political opposition.

But *Blue Ridge* also illustrates an important judicial shortcoming in reviewing land use decisions. There is little indication in the court's opinion that the court examined the methodology or credibility of the traffic study at all. The court was apparently moved by the simple fact that one side had a traffic study supporting its conclusion and the other side did not.[30] This result may seem surprising, but it is consistent with a general trend in land use decision making for courts to elevate procedure over substance. Courts are very reluctant to second-guess the substance of land use decisions because they recognize their own lack of expertise in this area, so they place a lot of weight on formal procedural factors that are easier to evaluate, such as whether land use regulations are consistent with a comprehensive plan, or whether the jurisdiction followed the correct process to reach a decision.[31] The substantial evidence standard invites a similar formalism, in which courts can defer to local decision-making as long as it is based in some kind of expert testimony.

B. ANALYZING THE TRAFFIC STUDY

Students can easily come away from a case like *Blue Ridge* with the sense that traffic studies are uncontroversial technocratic documents that require no serious analysis and are invulnerable to critique. That sense can be dispelled, however, if students are introduced to an actual traffic study. The exercise described below can give students confidence in their ability to analyze technical documents and the tools to critically examine such documents without the kind of near-total deference courts tend to confer upon them. Going "under the hood" of traffic studies will show students the dark secret of these studies, which is that they are less scientific than they are ideological products, and their precise predictions of future traffic are not based in anything resembling reality. That conclusion will then raise the question of whether courts should continue treating traffic studies so deferentially under the substantial evidence standard.

In my land use class, I assign students to read an actual traffic study from a mixed-use development project in the city of Carson, California, alongside a short and incisive piece on traffic impact analyses by Donald Shoup called

30. *See supra* text accompanying notes 7–10, 22–29.

31. For example, under the "spot zoning" doctrine, courts will evaluate the validity of a zoning change based on the size of the area subject to the zoning change, rather than the substantive rationale for the zoning change. *See, e.g.*, Foothill Cmtys. Coal. v. County of Orange, 166 Cal. Rptr. 3d 627, 634–38 (Cal. Ct. App. 2014). Another example is that courts will often ask whether a zoning ordinance is consistent with a comprehensive plan, but do not evaluate the substance of the plan itself. *See, e.g.*, Wolf v. City of Ely, 493 N.W.2d 846, 850–52 (Iowa 1992) (declaring a zoning ordinance to be invalid because it was not consistent with a comprehensive plan).

Truth in Transportation Planning.[32] The developer of "the Avalon" project in Carson (subsequently renamed "Union South Bay") proposed to build 357 apartments and 32,000 square feet of retail space on the site of a gas station, strip mall, and a few other uses.[33] Because the project required certain "entitlements," which is basically a euphemism for a discretionary land use decision, the developer was required to pay for a traffic study. I assign students to read this traffic study, but rather than just march through all 180 pages, I ask a few targeted questions, which are designed to help students understand the methodology traffic studies use to estimate traffic impacts. The first two questions are: (1) how much traffic does the report predict the project will generate, and (2) what is that prediction based upon? Students will look for section 7.1 of the report, entitled "Project Trip Generation."[34] Table 7-1 on page 35, reprinted below as Figure 1, shows a predicted increase of 2,398 car trips per day as a result of this project:

32. Donald Shoup, *Truth in Transportation Planning*, *in* PARKING AND THE CITY 59, 59–73 (Donald Shoup ed., 2018).

33. *See* ALFRED C. YING, LINSCOTT, LAW & GREENSPAN, ENG'RS, TRAFFIC IMPACT STUDY: THE AVALON MIXED-USE PROJECT 4 (2015), http://ci.carson.ca.us/content/files/pdfs/planning/avalon_mixeduse/Appendix_F_Traffic_Study.pdf [https://perma.cc/A86F-F8VL]. I chose this particular traffic study because it had a relatively clear discussion of how the traffic impacts were generated and because it was a mixed-use project with a variety of land uses, which is useful for illustrating the trip generation method described below.

34. *Id.* at 32.

Figure 1. Project Trip Generation for the Avalon Project[35]

Table 7-1
PROJECT TRIP GENERATION [1]

LAND USE	SIZE	DAILY TRIP ENDS [2] VOLUMES	AM PEAK HOUR VOLUMES [2] IN	AM PEAK HOUR VOLUMES [2] OUT	AM PEAK HOUR VOLUMES [2] TOTAL	PM PEAK HOUR VOLUMES [2] IN	PM PEAK HOUR VOLUMES [2] OUT	PM PEAK HOUR VOLUMES [2] TOTAL
Proposed Project								
Apartment [3]	357 DU	2,374	36	146	182	144	77	221
- Less Internal Capture [4]		(238)	(4)	(15)	(19)	(43)	(23)	(66)
- Less Transit/Walk/Bike (10%) [5]		(238)	(4)	(15)	(19)	(14)	(8)	(22)
Subtotal		1,898	28	116	144	87	46	133
Supermarket [6]	15,000 GSF	1,534	32	19	51	72	70	142
- Less Internal Capture [4]		(76)	(3)	(2)	(5)	(11)	(11)	(22)
- Less Transit/Walk/Bike (10%) [5]		(154)	(3)	(2)	(5)	(7)	(7)	(14)
		1,304	26	15	41	54	52	106
- Less Pass-By (36%) [7]		(470)	(9)	(5)	(14)	(19)	(19)	(38)
Subtotal		834	17	10	27	35	33	68
Pharmacy/Drugstore w/o Drive-Through [8]	8,000 GSF	720	16	8	24	33	34	67
- Less Internal Capture [4]		(36)	(2)	(1)	(3)	(5)	(5)	(10)
- Less Transit/Walk/Bike (10%) [5]		(72)	(2)	(1)	(3)	(3)	(3)	(6)
		612	12	6	18	25	26	51
- Less Pass-By (40%) [7]		(244)	(5)	(2)	(7)	(10)	(10)	(20)
Subtotal		368	7	4	11	15	16	31
Retail [9]	4,000 GLSF	170	2	2	4	7	8	15
- Less Internal Capture [4]		(8)	0	0	0	(1)	(1)	(2)
- Less Transit/Walk/Bike (10%) [5]		(18)	0	0	0	(1)	(1)	(2)
		144	2	2	4	5	6	11
- Less Pass-By (34%) [7]		(48)	(1)	(1)	(2)	(2)	(2)	(4)
Subtotal		96	1	1	2	3	4	7
High-Turnover (Sit-Down) Restaurant [10]	5,000 GSF	636	30	24	54	29	20	49
- Less Internal Capture [4]		(32)	(3)	(2)	(5)	(9)	(6)	(15)
- Less Transit/Walk/Bike (10%) [5]		(64)	(3)	(2)	(5)	(3)	(2)	(5)
		540	24	20	44	17	12	29
- Less Pass-By (20%) [7]		(108)	(5)	(4)	(9)	(3)	(2)	(5)
Subtotal		432	19	16	35	14	10	24
Net Proposed Project Subtotal		**3,628**	**72**	**147**	**219**	**154**	**109**	**263**
Less Existing To Be Removed								
Gasoline/Service Station with Convenience Market [11]	(8) VFP	(1,302)	(41)	(40)	(81)	(54)	(54)	(108)
- Less Pass-by (50%) [7]		652	21	20	41	27	27	54
Subtotal		(650)	(20)	(20)	(40)	(27)	(27)	(54)
Retail [9]	(22,595) GLSF	(964)	(14)	(8)	(22)	(40)	(44)	(84)
- Less Internal Capture [4]		48	1	1	2	6	7	13
- Less Transit/Walk/Bike (10%) [5]		96	1	1	2	4	4	8
		(820)	(12)	(6)	(18)	(30)	(33)	(63)
- Less Pass-By (34%) [7]		278	4	2	6	10	11	21
Subtotal		(542)	(8)	(4)	(12)	(20)	(22)	(42)
Medical-Dental Office Building [12]	(1,072) GSF	(38)	(2)	(1)	(3)	(1)	(3)	(4)
Net Existing Subtotal		**(1,230)**	**(30)**	**(25)**	**(55)**	**(48)**	**(52)**	**(100)**
NET INCREASE		**2,398**	**42**	**122**	**164**	**106**	**57**	**163**

35. *Id.* at 35 tbl.7-1.

So how does the report reach the precise forecast of exactly 2,398 additional trips per day? As we can see from Figure 1, the process begins by breaking the project down into its component land uses (apartments, supermarket, drug store, etc.), then predicts an anticipated number of trips for each land use.[36] For example, Figure 1 states that the project includes 357 apartment homes, which collectively generate 2,374 trips.[37] After deducting a percentage of trips for internal capture (trips generated within the new development) and trips that will use transit or other modes besides automobiles, the report concludes that the 357 apartments will lead to 1,898 net car trips to and from the new development.[38] That number is combined with the number of trips generated by all the other land uses within the development for a total number of trips generated by the development, and then trips generated by the existing development are subtracted (as those would not be new trips), for a total of 2,398 new trips.[39]

But this then leads to another question: How does the report determine that 357 apartments will generate 2,374 trips? If students have carefully read the text preceding the chart and the footnotes appended to it, they will see that the report is making these calculations based on standard trip generation rates published by the Institute of Transportation Engineers ("ITE"):

36. *See id.*
37. *Id.*
38. *Id.*
39. *Id.*

Figure 2. Notes on Project Trip Generation for the Avalon Project[40]

Table 7-1 (Continued)
PROJECT TRIP GENERATION [1]

[1] Source: ITE "Trip Generation Manual", 9th Edition, 2012.
[2] Trips are one-way traffic movements, entering or leaving.
[3] ITE Land Use Code 220 (Apartment) trip generation average rates.
- Daily Trip Rate: 6.65 trips/dwelling unit; 50% inbound/50% outbound
- AM Peak Hour Trip Rate: 0.51 trips/dwelling units; 20% inbound/80% outbound
- PM Peak Hour Trip Rate: 0.62 trips/dwelling units; 65% inbound/35% outbound

[4] Source: ITE "Trip Generation Handbook", 3rd Edition, 2014 and the National Cooperative Highway Research Program (NCHRP) Report 684 - "Enhanced Internal Trip Capture Estimation for Mixed-Use Developments", 2011. Internal capture trips are trips made to and from other components of the project (e.g., between the residential, retail, and restaurant components). The following daily and peak hour internal capture adjustment factors have been applied to account for the internal capture based on the synergistic effects of the proposed land use mix at the site (refer to Appendix B for the NCHRP worksheets).

Land Use	Daily	AM	PM
Residential	10%	10%	30%
Retail	5%	10%	15%
Restaurant	5%	10%	30%

[5] A ten percent (10%) combined transit/walk/bike trip reduction is assumed which also reflects neighborhood walk-ins to and from other adjacent uses within the Downtown Retail District and is consistent with the principles set forth in the Carson Street Mixed-Use District Master Plan.
[6] ITE Land Use Code 850 (Supermarket) trip generation average rates.
- Daily Trip Rate: 102.24 trips/1,000 SF of floor area; 50% inbound/50% outbound
- AM Peak Hour Trip Rate: 3.40 trips/1,000 SF of floor area; 62% inbound/38% outbound
- PM Peak Hour Trip Rate: 9.48 trips/1,000 SF of floor area; 51% inbound/49% outbound

[7] Sources: ITE "Trip Generation Handbook", 3rd Edition, 2014 and City of Los Angeles Department of Transportation (LADOT) Pass-by Trip Rates. Pass-by trips are made as intermediate stops on the way from an origin to a primary trip destination without a route diversion. Pass-by trips are attracted from traffic passing the site on an adjacent street or roadway that offers direct access to the site. To maintain a conservative assessment, the lower of the two published pass-by rates (ITE and LADOT) for each corresponding land use component were applied.
[8] ITE Land Use Code 880 (Pharmacy/Drugstore without Drive-Through Window) trip generation average rates.
- Daily Trip Rate: 90.06 trips/1,000 SF of floor area; 50% inbound/50% outbound
- AM Peak Hour Trip Rate: 2.94 trips/1,000 SF of floor area; 65% inbound/35% outbound
- PM Peak Hour Trip Rate: 8.40 trips/1,000 SF of floor area; 49% inbound/51% outbound

[9] ITE Land Use Code 820 (Shopping Center) trip generation average rates.
- Daily Trip Rate: 42.7 trips/1,000 SF of floor area; 50% inbound/50% outbound
- AM Peak Hour Trip Rate: 0.96 trips/1,000 SF of floor area; 62% inbound/38% outbound
- PM Peak Hour Trip Rate: 3.71 trips/1,000 SF of floor area; 48% inbound/52% outbound

[10] ITE Land Use Code 932 (High-Turnover [Sit-Down] Restaurant) trip generation average rates.
- Daily Trip Rate: 127.15 trips/1,000 SF of floor area; 50% inbound/50% outbound
- AM Peak Hour Trip Rate: 10.81 trips/1,000 SF of floor area; 55% inbound/45% outbound
- PM Peak Hour Trip Rate: 9.85 trips/1,000 SF of floor area; 60% inbound/40% outbound

[11] ITE Land Use Code 945 (Gasoline/Service Station with Convenience Market) trip generation average rates.
- Daily Trip Rate: 162.78 trips/vehicle fueling position (VPF); 50% inbound/50% outbound
- AM Peak Hour Trip Rate: 10.16 trips/VPF; 50% inbound/50% outbound
- PM Peak Hour Trip Rate: 13.51 trips/VPF; 50% inbound/50% outbound

[12] ITE Land Use Code 720 (Medical-Dental Office Building) trip generation average rates.
- Daily Trip Rate: 36.13 trips/1,000 SF of floor area; 50% inbound/50% outbound
- AM Peak Hour Trip Rate: 2.39 trips/1,000 SF of floor area; 79% inbound/21% outbound
- PM Peak Hour Trip Rate: 3.57 trips/1,000 SF of floor area; 28% inbound/72% outbound

As Figure 2 shows, ITE issues trip generation rates for every type of land use. So, for example, the trip generation rate for apartments is 6.65 trips/dwelling unit per day (note 3), and the rate for a high turnover restaurant is 127.5 daily car trips for every 1,000 square feet of retail space (note 10).[41] ITE also provides standard discount rates for internal capture, alternative transportation modes, and pass-by (the number of existing trips that will "pass by" the new development, which are not considered new trips) (notes 4 and 7).[42] Table 7-1 simply takes those rates and plugs them into the

40. *Id.* at 36 tbl.7-1 (Continued).
41. *Id.*
42. *Id.*

proposed project.[43] The project proposes 357 apartments, so the report multiplies 357 by the trip generation rate of 6.65 to arrive at the estimate of 2,374 trips per day.[44] The standard internal capture and alternative transportation discounts are applied for a subtotal of 1,898 new car trips generated by the 357 apartments.[45] The project proposes a 5,000 square foot high-turnover restaurant, so the report multiplies 127.5 times 5, for a total of 636 car trips per day.[46] Again, internal capture and alternative transportation modes are subtracted, as are pass-by trips, for a total of 432 car trips.[47] The numbers for all the land uses are totaled to 3,628 car trips, and then after the traffic generated by the existing land uses (1,230) is deducted, we arrive at a net increase of 2,398 car trips.[48]

But the remaining and decisive question is this: Does the traffic study represent "substantial evidence" that the project will actually generate 2,398 car trips, such that the city could now reasonably deny the project on the grounds that it will create too much traffic, or demand that the developer mitigate the impacts of 2,398 trips? In other words, to ask a question courts rarely seem to ask, how sound is the report's methodology for predicting 2,398 new trips? And how do we determine that? Hopefully, having explored this far, students can recognize the crucial fulcrum on which the answer to this question depends. Considering that the number of anticipated new trips is based entirely on the ITE trip generation rates, the real question is how accurate the ITE trip generation rates actually are.

To get at this point, after reading *Blue Ridge* and the Carson traffic study, I ask students to read *Truth in Transportation Planning* by Donald Shoup, a short but devastating critique of ITE trip generation rates.[49] Essentially, ITE collects data about trips to and from existing sites matching the relevant description (apartment, high-turnover restaurant, etc.). The forecast of future traffic is thus a simple extrapolation from existing observed traffic trends. So far, so good. But Shoup exposes some ugly realities about ITE's trip generation rate. First, for most of the land use categories, trip generation rates are based on ridiculously small samples. For example, the trip generation rate for fast-food restaurants is based on a sample of just eight observed sites.[50] Furthermore, for those eight sites, the ITE generates a rate of 632.125 trips per 1,000 square feet of restaurant space by simply dividing the number of vehicle trips by the square footage of each restaurant, and then deriving an

43. *See id.* at 35 tbl.7-1.
44. *Id.*
45. *Id.*
46. *Id.*
47. *Id.*
48. *Id.*
49. *See generally* Shoup, *supra* note 32 (discussing traffic impact analyses).
50. *See id.* at 64.

average number of trips per 1,000 square foot for the eight sites.[51] However, as Shoup notes, the eight sites demonstrate no relationship at all between square footage and the trip rate—the smallest restaurant had the highest number of trips and the smallest number of trips was generated by a medium-sized restaurant.[52] In short, ITE essentially starts from its conclusion—that trips are related to square footage, and then generates an equation to support that conclusion. As Shoup wryly observes, the extreme precision of the trip generation rate—632.125—gives it a veneer of technical accuracy that makes it seem unassailable.[53] But the fact is that this number is basically meaningless because it's derived from a metric (trips/1,000 square feet) that has no relationship to how trips are actually generated. Second, Shoup observes—as does the ITE itself—that almost all of the samples used to generate the trip rates are derived from "suburban sites with ample free parking" and minimal transit.[54] Both of these characteristics tend to have the effect of causing more people to drive more frequently. Where people have no convenient transportation option aside from driving and they know there will be plenty of free parking at their destination, they have every incentive to drive. As a result, the ITE trip generation rates become a self-fulfilling prophecy—they assume there is a huge demand for driving based on pre-existing conditions that incentivize driving, so planners use those trip generation rates to insist that developers accommodate the presumed demand with more road capacity and more free parking, which induces even more driving and validates the initial assumption that there is a huge demand for driving.[55]

So, in light of all this information, should traffic studies really be considered "substantial evidence" of actual traffic impacts, as courts generally assume they are? For Shoup, the answer is obviously no. In fact, he actually compares traffic studies to the kind of "junk science" courts typically reject as admissible evidence in a trial.[56] Law students will probably also come to the conclusion that courts should apply at least some scrutiny to the methodology of traffic studies.

This is a good point in the course to start a dialogue with students about the proper judicial role in land use decision making. Is it possible that courts have good reasons for declining to apply additional scrutiny to traffic studies? Traditionally, courts have taken a fairly hands-off approach to reviewing municipal land use decisions because they recognize the limits of their own expertise in such matters. If courts were to reject the ITE methodology generally used and accepted by traffic engineers and planners, what

51. *Id.*

52. *Id.* at 61–62.

53. *Id.* at 60 ("[T]he three-decimal-point precision serves no purpose except to falsely suggest that the estimate is accurate.").

54. *Id.* at 70–73.

55. *Id.* at 70–71 (describing "circular logic" of transportation planning).

56. *See* DONALD SHOUP, THE HIGH COST OF FREE PARKING 53 (2005).

methodology would they accept? Or would cities simply be unable to assess traffic impacts at all? As it turns out, in recent years scholars such as Amanda Howell, Kristina Currans, Kelly Clifton and several others have worked to improve the ITE methodology so that it takes greater account of important practical distinctions that ITE traditionally ignored, such as household income levels and proximity to the urban core.[57] Lower income households tend to use transit more frequently than higher-income households, and people living in urban areas are less likely to drive than those in suburban areas, for example, so trip rates should theoretically take account of those distinctions. As Currans writes, the ITE methodology was intended to be "a [simple] rule of thumb . . . but estimating transportation demand accurately can be more complex and nuanced than methods in practice would lead one to believe."[58]

Ironically, however, the complexity of estimating trip generation may be exactly why courts prefer the ITE method. Courts tend to like simple formulae that make adjudicating cases easier even if it comes at the expense of accuracy. They are reluctant to ask nuanced questions such as whether a traffic study accurately accounted for the difference between an urban and a suburban location. Even Shoup seems to recognize the appeal of the "square foot" method for estimating traffic impacts despite its many flaws—it is a simple and easily measured standard.[59] Students should understand why courts might prefer a flawed rule of thumb over a more accurate measure that entails additional administrative costs.

In summary, a discussion of traffic studies can enhance students' learning about discretionary approvals and judicial standards of review while also demystifying the technocratic-seeming process of estimating traffic impacts. Traffic studies can also usefully illustrate another important part of the land use curriculum: environmental impact reporting.

III. UNDERSTANDING THE DIFFERENCE BETWEEN LEVEL OF SERVICE ("LOS") AND VEHICLE MILES TRAVELED ("VMT") IN ENVIRONMENTAL IMPACT REVIEW

The central purpose of a traffic study is, of course, to evaluate traffic impacts. But what constitutes a "traffic impact" is itself a contested question. Perhaps the most significant controversy today with respect to traffic impacts is whether we should evaluate the congestion on local roads that will result from a new project (often referred to as "level of service" or LOS) or the total number of miles cars will be required to travel as a result of the project

57. *See* Amanda Howell, Kristina M. Currans, Steven Gehrke, Gregory Norton & Kelly J. Clifton, *Transportation Impacts of Affordable Housing: Informing Development Review with Travel Behavior Analysis*, 11 J. TRANSP. & LAND USE 103, 114 (2018).

58. Currans & Clifton, *supra* note 7, at 342.

59. *See* SHOUP, *supra* note 56, at 76–78 (acknowledging that basing parking requirements on floor space is preferred because it is much easier to measure than other standards).

(vehicle miles traveled, or "VMT"). This controversy is nicely illustrated by a recent piece of California legislation prohibiting cities from considering LOS as an environmental impact under the California Environmental Quality Act ("CEQA"), and mandating that they consider VMT instead.[60] Although the LOS/VMT distinction initially seems arcane and technical, it is an important distinction for students to grasp because it reveals profound truths about land use planning and politics, the relationship between land use planning and transportation, and the political hurdles to effectively addressing regional and global challenges like climate change and housing affordability.

Before diving into the LOS v. VMT issue in more detail, I want to step back for a moment and provide some context for why the measure of traffic impacts is so significant. Several states, including California and New York, require cities to prepare detailed reports on the environmental impacts of proposed projects, called "environmental impact reports" or "environmental impact statements" ("EIR" or "EIS").[61] Writing a report may not seem like a big deal, but it's actually an enormous obstacle that nearly every proposed new development has to carefully navigate. First of all, statutes and caselaw tend to interpret "environmental impacts" very broadly to include almost any physical impact, including noise, traffic congestion, urban decay, gentrification, and so on.[62] As a result, most projects will require some kind of environmental analysis. Second, the environmental reporting requirement can be extremely onerous, time-consuming, and expensive. EIRs often require detailed expert analysis and can run hundreds of pages long. They have to be long and detailed because the environmental impact reporting process breeds a tremendous amount of litigation.[63] If the city chooses to exempt a project from providing an EIR, project opponents can sue to force the city to do the EIR. On the other hand, if the city does require an EIR, project opponents can sue on the grounds that the EIR either failed to sufficiently analyze the environmental impacts of the project, or failed to address proposed alternatives to the project that would have a lesser impact,

60. *See* Melanie Curry, *After 4 Years, Key Rule Requiring Development to Account for New Miles Driven Moves Forward*, STREETSBLOG CAL (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 [https://perma.cc/65EF-3X6S]; CAL. GOVERNOR'S OFF. PLAN. & RSCH., TECHNICAL ADVISORY: ON EVALUATING TRANSPORTATION IMPACTS IN CEQA 1 (Dec. 2018), https://opr.ca.gov/docs/20190122-743_Technical_Advisory.pdf [https://perma.cc/FW2N-CBCJ].

61. *See* ELLICKSON ET AL., *supra* note 6, at 394–414.

62. *See, e.g.*, Chinese Staff & Workers Ass'n v. City of New York, 502 N.E.2d 176, 180–81 (N.Y. 1986) (holding that possible displacement of existing residents by new market-rate housing is an environmental impact under New York law).

63. *See* JENNIFER HERNANDEZ, DAVID FRIEDMAN & STEPHANIE DEHERRERA, HOLLAND & KNIGHT, IN THE NAME OF THE ENVIRONMENT: HOW LITIGATION ABUSE UNDER THE CALIFORNIA ENVIRONMENTAL QUALITY ACT UNDERMINES CALIFORNIA'S ENVIRONMENTAL, SOCIAL EQUITY AND ECONOMIC PRIORITIES – AND PROPOSED REFORMS TO PROTECT THE ENVIRONMENT FROM CEQA LITIGATION ABUSE 31–36 (2015), https://issuu.com/hollandknight/docs/ceqa_litigation_abuseissuu?e=16627326/14197714 [https://perma.cc/SV3V-F5L2].

and the city may be forced to amend the EIR. Because environmental impact lawsuits are so costly and time-consuming, they are a favored tool of project opponents.[64] For that same reason, avoiding or truncating the environmental impact reporting process is often a top priority for developers and jurisdictions that wish to entitle development.[65]

What this means practically is that if something like level of service *is* considered an environmental impact under CEQA, a developer will have to either locate the project to minimize the impact on LOS or pay for an arduous EIR process and the costs of mitigating the impacts of the project on LOS. But if LOS is *not* considered an environmental impact, then the developer can propose a project even with significant effects on LOS without worrying that those effects will trigger an expensive environmental review.

Needless to say, traffic studies have become critical tools for evaluating traffic impacts as part of the environmental impact reporting process, and that is one reason why introducing students to traffic studies can be so useful. In the previous Part, I discussed the process traffic studies use to predict the total amount of traffic generated by a new development.[66] This Part will show how that total number is used to determine specific traffic impacts under the LOS and VMT formulas, what the distinction between LOS and VMT means practically and politically, and how this discussion can be usefully incorporated into the land use class.

A. LEVEL OF SERVICE

Level of service or LOS generally refers to the impact of a project on local traffic congestion.[67] Traffic flow on a particular roadway or intersection is graded on a letter scale from A to F depending generally on the amount of delay each vehicle experiences getting to its destination.[68]

Under California's traditional regulatory guidelines, when a new development is proposed, a traffic study would be commissioned to determine if the anticipated traffic impacts of the new development would degrade the level of service on local roads to a letter grade the jurisdiction deems unacceptable.[69] If so, that was considered an "environmental impact" under CEQA. However, in July 2020 new regulations (mandated by a 2013 statute)

64. *See id.*

65. On environmental impact reporting generally, see ELLICKSON ET AL., *supra* note 6, at 394–414.

66. *See supra* text accompanying notes 34–44.

67. *See* Tabitha S. Combs & Noreen C. McDonald, *Driving Change: Exploring the Adoption of Multimodal Local Traffic Impact Assessment Practices*, 14 J. TRANSP. & LAND USE 47, 48 (2021).

68. *See id.*

69. *See* Curry, *supra* note 60; Martha Bridegam, *LOS to VMT: The Arguments Have Begun*, CAL. PLAN. & DEV. REP. (Aug. 27, 2014), http://www.cp-dr.com/articles/node-3560 [https://perma.cc/7T7J-JS2B]; Joanna D. Malaczynski & Timothy P. Duane, *Reducing Greenhouse Gas Emissions from Vehicle Miles Traveled: Integrating the California Environmental Quality Act with the California Global Warming Solutions Act*, 36 ECOLOGY L.Q. 71, 73–76 (2009).

went into effect that require cities to measure a project's impact based on how it will affect total vehicle miles traveled, rather than local traffic congestion. In other words, rather than looking at how a project will affect delay on local roads, jurisdictions are now expected to evaluate how many total miles a new project will cause vehicles to travel.[70]

To illustrate the difference practically, I propose a hypothetical to students: Consider a multi-family project with 50 new residential units on a vacant site in a developed area. What will be the project's impacts on LOS and VMT? Start with LOS. Traffic studies generally assume that most new residents will drive or be driven everywhere they need to go, so based on that assumption, the likely impact on LOS is obvious: a lot more car trips on local roads, which means a lot more congestion. To be more precise, we can dig deeper into the methodology of traffic studies: First, predict the number of new car trips by multiplying the number of homes by the standard ITE trip generation rate for apartments (50 x 6.65) for a total of 332.5 trips per day. Subtract some number of trips for transit and bike usage, perhaps ten percent, to get the total number of car trips generated. There is no need to subtract existing trips to the site since the site is currently vacant. Second, distribute the new trips along the existing nearby major roadways and intersections according to their existing usage patterns. Third, compare the number of anticipated trips on each roadway to the capacity of that roadway, which is generally a standard number published by the Transportation Research Board, such as 2,590 vehicles per hour for LOS A on a 4-lane freeway, or 3,320 vehicles per hour for LOS A on a six-lane freeway.[71] Fourth and finally, the vehicle/capacity ratio is used in a complex formula to determine the amount of delay each driver will experience in seconds per vehicle. In the case of our 50 new apartments, because the surrounding area is highly developed, the vehicle/capacity ratio is probably already approaching 1, or the point at which capacity is full. Any significant increase in traffic congestion is likely to substantially degrade the LOS. In other words, in any already developed area the project will almost surely be considered a significant environmental impact under an LOS standard.

Of course, if the impact on LOS is significant, the developer will likely be required to mitigate those impacts. So, one might ask students: How do we mitigate the impact of those 50 homes on LOS? Because delay is measured as a function of vehicles to capacity, there are two ways to minimize the impact of a project on LOS: either reduce the number of vehicles on the road, or

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70. *See* Curry, *supra* note 60; Ernesto Hernandez-Lopez, *Bike Lanes, Not Cars: Mobility and the Legal Fight for Future Los Angeles*, 42 WM. & MARY ENV'T L. & POL'Y REV. 553, 581–83 (2018).

71. *See* TRANSP. RSCH. BD., NCHRP REPORT 599: DEFAULT VALUES FOR HIGHWAY CAPACITY AND LEVEL OF SERVICE ANALYSES 78 (2008), http://www.trafficwareuniversity.com/sites/default/files/nchrp_rpt_599_0.pdf [https://perma.cc/9438-BYPW]. *See generally* [1 CONCEPTS] TRANSP. RSCH. BD., NAT'L RSCH. COUNCIL, HIGHWAY CAPACITY MANUAL: A GUIDE FOR MULTIMODAL MOBILITY ANALYSIS (6th ed. 2010) (calculating various roadway capacities).

increase the road capacity. One could theoretically lower the number of vehicles by investing in transit or introducing congestion pricing to reduce dependency on the automobile, but no politician who wants to get re-elected would seriously tell a room full of residents angry about a new development that they are now going to be charged a fee to drive on roads that they used to drive on for free so that a bunch of new people can also drive on those roads.[72] Instead, under the existing LOS formula, the most politically feasible way to reduce the number of vehicles is to shrink or reject the housing project. Fewer homes equal fewer car trips, which means a lower vehicle to capacity ratio, which means less delay on local roads. If city officials are insistent on approving the project over the complaints of neighbors, their other option is to increase road capacity, which means widening streets to accommodate more cars. So, road widening is the bread and butter of traffic mitigation measures for projects that will degrade LOS.

Step away from the technicalities for a moment and the practical impacts of the LOS formula become clear. The formula incentivizes cities to shrink or reject housing projects, which pushes housing away from already developed areas with congested roads. The demand for housing must be absorbed in outlying, less developed areas, which increases vehicle use by making people drive longer distances to their jobs or schools. This dependence on the automobile is intensified by the LOS formula's bias towards widening roads to accommodate more vehicles, because road widening tends to encourage more driving.[73] In addition, because LOS is based on automobile delay, it punishes projects that attempt to slow down traffic in order to protect pedestrian safety or make neighborhoods more walkable. So, any kind of development that aims to create a lively, walkable downtown area through "traffic calming" mechanisms like on-street parking, speed bumps, pedestrian crosswalks and the like will be disfavored. Even adding bike lanes can be perilous if doing so reduces the number of car lanes and slows down car traffic. Hence, the persistent bias in the LOS formula is in favor of sprawling, auto-centered development.

B. VEHICLE MILES TRAVELED

For that reason, removing LOS as a traffic impact under CEQA means removing one source of bias in our land use and transportation policy towards

72. On the extremely difficult politics of congestion pricing, see David King, Michael Manville & Donald Shoup, *For Whom the Road Tolls: The Politics of Congestion Pricing*, 31 ACCESS 2 (2007), https://www.accessmagazine.org/wp-content/uploads/sites/7/2016/02/Access-31-02-For-Whom-the-Road-Tolls.pdf [https://perma.cc/9NZK-ERJJ].

73. *See, e.g.*, SUSAN HANDY & MARLON G. BOARNET, CAL. ENV'T PROT. AGENCY AIR RES. BD., IMPACT OF HIGHWAY CAPACITY AND INDUCED TRAVEL ON PASSENGER VEHICLE USE AND GREENHOUSE GAS EMISSIONS 2 (2014), https://ww2.arb.ca.gov/sites/default/files/2020-06/Impact_of_Highway_Capacity_and_Induced_Travel_on_Passenger_Vehicle_Use_and_Greenouse_Gas_Emissions_Policy_Brief.pdf [https://perma.cc/6724-43GG].

sprawl and car dependency. But then we must consider what effect *substituting* VMT for LOS will have. While a 50-unit apartment building in a developed area likely means a significant predicted degradation in LOS, what impact will it have on total vehicle miles traveled? The methodology for calculating VMT is a bit more complex than LOS. It starts similarly with trip generation rates, but instead of distributing the trips at nearby major intersections and roadways, it models the complete routes or "tours" that vehicles are likely to take to and from their destinations.[74] As a result, if the apartment building is located in an already developed area with jobs and schools, the model will predict fewer vehicle miles traveled than if the building is located further away. The VMT calculation "rewards" housing that is close to existing jobs and schools by potentially relieving it of the burdens of environmental review, while "punishing" housing that is far from jobs and schools. This is precisely the opposite of what LOS does. According to the LOS formula described above, adding any new housing to an already busy area is very likely to degrade LOS. The most viable path for reducing local traffic congestion under the LOS formula is to force new housing away from existing urban centers where jobs and schools are located out onto the fringes of the metropolitan region, the familiar pattern known as urban sprawl. The result is much more VMT —longer commutes to work, on average—but lower LOS because *local* roads are less congested.

VMT also differs from LOS in the mitigations that are required for a project with significant VMT impacts. Total vehicle miles traveled cannot be reduced by road widening or sprawl (which are likely to actually increase VMT), but can be reduced by investments in transit or other transportation modes, addition of bicycle infrastructure, pricing parking, implementing telecommuting options for employees, and "traffic calming" mechanisms that discourage driving.[75] Notice that many of these mitigation measures, such as bike lanes and traffic calming, would be disfavored under an LOS formula because they may increase delay on local roads.

C. THE POLICY RELEVANCE OF LOS V. VMT

From this basic description of the distinction between LOS and VMT, we can extrapolate what makes this distinction so profound in terms of land use and transportation policy. The distinction illustrates three points that are incredibly significant for land use students to grasp. First, VMT and LOS represent two competing philosophies of urban development. A VMT-orientation will favor denser urban development where housing is near jobs

74. City of Culver City, Presentation to City Council: Modeling and VMT: A Primer, 9–12 (Jan. 30, 2018), https://www.culvercity.org/files/assets/public/documents/community-development/travel-model-amp-impact-analysis/tdfmvmtdeck.pdf [https://perma.cc/8TVM-SLSH].

75. *See* CITY OF L.A. DEP'TS OF CITY PLAN. AND TRANSP., CEQA TRANSPORTATION ANALYSIS UPDATE: FREQUENTLY ASKED QUESTIONS 2–3 (2019), https://www.ladot.lacity.org/sites/default/files/2020-04/faq_transportation-section-update_aug2019_0.pdf [https://perma.cc/T7JC-6T4F].

and schools and transit, biking and walking are viable alternatives to driving. An LOS-orientation favors sprawling development in which housing is far from jobs and schools, roads are wide enough to accommodate thousands of speeding cars throughout the day, and the automobile has unchallenged supremacy. LOS is a policy choice in favor of the car, whereas VMT is a policy choice to incentivize alternative forms of transportation. Therefore, California's decision to elevate VMT and demote LOS should be understood as a policy choice in favor of the latter philosophy.

Second, the distinction between LOS and VMT lays bare many of the frustrating contradictions in the discourse and politics of land use, transportation, and environmental policy. If statutes like CEQA are genuinely concerned with "environmental impacts," then it's abundantly clear that we should be measuring such impacts using VMT rather than LOS. One of the most significant factors in climate change is carbon emissions from automobiles.[76] In general, decreasing VMT equates to a reduction in greenhouse gas emissions, so measuring vehicle miles travelled is effectively measuring a climate impact.[77] On the other hand, though there is some relationship between slow car speeds and increased greenhouse gas emissions, improving level of service does not translate as directly into a reduction in emissions.[78] In fact, using LOS as a measure of environmental impacts probably *increases* carbon emissions because it encourages sprawling development and more automobile usage overall. So, if the goal were to address actual environmental impacts, we would clearly measure VMT rather than LOS.

In that light, it's rather curious that for the last generation California's Environmental Quality Act focused purely on maintaining LOS and not at all on reducing VMT, and that it took a piece of legislation to force agencies to shift from LOS to VMT.[79] Moreover, there was so much resistance to this shift that it took seven years from the statute's enactment for the VMT regulations to actually go into effect, and even the recent changes are relatively mild.[80] Jurisdictions can still use LOS to measure impacts for purposes other than environmental review, such as evaluating zoning changes, subdivision review,

76. According to the California Air Resources Board, on-road vehicles accounted for approximately 36 percent of greenhouse gas emissions in the state in 2017. *See* CAL. AIR RES. BD., CALIFORNIA GREENHOUSE GAS EMISSIONS FOR 2000 TO 2017: TRENDS OF EMISSIONS AND OTHER INDICATORS 6 (2019), https://ww3.arb.ca.gov/cc/inventory/pubs/reports/2000_2016/ghg_inventory_trends_00-16.pdf [https://perma.cc/6ZTJ-AL56].

77. *See* MAC TAYLOR, CAL. LEGIS. ANALYST'S OFF., ASSESSING CALIFORNIA'S CLIMATE POLICIES–TRANSPORTATION 39 (2018), https://lao.ca.gov/Publications/Report/3912 [https://perma.cc/LS4H-JT2Q].

78. *See id.*

79. *See* Curry, *supra* note 60.

80. *See id.*

or assessing impact fees.[81] Why? If it's so obvious that VMT is the superior policy choice, why is LOS so persistent?

Here is where students need to understand the difference between good *policy* and good *politics*. While VMT is clearly superior policy, the reality is that the people who vote in local politics and show up at city council meetings to shout at their elected officials care *a lot* about LOS and not at all about VMT.[82] The reason is that while VMT addresses climate change on a global scale over the long term, LOS addresses what affects me personally in my daily life—the length of my commute, the time I spend sitting at a traffic light—and that is something I experience much more directly and acutely than the effects of climate change. This is, in a microcosm, the whole political problem our society has addressing climate change. Studies consistently show that people want to address the impacts of climate change as long as it does not inconvenience them personally.[83] Many authors have written about the collective action problems inherent in trying to solve climate change, as every country wants to solve climate change without having to make any economic sacrifices.[84]

A further paradox here is that residents who oppose housing projects based on level of service often do so *in the name of the environment*, a position that California policy has long endorsed by considering localized traffic congestion to be an adverse environmental impact. Residents will frequently argue, for example, that increasing the number of cars on local roads will increase air pollution.[85] The assumption seems to be that the new cars will simply materialize out of thin air, rather than relocating from someplace else, probably further away, where they are already emitting carbon into the atmosphere. The reason this occurs is because people persistently elevate local over global concerns, to the point that the global concerns become practically invisible. People are so focused on their own surroundings that they cannot even comprehend that new cars on their local streets are actually coming from someplace else, or that putting cars closer to jobs may be a net benefit for the environment. It is for this reason that people can claim with a straight face to be protecting the environment while actually advocating for policies that harm the environment. When they say they are protecting "the

81. *See* CAL. PUB. RES. CODE § 21099(b)(4) (West 2020).

82. *See* Hernandez-Lopez, *supra* note 70, at 555–56, 559, 572–84 (discussing the difficult politics of reducing car dependency in Los Angeles).

83. *See, e.g.*, Valerie Volcovici, *Americans Demand Climate Action (As Long As It Doesn't Cost Much): Reuters Poll*, REUTERS (June 26, 2019, 5:10 AM), https://www.reuters.com/article/us-usa-election-climatechange/americans-demand-climate-action-reuters-poll-idUSKCN1TR15W [https://perma.cc/2THS-YBXN].

84. On climate as a collective action problem, see Scott Barrett, *Choices in the Climate Commons*, 362 SCIENCE 1217, 1217 (2018); Jonathan Rosenbloom, *Local Governments and Global Commons*, 2014 BYU L. REV. 1489, 1503–04.

85. *See* Hernandez-Lopez, *supra* note 70, at 555–56, 572–84 (discussing a lawsuit that made these claims).

environment," they mean *their own environment*, their own immediate surroundings, not the actual global environment that we all share. This is what Bernard Frieden called the "environmental protection hustle," in which affluent communities use the pretext of environmental protection to advance anti-growth policies that serve their own parochial self-interest while actually harming the environment.[86]

This observation leads to the third implication of the LOS/VMT debate, which is how the elevation of local over global concerns totally warps our housing politics. In the same way that residents oppose more cars on their own streets and call it "environmentalism," despite the fact that it simply pushes cars further from jobs and increases carbon emissions, residents often oppose new housing in their communities and claim that doing so will make housing more affordable, even though doing so actually reduces the stock of housing and increases housing prices. The basic problem in both cases is an excessive focus on the local and a neglect of the regional and global consequences of their actions. As noted, residents seem to think keeping cars off their own streets will somehow make those cars disappear rather than simply relocating them to outlying areas, because their focus is purely on their own surroundings.[87] Likewise, residents in many communities are often so focused on what they see as the negative impacts of new housing on their immediate surroundings that they fail to see how local opposition to new housing distorts regional housing markets and thereby increases housing costs regionwide.

San Francisco is a poster child of this toxic housing discourse. In the name of fighting gentrification, residents in the city have persistently blocked almost all market-rate housing for the past generation. Though virtually the entire city has gentrified during that time and housing costs have skyrocketed due to the complete lack of new market-rate housing, residents continue to fight new market-rate housing and claim they are preventing gentrification.[88] In a recent article, Anika Singh Lemar explores this disconnect.[89] She shows that while many low-income communities fight to preserve discretionary land use controls so they can block new development and bargain with developers to prevent gentrification, their fight is largely self-defeating because the main beneficiaries of discretionary land use controls are affluent suburban communities who use the same techniques far more effectively to block new

86. *See* BERNARD J. FRIEDEN, THE ENVIRONMENTAL PROTECTION HUSTLE 8–10 (1979); *see also* CONOR DOUGHERTY, GOLDEN GATES: FIGHTING FOR HOUSING IN AMERICA 16–18 (2020) (discussing Frieden's book).

87. *See supra* notes 85–86 and accompanying text.

88. *See generally* RANDY SHAW, GENERATION PRICED OUT: WHO GETS TO LIVE IN THE NEW URBAN AMERICA (2018) (describing San Francisco housing politics and noting that the entire city gentrified despite a nearly total absence of new market-rate housing for a generation).

89. *See* Anika Singh Lemar, *Overparticipation: Designing Effective Land Use Public Processes*, FORDHAM L. REV. (forthcoming 2021) (manuscript at 42–52).

housing. The result is that the housing demand is then pushed into low-income communities with less ability to fight it, hastening the very gentrification those communities are trying to prevent.[90] As in the LOS v. VMT debate, regional and global issues are lost in an excessive focus on the local.

So, what can we discern from the fact that California has in fact shifted from LOS to VMT? To an extent, it perhaps demonstrates that local parochialism may be overcome through state preemption.[91] If the central political problem is the tunnel vision that causes communities to value the local over regional concerns, arguably one solution is to change the scale of decision making from the local to the state. This could be a good point in the curriculum to digress into discussing some other ways states have preempted aspects of local land use control in order to prevent this kind of local parochialism, such as California's recent legislation mandating streamlined approvals for accessory dwelling units, Oregon's legislation barring single-family zoning, and so forth.[92]

But it may also be useful to inject some skepticism into this conversation. CEQA is a state law, and it has taken a generation to begin a shift from LOS to VMT, so obviously parochialism has been just as prevalent at the state as the local level. Furthermore, as discussed earlier, the shift from LOS to VMT has been a relatively modest one. Although cities cannot consider LOS as an environmental impact under CEQA, they can still consider it in other parts of the land use process. For example, cities can still deny a variance, conditional use permit or subdivision review because it finds that a project will degrade LOS or demand an exaction for road-widening based on such a finding.[93] In short, it appears that lawmakers are beginning to understand the superiority

90. *See id.*

91. State preemption of local authority has become a major issue in recent years, resulting in considerable literature on the topic. *See, e.g.*, Kenneth A. Stahl, *Local Home Rule and State Preemption of Local Land Use Control*, 50 URB. LAW. 179 (2021); Nestor M. Davidson, *The Dilemma of Localism in an Era of Polarization*, 128 YALE. L.J. 954, 957–58 (2019); Richard Briffault, *The Challenge of the New Preemption*, 70 STAN. L. REV. 1995, 1995 (2018); Erin Adele Scharff, *Hyper Preemption: A Reordering of the State–Local Relationship?*, 106 GEO. L.J. 1469, 1477–79 (2018); Richard C. Schragger, *The Attack on American Cities*, 96 TEX. L. REV. 1163, 1169–1181 (2018); Kenneth A. Stahl, *Preemption, Federalism, and Local Democracy*, 44 FORDHAM URB. L.J. 133, 162–63 (2017). These and other sources are collected in RICHARD BRIFFAULT, NESTER M. DAVIDSON & LAURIE REYNOLDS, THE NEW PREEMPTION READER: LEGISLATION, CASES, AND COMMENTARY ON STATE AND LOCAL GOVERNMENT LAW (2019).

92. *See* Assemb. B. 68, 2019–2020 Leg., Reg. Sess. (Cal. 2019) (limiting local discretion to deny or regulate construction and use of backyard cottages); S.B. 330, 2019–2020 Leg., Reg. Sess. (Cal. 2019) (streamlining zoning process); S.B. 1333, 2017–2018 Leg., Reg. Sess. (Cal. 2018) (mandating that charter cities conform zoning laws to a general plan); S.B. 35, 2017–2018 Leg., Reg. Sess. (Cal. 2017) (streamlining zoning process); Laura Bliss, *Oregon's Single-Family Zoning Ban Was a 'Long Time Coming'*, BLOOMBERG CITYLAB (July 2, 2019, 8:03 AM), https://www.citylab.com/equity/2019/07/oregon-single-family-zoning-reform-yimby-affordable-housing/593137 [https://perma.cc/M6C6-739Z] (reporting on Oregon's H.B. 2001 overriding single-family zoning).

93. *See supra* text accompanying note 69.

of VMT as a policy matter, but the politics of LOS mean that half-measures are the best we can hope for in the near term.

IV. NEW URBANISM AND FORM-BASED CODES

Another effective way to incorporate transportation into the land use curriculum is to take a somewhat new approach to the curriculum's treatment of "new urbanism." New urbanism is a movement that seeks to re-invent urban planning to make cities more pedestrian friendly, walkable, interesting, and diverse.[94] The centerpiece of the idea is to undo a century of automobile-centered urban planning and reinstate traditional urban planning principles that characterized cities before the rise of the car. Although it's debatable how much influence new urbanism has actually had in practice, it is an extremely important topic to discuss in a land use class primarily because it serves as an effective illustration and critique of some of the predominant features of our existing land use regulatory scheme. New urbanism connects with many essential questions raised by the course, including the desirability of discretionary decision making, the inclusiveness of public participation, and the ways that reforming the land use status quo may contribute to gentrification and displacement.

Yet, new urbanism makes little more than a cameo appearance in most existing land use casebooks, often in a dense textual note.[95] New urbanism is an awkward fit in the traditional "case method" format of law teaching because there simply aren't many cases dealing with new urbanism. The material calls for a departure from the conventional method of case analysis, but there is still plenty of opportunity for close textual reading and interactive learning.

A. WHAT IS NEW URBANISM?

I begin my discussion of new urbanism by drawing students into a conversation about what exactly new urbanism is and how it differs from conventional urban planning. A particularly great piece to get this discussion started is Michael Lewyn's *New Urbanism for Dummies*.[96] According to Lewyn, there are five principal differences between new urbanism and conventional urban planning, all of which are worth discussing at some length with students:

(1) conventional "Euclidean zoning" segregates different land uses by placing each type of use in a single-use district from which most other uses are banned. So, for example, retail stores are generally banned in residential

94. Some important sources on new urbanism include, in addition to those discussed below, ANDRES DUANY, ELIZABETH PLATER-ZYBERK & JEFF SPECK, SUBURBAN NATION: THE RISE OF SPRAWL AND THE DECLINE OF THE AMERICAN DREAM 258 (2000); PETER CALTHORPE, THE NEXT AMERICAN METROPOLIS: ECOLOGY, COMMUNITY, AND THE AMERICAN DREAM 10–11 (1993).

95. *See* ELLICKSON ET AL., *supra* note 6, at 858–60; CALLIES ET AL., *supra* note 6, at 313–29; STERK ET AL., *supra* note 6, at 93–97, 127–29.

96. Michael Lewyn, *New Urbanist Zoning for Dummies*, 58 ALA. L. REV. 257, 258–60 (2006).

districts, apartments are prohibited in single-family home districts, and so forth. New urbanist zoning codes permit and incentivize the kind of mixed-use developments that characterize traditional urban places, such as buildings with retail on the ground floor and apartments above.[97]

(2) conventional zoning policy and practice is to mandate sprawling development by banning most dense development and requiring that land uses occupy extremely large lots. New urbanist zoning codes permit far greater density and use incentives to encourage denser development;[98]

(3) conventional zoning ordinances require that buildings be "set back" a considerable distance from the street, whereas new urbanist zoning codes do not, and often require buildings to be close to the street;[99]

(4) conventional zoning codes mandate that developers dedicate a large percentage of land for "free" off-street parking, whereas new urbanist zoning minimizes parking requirements;[100] and

(5) conventional zoning mandates that streets be wide and long, whereas new urbanist codes mandate that blocks be shorter and streets thinner.[101]

A central purpose of these proposed new urbanist reforms is to reduce the automobile dependency that is facilitated and often required by traditional planning practices, and encourage a more pedestrian-friendly urban environment.[102] It can be effective at this point in the class to ask students how each of these reforms reduces automobile dependency. The answers should be something along the following lines:

(1) The Euclidean separation of uses encourages driving because homes are located far from offices, schools, and shopping. New Urbanism's emphasis on mixed-use development, on the other hand, encourages walking by placing these uses near each other, and also creating a more pleasing environment with opportunities for window-shopping on the ground floor.

(2) Sprawl spreads people and places out across long distances, making access to a car necessary and reducing the feasibility of mass transit, which generally requires a residential density of at least seven to fifteen homes per acre. New urbanism's focus on denser development reduces sprawl.[103]

(3) Setbacks make street fronts boring, and further increase the distance between places, whereas putting buildings close to the street makes street fronts more varied and interesting, and clusters places closer together.

(4) Mandatory off-street parking minimums encourage more driving, since parking is free, and taking parked cars off the street curb and into off-street lots and structures makes it more convenient for cars to drive fast.

97. *Id.* at 262–63, 271–73.
98. *Id.* at 274–77.
99. *Id.* at 277–84.
100. *Id.*
101. *Id.* at 284–89.
102. *See id.* at 257–60.
103. *See id.* at 275.

Reducing parking minimums and placing more parking on the street will thus minimize fast driving and make the environment more friendly for pedestrians; and

(5) Wider and longer streets likewise encourage cars to drive fast and makes walking tedious, whereas shorter narrower blocks make cars drive slower and create a more varied environment for pedestrians.

B. THE FORM-BASED CODE

This introduction to new urbanism leads into a short discussion of "form-based codes," which are the formal regulatory instruments generally used to implement new urbanist design concepts.[104] Form-based codes differ from traditional zoning ordinances in a few key ways. First, form-based codes focus on building design rather than building use, or in other words, how the building relates to the urban environment rather than what takes place inside the building.[105] Instead of dictating that buildings in a certain area must all be single-family homes or apartment homes, a form-based code would emphasize that buildings in a certain area must have a certain kind of design, or that the building frontage (the area facing the street) must be laid out in a certain way. Traditional zoning ordinances, of course, may also regulate design in this way, such as by requiring minimum setbacks or minimum lot sizes, but where traditional zoning ordinances are *prohibitory*, focusing on what is prohibited, form-based codes are *prescriptive*, meaning that they often mandate certain forms, with much more specificity than traditional zoning ordinances do.[106] Form-based codes use detailed illustrations to describe the mandated forms. For example, the model form-based code called the "Smartcode"[107] illustrates prescribed forms of "frontages," or the space between buildings and the street, with the following Figure:

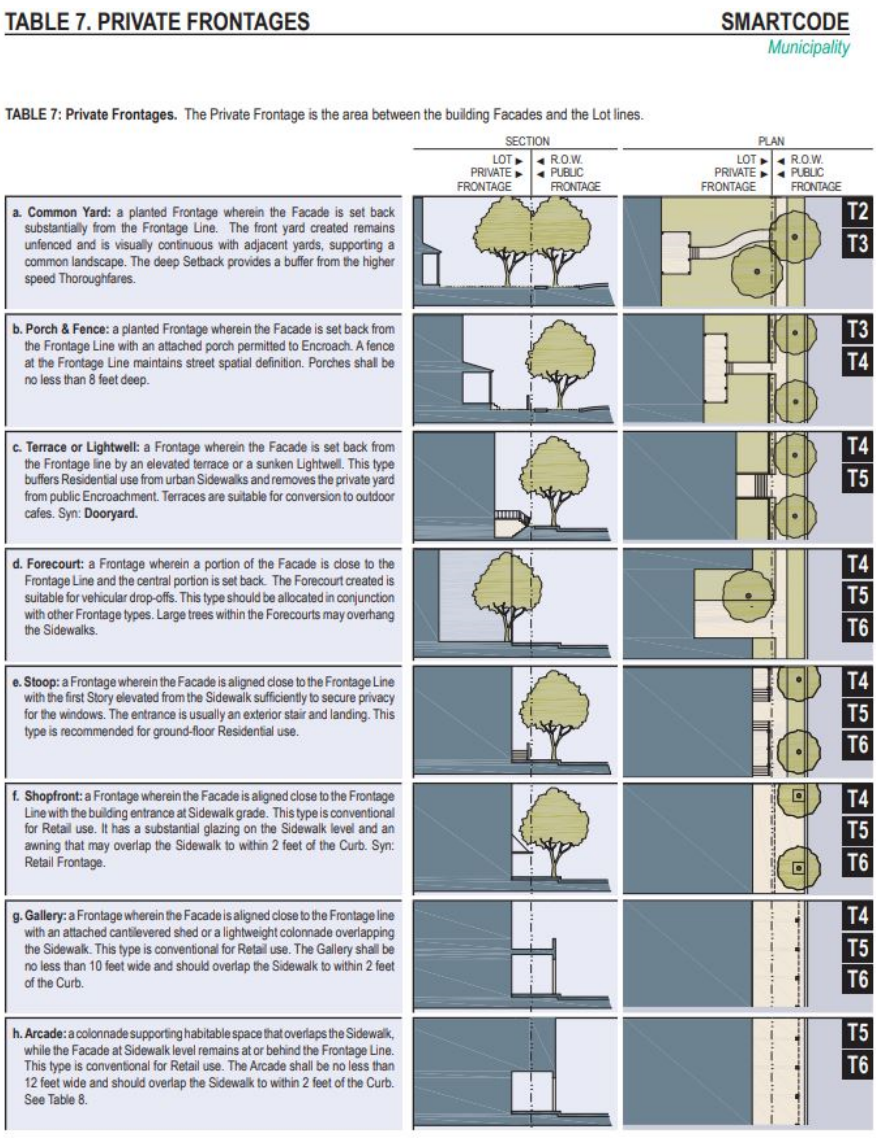
104. I assign a series of blog posts on PLANNERSWEB that nicely explain form-based codes and their distinction from conventional zoning codes. Mary Madden & Joel Russell, *Part 1: What is a Form-Based Code?*, PLANNERSWEB (Dec. 5, 2014), http://plannersweb.com/2014/12/fbc1 [https://perma.cc/5P2T-BDPA]; Mary Madden & Joel Russell, *Part 2: The Emergence of Form-Based Codes*, PLANNERSWEB (Dec. 5, 2014), http://plannersweb.com/2014/12/fbc2 [https://perma.cc/M6F7-YCYV]; Mary Madden & Joel Russell, *Part 3: Typical Elements of a Form-Based Code*, PLANNERSWEB (Dec. 5, 2014), http://plannersweb.com/2014/12/fbc3 [https://perma.cc/C46R-UUZ4]; Mary Madden & Joel Russell, *Part 4: How Form-Based Codes Are Written*, PLANNERSWEB (Dec. 5, 2014), http://planners web.com/2014/12/fbc4 [https://perma.cc/22TP-7YSB].

105. *See* Madden & Russell, *Part 3: Typical Elements of a Form-Based Code*, *supra* note 104.

106. *See* CALLIES ET AL., *supra* note 6, at 324–25.

107. *See* CTR. FOR APPLIED TRANSECT STUD., SMARTCODE VERSION 9.2 SC36 tbl. 7 (2009), https://transect.org/codes.html [https://perma.cc/X3VK-L2UF].

Figure 3. Smartcode Illustration of Private Frontages[108]



108. *Id.*

Figure 3 illustrates another key difference between traditional zoning ordinances and form-based codes, which is that traditional zoning ordinances only regulate privately owned lots and ignore the publicly owned land with which the private lots interact (streets, sidewalks, parks), leaving those public spaces to be managed by traffic engineers and public works departments. Form-based codes, on the other hand, regulate the public and private space in an integrated manner. For instance, form-based codes may prescribe narrower streets and tall buildings close to the street in more urban areas, and shorter buildings with wider streets in more suburban or rural areas.

In my class, after providing some introductory reading material on form-based codes, I perform an exercise focused on the following Figure, which contrasts an intersection under traditional zoning with an intersection under a form-based code:[109]

Figure 4. Contrast between Traditional Zoning and Form-Based Code[110]

109. *See* Madden & Russell, *Part I: What Is a Form-Based Code?*, *supra* note 104.

110. *Id.* This image is reproduced with the permission of the artist.

To get the conversation started, I ask students what differences they perceive between the two pictures. Students often notice several things that are present in the second picture but absent in the first: more visible crosswalks; wider, brick sidewalks; pedestrians and bicycle riders; buildings fronting on and interacting with the street; public transit; retail activity in a residential neighborhood; trees providing ornamentation and shade along the street; decorative street furniture such as streetlamps; and on-street parking.

These observations then lead to an important question: how can a form-based code facilitate a transformation from picture A to picture B? A few answers are plausible: (1) form-based codes do not separate uses, so a restaurant may be located across the street from a residential building; (2) unlike traditional zoning codes, form-based codes generally permit on-street parking; (3) form-based codes can regulate public space such as sidewalks and crosswalks on the street; (4) form-based codes can mandate design choices such as awnings, buildings with entrances facing the street, brick sidewalks, and even trees and street furniture.

After talking through the different ways this graphic illustrates the differences between conventional and new urbanist zoning, one may then ask which picture students prefer. The second is obviously intended to be preferable. The first picture is hostile to every use of space except driving at extremely fast speeds. The second is a more pleasant and clearly safer urban environment that invites a wide variety of modes of transportation, including walking, biking, and transit. Unlike the first picture, it offers interesting views and diversions, a variety of uses, and a welcoming public space.

C. NEW URBANISM AND LOCAL POLITICS

This discussion leads to the central question: if the graphic is intended to show how much better urban life is with a form-based code than a conventional Euclidean zoning code, why do so many more of our communities look like the first picture then the second? Why has it proven so hard to make the transition to communities that offer anything other than an automobile-centric view of the world? The answer is *politics*. As discussed in the previous part, good policy is not the same thing as good politics. While form based codes clearly offer a superior urban realm, the reality is that new urbanist developments like these often draw intense opposition from existing neighbors.[111] Indeed, new urbanists have had the most success creating whole new communities in exurban or "greenfield" areas where there are no

111. *See generally* Jennifer Hernandez, *California Environmental Quality Act Lawsuits and California's Housing Crisis*, 24 HASTINGS ENV'T L.J. 21 (2018) (finding that CEQA is most frequently used to block transit-oriented housing developments favored by New Urbanists). *But see* Moira O'Neill, Giulia Gualco-Nelson & Eric Biber, *Developing Policy from the Ground Up: Examining Entitlement in the Bay Area to Inform California's Housing Policy Debates*, 25 HASTINGS ENV'T L.J. 1, 34–35 (2019) (questioning methodology of Hernandez study).

neighbors to object, rather than attempting to retrofit existing communities where there are already entrenched neighbors ready to get angry about any changes to their way of life.[112] On that score, it is notable that Peter Calthorpe, one of the major new urbanist figures, recently spoke with an anti-housing political organization in California about how he shared the group's opposition to building new urbanist transit-oriented development in existing suburban communities.[113]

What's not to like about new urbanism? For one thing, density. Unlike traditional zoning ordinances, form-based codes rarely specify maximum housing densities, focusing instead on things like size, bulk, frontage, and other aspects related to design.[114] From a policy perspective, this is undoubtedly wise, because it is well established that denser housing is a critical prerequisite to reducing housing costs, addressing climate change, mitigating segregation, and dealing with a host of other societal ills.[115] But *politically*, the failure of form-based codes to cap densities is often fatal. The D word is toxic in debates over new housing. Density is the number one bugaboo that causes neighbors to explode into an apoplectic rage.[116] They equate density with traffic-clogged roads, insufficient parking, overcrowded schools, diminished neighborhood character, and on and on.[117] As discussed earlier, neighbors weigh the *local* costs of increased density far more heavily than the *global* benefits.

In addition to density, the very thing new urbanists aspire to do to the public realm—make it more amenable to pedestrians by slowing down cars—is exactly what existing residents hate about it. It is extremely perilous to the aspirations of any elected official to propose a public policy that will make

112. *See, e.g.*, Robert Steuteville, *The Four Phases of New Urbanism*, PUB. SQUARE (Mar. 10, 2016), https://www.cnu.org/publicsquare/four-phases-new-urbanism-0 [https://perma.cc/8ATY-RUYP] (describing "first phase" of new urbanism as primarily focused on exurban development).

113. *See* Jordan "AB387 stan" Grimes (@cafedujord), TWITTER (Apr. 4, 2020, 12:08 PM), https://twitter.com/cafedujord/status/1246484696998924289 (last visited Mar. 26, 2021).

114. *See* Lewyn, *supra* note 96, at 276 (form-based codes mandate maximum overall densities for an area, not densities for individual buildings).

115. *See* Vicki Been, Ingrid Gould Ellen & Katherine O'Regan, *Supply Skepticism: Housing Supply and Affordability*, 29 HOUS. POL'Y DEBATE 25, 32–33 (2019) (collecting literature on advantages of dense development).

116. *See* William Marble & Clayton Nall, *Where Self-Interest Trumps Ideology: Liberal Homeowners and Local Opposition to Housing Development*, J. POL. (forthcoming) (manuscript at 4), https://williammarble.co/docs/MarbleNallJOP.pdf [https://perma.cc/7724-AHPY] (demonstrating that homeowners regardless of political ideology oppose denser housing in their communities); Hernandez, *supra* note 111, at 29 (reporting data showing that the majority of housing projects challenged under the California Environmental Quality Act were higher-density projects).

117. Anecdotal evidence on this point abounds but scholars have only recently begun empirically studying homeowners' attitudes towards new development. *See, e.g.*, EINSTEIN ET AL., *supra* note 4, at 117 (2020) (describing a comprehensive study of homeowners' attitudes towards new development shows density, traffic, neighborhood character and parking among the main reasons for opposing new housing).

car commutes for existing residents even slightly longer. (On the other hand, lengthening commutes for *prospective* residents by forcing them to live hours away from their jobs is totally fine). When Los Angeles city councilmember Mike Bonin championed a "road diet" recently that would remove some lanes on a handful of streets in west Los Angeles, affluent residents in his district mobilized to destroy it—and him.[118] They brought lawsuits to stop the road diet and attempted to recall Bonin, even after he caved and agreed to restore some of the lanes.[119]

Advocates of new urbanist developments often attempt to defuse these kinds of concerns by pointing out that new residents will use other modes of transportation such as bikes and transit, and that car rides will be shorter if people live closer to their jobs.[120] But these claims are invariably met by local residents with anger and incredulity. Residents almost always start from the baseline belief that traffic and parking are already intolerably bad in their communities and generally believe with complete certainty that any new housing development will inevitably make them worse.[121] They view walkability, transit, and biking as either utopian fantasies or, more likely, developer scams, and "new urbanism" as a code word for inexorably worsening quality of life for existing residents.[122]

The incredible amount of cynicism with which existing residents approach new housing development is deeply rooted in the pathology of our existing transportation policy. In short, that policy embodies a self-fulfilling prophecy of ever-worsening traffic. Decades of car-centered urban planning have misled people into believing that traffic congestion can be improved with road widening, but this never actually occurs because road widening simply increases the volume of cars on local roads, leading to worse traffic and increasing public mistrust about the traffic impacts of new development.[123] Subsequently, when dense transit-oriented projects are proposed, local residents reject all assurances that these projects won't worsen existing traffic and parking issues, and so they often demand that such projects include lots of new parking and wider roads to accommodate car traffic. Of course, these measures are exactly the opposite of what new urbanist planning prescribes because they simply encourage more driving and depress alternative modes of transportation. More driving then makes traffic and parking issues worse,

118. *See* Laura J. Nelson, *Critics Frustrated by 'Road Diets' Launch Effort to Recall L.A. Councilman Mike Bonin*, L.A. TIMES (Sept. 15, 2017, 4:00 AM), https://www.latimes.com/local/lanow/la-me-ln-bonin-recall-20170915-story.html (last visited Mar. 27, 2021).

119. *See id.*; *see also* Hernandez-Lopez, *supra* note 70, at 565–66, 583–84 (discussing fraught politics of road diets in Los Angeles).

120. *See* Hernandez-Lopez, *supra* note 70, at 565–66; 571–72 (discussing the claims that Los Angeles's Mobility Plan would decrease congestion by reducing car trips).

121. *See id.* at 576 (discussing lawsuit challenging LA Mobility Plan on various grounds).

122. *See id.* at 556–58.

123. *See* HANDY & BOARNET, *supra* note 73, at 6.

which is exactly what residents predicted would happen if the new urbanist development were approved, despite the fact that the reason traffic and parking got worse was because the new urbanist components were stripped away from the project at the residents' insistence. Residents then feel vindicated in their belief that any new development will only make traffic and parking worse, and emboldened to continue fighting it.

D. PLANNING AND DEALING WITH NEW URBANISM

As these observations illustrate, the path dependency of our existing political system is a major obstacle to the realization of new urbanist aspirations. For this reason, the success of new urbanist schemes largely depends on their ability to circumvent the expected political opposition. As noted earlier, many new urbanists propose to simply avoid this problem altogether by building projects out in the sticks or along commercial corridors where there are no existing residents to complain.[124] But new urbanism also presents a more radical solution: In addition to proposing a theory of urban design that departs from conventional zoning principles, new urbanism also offers a totally different approach to local politics that can short-circuit obstruction by NIMBYs ("Not in My Backyard.") Unlike traditional zoning schemes, which often have very general standards and then rely on an extensive discretionary review of individual projects, form-based codes have less need for an ad hoc review process to ensure that each individual project meets city standards because they have very detailed and prescriptive standards for projects to follow. Often, if a developer meets all the detailed standards in the form-based code, they are entitled to a streamlined approval process. In short, where traditional zoning ordinances favor a backloaded, retrospective discretionary review process, new urbanist zoning favors a frontloaded, prospective planning process with little back-end discretion.[125]

In practice, what this means is that new urbanist schemes are less beholden to NIMBY opposition. By their nature and in many ways by their design, discretionary processes invite angry neighbors to come to public hearings and oppose new projects or insist on extravagant concessions. Removing that discretion takes away one veto point that neighbors often have over a project. To be sure, new urbanist planning attempts to compensate for the lack of back-end political participation by soliciting a large amount of public input on the front end before adoption of the form-based code, but this process is much less prone to NIMBYism because neighbors generally do not have a concrete project around which they can rally opposition.[126]

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124. *See supra* text accompanying notes 111–13.

125. *See* Madden & Russell, *Part 3: Typical Elements of a Form-Based Code*, *supra* note 104; Madden & Russell, *Part 4: How Form-Based Codes are Written*, *supra* note 104.

126. *See* Madden & Russell, *Part 4: How Form-Based Codes are Written*, *supra* note 104 (describing process of public participation for developing a form-based code).

This is a great point in the curriculum to delve into the respective merits of "planning" versus "dealmaking" models of land use decision making. As most students learn, land use regulation was originally conceived as being about prospective planning, in which cities would lay down their regulations in advance and then developers would build projects "by right" based on the pre-existing standards.[127] Land use policy has subsequently shifted towards "dealmaking," in which cities and developers negotiate for entitlements on a case-by-case basis.[128] The dealmaking approach to land use has become predominant over the past few decades. A combination of growing fiscal constraints on cities and increasing community resistance to new development meant that cities needed a flexible approach to growth that would allow cities to evaluate the merits of particular projects and bargain with developers for concessions developers would provide in exchange for development permits.[129] The bargaining approach allowed cities to assuage community concerns about development by forcing developers to pay to mitigate the development's impacts and confer wide-ranging benefits on the community, and also to address fiscal concerns by forcing developers to pay for things the city itself could no longer afford. For these reasons, particularized and backwards-looking decisions, which are often considered quasi-judicial in nature, have become preferable to prospective, citywide planning, and exactions have become routine.[130]

The dealmaking model has endured some harsh and well-deserved criticism over the years. For one thing, the fact that the relevant political action takes the form of a particularized decision on a specific development project rather than the approval of a prospective, citywide plan means that the dealmaking process tends to favor project opponents. This is because, first of all, project opponents can more easily organize to oppose a concrete project in their proverbial back yard than when it is still on the drawing board. Second, the community has substantial leverage over the developer at the point where there is a concrete project to oppose and the developer has already sunk significant resources into the project. The ability of cities to "extort" developers for concessions in these circumstances is the animating principle behind the Supreme Court's exactions jurisprudence, which

127. *See* Carol M. Rose, *Planning and Dealing: Piecemeal Land Use Controls as a Problem of Local Legitimacy*, 71 CAL. L. REV. 837, 853–57 (1983) (describing shift from "by right" to dealmaking in local land use regulation).

128. *See id.*

129. *See* Laurie Reynolds, *Taxes, Fees, Assessments, Dues, and the "Get What You Pay For" Model of Local Government*, 56 FLA. L. REV. 373, 385–96 (2004) (describing the factors behind the shift in municipal finance from general taxation to particularized "dues" like exactions); Mark P. Barnebey, Tom MacRostie, Gary J. Schoennauer, George T. Simpson & Jan Winters, *Paying for Growth: Community Approaches to Development Impact Fees*, 54 J. AM. PLAN. ASS'N 18, 18–21 (1988); Rose, *supra* note 127, at 849–50, 879–880.

130. *See* Daniel P. Selmi, *The Contract Transformation in Land Use Regulation*, 63 STAN. L. REV. 591, 598–607 (2011) (describing evolution from prospective planning to ad hoc decision making).

restricts cities' ability to demand ad hoc concessions from developers.[131] Another concern with particularized dealmaking is that decisions are made without any reference to an overarching plan for the community as a whole. A bleakly hilarious example of this practice is illustrated in an article by Michael Manville on street widening in Los Angeles. The city requires landowners who seek redevelopment to dedicate a portion of the property fronting the street for street widening.[132] However, because few landowners apply for redevelopment, the result is that the street may be widened in front of one parcel but not any of the neighboring parcels, making the widened portion of the street completely useless for moving vehicles and also useless for the property owner.[133]

By shifting the focal point of decision making to the prospective planning stage, new urbanism enables more comprehensive planning of the urban environment as a whole and reduces the opportunities for project opponents to force deviations from the comprehensive plan. This is surely preferable if one believes our cities are extremely poorly planned and that post-hoc discretion is an opportunity for cities to exploit developers for the benefit of politically powerful incumbents.

But it's important to show students that there is another view of discretionary decision making that is often embraced by communities fighting development. In this view, developers exert too much power in the land use approval process and use that power to extract value from the community. For that reason, ad hoc dealmaking is preferable because it allows the community to re-capture the publicly generated value of development at the point when the community has the maximum amount of leverage over the developer. A useful introduction to this viewpoint is William Simon's book *The Community Economic Development Movement*, which has a thoughtful and clear discussion about the role of exactions in extracting community benefits from development, and a concise critique of the Supreme Court's exactions jurisprudence.[134] In my class I pair an excerpt from Simon alongside the exactions cases to highlight this debate.

E. NEW URBANISM AND THE GENTRIFICATION DEBATE

As it happens, new urbanism itself has become a focal point in one particularly important manifestation of the debate between planning and dealing, which is gentrification. Gentrification is a term generally used to describe the process by which urban areas historically occupied by disadvantaged minority communities are repurposed for middle-class, often

131. *See* cases cited and accompanying text *supra* note 20 (discussing exactions cases).

132. *See* Michael Manville, *Automatic Street Widening: Evidence from a Highway Dedication Law*, 10 J. TRANSP. & LAND USE 375, 386 (2017).

133. *See id.*

134. *See* WILLIAM H. SIMON, THE COMMUNITY ECONOMIC DEVELOPMENT MOVEMENT: LAW, BUSINESS, & THE NEW SOCIAL POLICY 78–88 (2001).

white, residents. Gentrification may include the displacement of existing residents due to rising rents and cost of living as well as the disruption of community life from increased police presence and the like.[135] Gentrification is rarely discussed in most land use casebooks. The casebooks address the role of race primarily in the context of exclusionary zoning, whereby affluent white suburban communities use restrictive zoning regulations to exclude minority residents. Gentrification is in a sense the converse phenomenon, in which affluent white residents move into minority communities. Therefore, assigning students to study the relationship between new urbanism and gentrification gives students an opportunity to explore the ways that race and inequality interact with land use and transportation planning in a context that is typically neglected in the land use curriculum.

Advocates for minority communities facing the threat of gentrification generally raise two principal objections to new urbanism. First, they claim that new urbanist developments, particularly "transit-oriented developments," are disproportionately sited in minority neighborhoods because those areas tend to be where transit lines are located.[136] The concern is that transit-oriented projects are typically higher-end developments that cater to wealthier middle-class residents.[137] As middle-class residents are drawn to the area by new urbanist developments, their appetites and purchasing power will increase rents and other costs in the community.[138] Similarly, they will transform the spaces to conform to their preconceptions of what primarily white, middle-class communities should look like, such as by demanding increased policing to remove unauthorized street vendors, harass residents who are playing loud music, and so forth.[139] The result is that the pre-existing minority residents will be made unwelcome in their own communities, and possibly forced to relocate elsewhere.

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135. For good balanced discussions of gentrification, see generally JOHN JOE SCHLICHTMAN, JASON PATCH & MARC LAMONT HILL, GENTRIFIER (2017) (evaluating the impact of socioeconomic conditions and individual choices on displacement of low-income communities); THE GENTRIFICATION READER (Loretta Lees, Tom Slater & Elvin Wyly eds., 2010) (assembling literature on gentrification); THE GENTRIFICATION DEBATES (Japonica Brown-Saracino ed., 2010) (compiling works focused on gentrification and its consequences).

136. *See* Daniela A. Tagtachian, Natalie N. Barefoot & Adrienne L. Harreveld, *Building by Right: Social Equity Implications of Transitioning to Form-Based Code*, 28 J. AFFORDABLE HOUS. & CMTY. DEV. L. 71, 74 (2019).

137. *See id.* at 74 n.16. *See generally* Michael Hankinson, *When Do Renters Behave Like Homeowners? High Rent, Price Anxiety, and NIMBYism*, 112 AM. POL. SCI. REV. 473 (2018) (presenting survey data demonstrating why renters in dense urban areas are often skeptical of new development).

138. *See* Hankinson, *supra* note 137, at 476–77 (speculating that concerns about rent increases and displacement underlies widespread hostility among renters to new housing in their neighborhood).

139. *See* MARY PATTILLO, BLACK ON THE BLOCK: THE POLITICS OF RACE AND CLASS IN THE CITY 288 (2007) (discussing ways in which influx of white middle-class residents can change community culture).

The second objection is that, due to the increased risk of gentrification and displacement from new urbanist developments and the generally weak political power of minority communities, those communities need the ability to engage in ex-post negotiations with developers to demand concessions. This is the point when communities have maximum negotiating power and when the impacts of the project are most clear.[140] But new urbanism's emphasis on ex ante planning deprives communities of this critical source of leverage.[141]

An article I use in class to explore these difficulties is a recent piece by several affordable housing advocates in the Journal of Affordable Housing and Community Development entitled *Building By Right: Social Equity Implications of Transitioning to Form-Based Code*.[142] The authors provide several case studies to illustrate their point that the absence of community-driven negotiations over development deprived minority residents of the ability to make their concerns about new urbanist projects known.[143] For example, when Miami-Dade County implemented form-based codes in several urbanized areas, residents in one community expressed concern that a new apartment building would disrupt traffic patterns, but were not given the opportunity to comment on the project because the project fully complied with the form-based code and was thus entitled to by-right approval.[144]

After introducing the basic critique of new urbanism articulated by these advocates, I find it useful to push back a bit against their claims. As discussed earlier, one premise of the opposition to transit-oriented development in minority communities is that these developments will draw in middle-class residents whose actions to make the space more suitable to their own tastes will result in the displacement of minority residents.[145] In urbanist jargon, this concern is often referred to as the "amenity effect" of gentrification.[146] But a contrary, and frankly more empirically supported claim, is that introducing

140. *See* Tagtachian et al., *supra* note 136, at 76 (explaining how form-based codes take leverage away from low-income communities in negotiating with developers).

141. *See id.* at 84–104 (using several case studies to argue that by-right approval process deprived communities of color of the ability to negotiate terms of new development that adversely affected them). According to the article, "form-based codes allow developments to be built as a matter of right, and thereby remove the little leverage that is afforded to communities through notice and public hearing requirements if the up-zoning were requested in traditional zoning." *Id.* at 76 (citation omitted).

142. *Id.*

143. *See id.* at 84–104.

144. *See id.* at 100.

145. *See supra* notes 136–39 and accompanying text.

146. *See generally* Victor Couture, Cecile Gaubert, Jessie Handbury & Erik Hurst, *Income Growth and the Distributional Effects of Urban Spatial Sorting* (Nat'l Bureau of Econ. Rsch., Working Paper No. 26142, 2020), https://www.nber.org/papers/w26142 [https://perma.cc/AB2V-LV2S] (exploring the amenity effect of gentrification in certain U.S. cities); Veronica Guerrieri, Daniel Hartley & Erik Hurst, *Endogenous Gentrification and Housing Price Dynamics*, 100 J. PUB. ECON. 45 (2013) (discussing gentrification's effect on the displacement of minority residents).

new market-rate housing for middle-class residents in gentrifying communities will actually *reduce* displacement. The premise is that middle-class residents are *not* drawn to gentrifying neighborhood by new luxury housing, but instead by relatively lower rents and home prices than are available in the suburbs, proximity to transit and job opportunities, and the attractions of urban living.[147] What that means in substance is that middle-class residents will find gentrifying neighborhoods attractive regardless of whether new housing is provided for them, and therefore if new housing is *not* provided, they will instead buy up the existing housing stock and directly displace existing residents. On this view, new housing is simply a lagging indicator of existing demand, rather than a magnet that entices middle-class residents to the area, and can thus relieve the pressure on the existing housing stock.[148] In other words, the key question that is much debated is whether the "supply effects" of new housing overwhelm the "amenity effects."[149]

Another point worth raising in regard to the criticisms of new urbanism raised in *Building by Right* is how strikingly similar the rhetoric and tactics of anti-gentrification activists are to the rhetoric and tactics of affluent suburbanites who oppose new development. Rhetorically, both groups appear to accept the premise that growth represents a zero-sum game in which every developer gain is a community loss, and the assumption that automobile dependency is irreversible. For example, earlier I cited *Building by Right*'s discussion of residents in Miami-Dade who were denied the opportunity to object to a new apartment building that disrupted traffic patterns.[150] Of course, the whole point of new urbanist, transit-oriented development is to disrupt existing traffic patterns in order to disincentivize car use and encourage use of transit, especially in places that are located close to existing transit stops. For the reasons I discussed earlier, however, residents rarely accept assurances that new development will do anything but worsen their quality of life. In terms of tactics, the authors of *Build by Right* support regulatory reforms to prevent gentrification that sound very similar to the kinds of tactics preferred by suburban opponents of new development: more

147. *See* Noah Smith, *Yuppie Fishtanks: YIMBYism Explained Without "Supply and Demand"* NOAHPINION (July 27, 2018), http://noahpinionblog.blogspot.com/2018/07/yimbyism-explained-without-supply-and.html [https://perma.cc/CB9S-9ADQ].

148. *See* BRIAN J. ASQUITH, EVAN MAST, DAVIN REED, W.E. UPJOHN INST. FOR EMP. RSCH., SUPPLY SHOCK VERSUS DEMAND SHOCK: THE LOCAL EFFECTS OF NEW HOUSING IN LOW-INCOME AREAS 2–3 (2020) (arguing that supply effects of new housing in lower-income areas overwhelm amenity effects and result in price reductions).

149. *See, e.g.*, Been et al., *supra* note 115, at 25; John Mangin, *The New Exclusionary Zoning*, 25 STAN. L. & POL'Y REV. 91, 108–13 (2014) (explaining the "supply skepticism" among anti-gentrification activists and scholars). For good resources generally on the gentrification debates, see JOHN JOE SCHLICHTMAN, JASON PATCH & MARC LAMONT HILL, GENTRIFIER (2017); THE GENTRIFICATION READER (Loretta Lees, Tom Slater & Elvin Wyly eds., 1st ed. 2010); THE GENTRIFICATION DEBATES (Japonica Brown-Saracino ed., 2010).

150. *See supra* text accompanying notes 142–43.

process, more localized control, more environmental impact review, growth controls, and mandatory inclusionary zoning.[151] Ironically, the reason these tactics are preferred by affluent suburban residents is because they increase the cost of housing and therefore make it less likely for housing, and especially any kind of affordable housing, to be located in suburban communities. As Anika Singh Lemar points out, although housing advocates champion ad hoc discretionary processes for giving low-income communities "leverage," those processes systemically advantage affluent suburban communities who use them to perpetuate segregation and *worsen* gentrification by directing population growth away from affluent suburbs and towards minority communities who have a weaker ability to resist new growth.[152]

Hopefully, students will come away with an understanding of how nuanced these issues are. Minority communities are right to be skeptical that market-driven development will benefit them after years of disinvestment and urban renewal schemes. And they are right to demand community control over new development after years of being ignored by city hall in favor of the interests of affluent white residents.[153] An extremely difficult question raised by this discussion, then, is how to empower historically disadvantaged communities without at the same time perpetuating the very forces of gentrification and segregation that created and maintain that disadvantage. A recent bill in California entitled Senate Bill 50 attempted to resolve this difficulty by legalizing denser development in affluent communities but not in "sensitive" communities at risk of gentrification.[154] The bill was killed by an unusual alliance in which representatives of affluent suburban communities teamed with affordable housing advocates who were skeptical the bill had done enough to resolve gentrification concerns.[155] As a result, the state legislature failed to do anything meaningful to address the state's skyrocketing housing prices that are steadily displacing poor and middle-class Californians.

In summary, a robust discussion of new urbanism gives teachers many avenues for exploring the intersection between land use law and transportation and provides important context for ongoing political debates

151. *See* Tagtachian et al., *supra* note 136, at 109–14.

152. *See* Lemar, *supra* note 89 (manuscript at 43–52); *see also* John Infranca, *Differentiating Exclusionary Tendencies*, 72 FLA. L. REV. 1271, 1315–17 (2021) (discussing how increased participation does not necessarily reflect the community's views).

153. *See* Infranca, *supra* note 152, at 1282, 1287–88, 1297, 1298–1300.

154. S.B. 50, 2019–2020 Leg., Reg. Sess. (Cal. 2018) (mandating zoning changes near transit and in jobs-rich areas to permit more housing).

155. *See* Liam Dillon, *The Revenge of the Suburbs: Why California's Effort to Build More in Single-family-home Neighborhoods Failed*, L.A. TIMES (May 22, 2019, 5:00 AM), https://www.latimes.com/politics/la-pol-ca-california-sb50-failure-single-family-homes-suburbs-20190522-story.html (last visited Mar. 27, 2021); Jared Brey, *Why Some Tenant Groups Are Opposing California's Density Bill*, NEXT CITY (May 14, 2019), https://nextcity.org/daily/entry/why-some-tenant-groups-are-opposing-californias-density-bill [https://perma.cc/BLZ5-VLX8].

about land use reform.

This contribution has not aimed to offer a comprehensive discussion of all the ways transportation issues might usefully be incorporated into the land use curriculum. Hopefully, however, these three suggested curricular innovations will inspire land use teachers to explore the many intersections between land use and transportation policy.