

NRC COMMENTS ON THE DOWNTOWN PLAN

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Subject: Comments on October 2019 Draft Downtown Davis Specific Plan

The Natural Resources Commission (NRC) discussed the Downtown Davis Specific Plan (DP) Public Review Draft, released October 2019, at its December meeting. Additionally, some NRC members attended the December 4, 2019 Downtown Plan Presentation to Commissions by Opticos and City staff. A subcommittee including John Johnston, Courtney Doss and Richard McCann consolidated the commissioner's comments into a draft that was considered at a special NRC meeting held January 13, 2020. The comments below reflect the final NRC comments adopted by a vote of the commission at the January 13, 2020 meeting.

NRC Comments

First, the NRC agrees with the sustainability vision statements contained in the DP. As it is written now, however, many of the concepts and proposals in the DP are aspirational. The NRC believes that a holistic sustainability strategy requires more robust sustainability recommendations to be associated with the DP. The DP currently calls for a Sustainability Implementation Plan (SIP) to be developed in a separate process (Page 40). The NRC agrees that a separate process producing a focused sustainability document may be desirable as opposed to trying to improve the current DP draft. Nevertheless, there is a fear that delaying the SIP may introduce the risk that it won't be done. **Consequently, the NRC recommends (1) that the City plan for and fund the development of the SIP as quickly as possible and (2) that it incorporate appropriate elements of the SIP into the DP EIR as part of the proposed mitigation measures.** Although the commission recognizes that this may delay the start of the EIR, more clarity in the EIR from preparing the SIP would reduce uncertainty and increase the likelihood of acceptance of the EIR findings. A good template to consider is the SIP developed for the Nishi project.

Second, the NRC notes that the DP lists multiple studies that are needed to fully develop the ideas presented in the plan. (See comment 8-3 below as well.) These studies include:

- Sustainability Implementation Plan (as noted above)
- Economic Development Plan
- Infrastructure Financing Plan
- Climate Action and Adaptation Plan (in progress)
- Citywide General Plan

The NRC urges the City Council and the public to recognize that these plans need to be completed before the vision presented in the DP can be fully realized. We should not leave the downtown planning effort half-done by neglecting these issues. Accordingly, the NRC believes that it is imperative to define the intent for further studies and specify a schedule for their completion prior to the adoption of the DP.

Third, the DP sustainability strategy should focus on steps that move from aspirational goals to practical implementation steps. These must include measurable outcomes, financial or other incentives, and budget allocations for plan management and enforcement. These steps can be identified and adopted as mitigation

measures in the companion EIR. Examples of concrete implementation steps to be considered include the following:

1. Adopt City ordinances and codes that specify sustainability actions and measures that work with the form-based zoning code, and that are at least applicable to the Downtown Core area.
2. Provide specific planning guidance on public spaces such as streets, sidewalks and plazas, including street width, road materials, parking placement, traffic management, sidewalk and bikeway design and materials, greenscape coverage, and maintenance requirements. Mitigation features for urban heat island effects in the downtown such as urban forestry, landscaping, shading, and cool surfaces should be addressed as well.
3. Specify sustainability metrics for building energy use, GHG emissions, distributed energy resources installations, water use and reuse, stormwater retention versus diversion, greenscape coverage, and vehicle, transit and bicycle trips and parking.
4. Position the downtown to lead rather than follow. Currently the Implementation Plan calls for downtown buildings to adhere to whatever city energy and building codes exist at the time of construction; instead downtown features should be a model for the rest of the city. Provide incentives tied directly to meeting and exceeding sustainability requirements for building code compliance. Incentives might include discounts on impact, inspection or other applicable fees, and relief from density and parking requirements or other regulatory requirements.
5. Provide incentives for activities and project features that result in reduction in automobile trips and increased transit, bicycle, micromobility, and pedestrian trips. Such features might include parking fees and meters, transit discounts, bicycle parking access, pedestrian throughways, and episodic street closures.
6. Set aside funding for project inspection and management, public space investment and maintenance, and enforcement actions.
7. Integrate elements from the 2020 Climate Action and Adaptation Plan as appropriate.

Shown below is a tabulation of the NRC comments specific to the draft Downtown Davis Specific Plan elements. All elements presented are important to the success of the sustainability elements in the DP; however, those elements that the NRC considers critical are shown in **bold**.

Number	Reference	Recommendation
Chapter 6 Transportation		
	General	Generally, the transportation vision in the DP is strong, and the NRC concurs with many of the principles including the importance of enabling multimodal transport, ensuring that streets are safe and universally accessible, and supporting the concept of streets as public space.
6-1	(none)	Electric vehicle charging infrastructure information is lacking in the DP. If Davis aspires to achieve a 100% ZEV fleet, then the City needs to plan for charging infrastructure, placement and integration with other features, electrical grid impacts, and financing.
6-2	(none)	Prioritize bicycle-friendly standards, including traffic signal timing, traffic speed, and integration of active transit modes.
6-3	Figure 6.3	Repair the disconnect between general concepts for Davis and the illustrations, such as Figure 6.3 showing a 6-lane road which is

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		incompatible with Davis Downtown and the goal of prioritizing pedestrians and bikes.
6-4	(none)	Plan for micromobility options (such as electric scooters) is lacking in the DP. Use the DP to propose safe ways to incorporate micromobility into the downtown transportation system. Such services support the goal to reduce vehicle travel. Use the DP as a model for incorporating micromobility into citywide transportation systems. For instance, identify opportunities to define parking spaces for micromobility vehicles in the same way that bike parking is handled.
6-5	<i>Target Speeds</i> pg. 162	Consider timing intersection lights in downtown to match bicycle speeds (10-15 mph), as per New York City and other U.S. and European examples, rather than matching car speeds (20-25 mph).
6-6	<i>Target Speeds</i> pg. 162	Decrease downtown speed limits. DP states ‘ <i>maximum target speeds shall be 25 mph...and 20 mph</i> ’. Speed limits of 15 mph or lower are safer for bicyclists and pedestrians, both of which should have high priority downtown. Additionally, focus on traffic calming measures and design speed, rather than relying only on speed limits to slow down traffic.
6-7	Figure 6.9, Figure 6.14	Clarify the ‘bicycle priority network’. D Street is identified as part of the network in Figure 6.9, but Figure 6.14 proposes that the D Street bicycle lanes be sandwiched between moving traffic and parked cars. This presents contradicting approaches for the safety and convenience of bicycles over cars.
6-8	Section 6.6	Improving transportation choices is an important part of meeting GHG emissions goals. The transportation management plan should be aligned with the CAAP implementation strategy.
6-9	Pg. 150-151	Street standards should include measures that will allow for periodic or episodic closure of the streets for special events that bring pedestrians to downtown.
6-10	Pg. 182	See comment 7-11 regarding bulb-outs on 5 th Street.
Chapter 7 Infrastructure		
	General	This chapter focuses on publicly-owned water-related infrastructure. The consequences of increased density and implementation of other ideas discussed in Chapter 3 such as district heating, electricity options, battery storage and microgrid strategies, broadband data systems, natural gas systems (to be decommissioned by 2040) will have impacts on non-water infrastructure that should be described in this chapter.
	General	While the list of Low Impact Development (LID) and Green Infrastructure (GI) strategies is comprehensive, there is insufficient information in the text to support the choices of areas for GI improvement. Overall, the GI recommendations are significantly less robust than other chapters. The NRC recommends building upon the information in this chapter to bring it up to par with other chapter topic areas. Chapter 7 as it stands now does not appear to be readily implementable by City staff or private developers.
7-1	Section 7.3	The analysis in <i>Water Use and Demand Management</i> seems incomplete. The scenarios as presented are not significantly different from each other or from business as usual. The definitions of the scenarios should be revisited to provide greater consideration of the full suite of options

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		<p>such as indoor non-potable and potable demand reductions, more extensive greywater reuse (including showers), rain catchment, permeable pavement or other water conservation/reuse systems. Irrigation demand should not be the only difference between scenarios.</p> <p>It was mentioned to commissioners in the December review meeting with Opticos that information could be provided as appendices. It would be helpful to know where the information presented in the text came from so that readers can properly assess whether these recommendations are appropriate and should be adopted.</p>
7-2	Pg. 178, pg. 188, pg. 190	<p>It is stated in the chapter that the storm drainage systems have “sufficient capacity to support planned growth” and increased demand “would not trigger upgrades to the water distribution network...[or] to the sewer collection system”. On the surface, the significant densification proposed for the downtown area raises doubts about this issue. It would be helpful to be able to review the information used to draw these conclusions.</p> <p>Additionally, on page 180, the “Tiers of Green Infrastructure Opportunities” identify that some GI will provide relief for “system deficiency issues.” What system deficiencies are being referenced if the sewer, storm, and water system have sufficient capacity.</p>
7-3	Pg. 175-177	<p>The language appears to be “boiler plate” approaches that have not been assessed for applicability and implementation to Downtown Davis, or in some cases even the Davis climate. For example, shallow groundwater is potentially a constraint elsewhere, but that doesn’t apply here.</p>
7-4	Table 7A	<p>These opportunity tiers and how they were developed needs to be described in the report; in other words, ‘show your work’. In describing Tier 1 opportunities, there are allusions to addressing system deficiencies and cost savings (top of page) that are not well described. Please elaborate so the reader understands the importance of Tier 1. A better description in <i>Identifying Opportunities</i> (pg. 176) would help the reader understand the tiers later.</p>
7-5	Pg. 177	<p>Green infrastructure (GI) on a small scale and distributed throughout the downtown can be used for deep watering trees to promote a healthy urban forest (e.g. tree boxes). Can this co-benefit with the urban canopy be better explained and savings quantified? (See comment 7-8.)</p> <p>One suggestion is to combine distributed small-scale GI for trees with the Bioretention Bulb-Outs description (both are small scale), and to re-label the other category as Bioretention in Parks and Large Landscaping (these two applications provide flood control benefits that the small scale applications do not).</p>
7-6	Pg. 184-185	<p>The Water Reuse District does not seem to be well thought out. It is the NRC’s opinion that there is no compelling reason for this concept to be applied in downtown. Either describe the benefits and purposes clearly, or eliminate it in favor of alternative measures to accomplish goals such as water efficient appliance standards, a greywater ordinance and incentives, rainwater storage and reuse, et al. Such water reuse systems can be difficult to operate and maintain at the scale envisioned for downtown buildings.</p>

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		Additionally, questions remain as to who would be responsible for operations and what role/responsibility the City would have to protect against potential public health risks associated with these systems (see comment 8-4).
7-7	Pg. 177, Photo 4	Permeable paving could also be used in parking lots in addition to streets. In cases where emergency vehicle or delivery truck access is needed that would exceed the design weight of the pavement, permeable paving can be limited to parking areas and not installed in travel lanes.
7-8	Pg. 179	Regional stormwater treatment is a strategy that needs to be considered as the State implements more stringent water quality objectives for stormwater. Likely, though, this will need to be a Citywide strategy and not a specific issue to be handled as part of the Downtown Davis Specific Plan. That being said, there is no reason not to facilitate as much stormwater infiltration on site in order to promote groundwater recharge, healthy soils, and sustain the urban forest. (See comment 7-5.)
7-9	Pg. 180, Site Selection Strategy and Tiers of Green Infrastructure Opportunities	Clarify the descriptions of the tiers to highlight the characteristics of the sites, as well as the benefits different tiers of GI would provide. There are references to system deficiencies and poor soils that need further explanation. Please describe the benefits cited in more detail that helps the reader understand the differences between these categories and the reasoning behind their differentiation. One example may be landscaping irrigation and tree maintenance. The traditional benefits cited in the text are OK, but specifically to the Davis climate there is the added benefit of deep watering trees in the winter to support the urban forest, which provides context to the need for GI downtown.
7-10	Figure 7.4	Tier 3 should be not be limited to specific locations – all areas should be eligible for consideration for Tier 3 for green infrastructure opportunities. Additionally, these Tier 3 areas should not be highlighted with stars on Figure 7.4 – it provides too much emphasis that detracts from higher impact Tier 1 & 2 opportunities.
7-11	Pg. 182, Figure 7.5	Have the additional bulb-outs on 5 th Street been vetted with City transportation staff? 5 th Street was recently subject to extensive improvements, which included removal of a travel lane. Additional obstacles may be undesirable.
7-12	Pg. 182, GI plan for streetscapes	Plan proposes using bike lanes for permeable pavement locations. Permeable pavers would be a bad idea because of the uneven surface associated with them. A layout such as the one shown on pg. 177 would be preferred over having pavers in the bike lanes. Alternatively, the National Association of City Transportation Officials recommends porous asphalt or concrete for pervious bicycling surfaces rather than interlocking pavers, which may settle over time and become uncomfortable for bicycling.
7-13	Pg. 183	Delete the box highlighting the 130 gpcd existing water demand. It doesn't apply to downtown.
7-14	Pg. 186	How the upcoming state mandate of 55 gpcd indoor use is incorporated into the plan is unclear. Table 7C and Figures 7-7 through 7-9 appear to be based on a larger demand factor.

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7-15	Pg. 186, Table 7C	The demand offset using recycled water is shown as 8 AFY but the difference in total demand between scenarios 1 and 3 is only 5 AFY (162-157=5). Is the math correct? (See also comment 7-1.)
7-16	Figure 3.13	Given all of the water-reduction strategies envisioned for downtown in Chapter 7, the decorative fountain shown in Figure 3.13 appears inconsistent, especially when the Square is a demonstration area for water efficiency. The fountain could be acceptable if it designed to foster public education on water issues and uses a recycling water system. Alternatively, dry art can be an effective centering/gathering point in a public commons.
Chapter 8 Implementation		
	General	This chapter contains most of the recommendations for actually implementing the recommendations in all of the previous chapters. However, related to the sustainability components, much of the language is ‘consider’, ‘investigate’, ‘decide’. Even though further analysis may be needed for many of these components, there still needs to be some clear direction and policy on implementation.
8-1	Pg. 198 and Table 8F	The City should think through a green infrastructure (GI) policy for downtown. Consider: When should GI be part of the public realm and when should it be private? Should stormwater capture systems be public or private and is this dependent on size of the building? Is GI on private land required or incentivized?
8-2	Pg. 198	On Page 198, the author states that “<i>the recommended GI improvements in the public realm have not been included in calculating capital costs, since these upgrades are discretionary.</i>” This approach seems inconsistent with many other improvements for which costs are provided even though they are discretionary. If costs are omitted because the features are discretionary, they will never be chosen because there won’t be budgeted. The City needs these costs so it can prioritize improvements, apply for grants and other funding, work with project applicants, etc.
8-3	(none)	A process needs to be defined for implementing items that aren’t in the form-based zoning code. Since not all of the recommendations in the DP are part of the accompanying form-based Downtown Code, how do they get embedded into the policies, ordinances, standards and other implementation activities of the city? For example, related to GI, as discussed above, there is no Green Infrastructure policy—either established or recommended. Who is responsible for this after the DP is adopted? This information could be incorporated into the recommended phasing plans. (<i>This comment relates to the opening overview comment.</i>)
8-4	Pg. 224, Action 5B	The DP says to “ <i>consider requiring net zero water</i> ”, but the economics and the operational/institutional complications need to be examined carefully. It may not make sense (cost and finances, energy, best value) to deploy multiple small-scale, privately operated, technically sophisticated recycling units to save 8 AFY. This action only makes sense if a more extensive

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		analysis covering more water uses is presented in Section 7-3, as noted in comment 7-1.