Road Design Flexibility Technical Assistance

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Introduction: The City of Green Cove Springs requested technical assistance on approaches to road design flexibility generally to promote affordable housing, as well as flexibility related to a specific case of a proposed shared driveway. The following provides resources and examples starting with general guidance and moving to more specific driveway examples that may be instructive.

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General Street Design Guidance

The City may want to review its street design standards comprehensively to evaluate adjustments/reduced requirements that reduce costs or increase the amount of available land that can be dedicated to livable square footage, while still maintaining transportation safety, to promote housing in general or affordable housing developments specifically.

The City should evaluate constraints and opportunities in view of standards approval by FDOT (Sec. 113-69(a), Green Cove Springs Code of Ordinances). For roadways under the State's jurisdiction, there is an opportunity to establish a community design element in the Comprehensive Plan with a roadway design vision to facilitate coordination with FDOT, in accordance with Fla. Stat. 336.045(6).

The following resources include holistic street design, including in more urban contexts. Note that these will not necessarily have a specific lens for promoting affordable housing (e.g., maximizing number of units), and they may base guidance on additional priorities, such as transportation connectivity.

SmartCode Version 9.2: https://transect.org/codes.html
Additional annotation for calibration available here: https://transect.org/modules.html

This resource is an open-source form-based code that, from a transportation standpoint, aims to prioritize pedestrians in more urban contexts. It includes street design and connectivity standards such as block perimeter, curb and turning radii, road configurations and widths by design speed, parking configurations and lane widths by design speeds all by context (rural through urban core and special district contexts). It shows how these components might fit together in conjunction with the local land use context. Reviewing how the options align with the City's aspired land use context and existing roadway design standards may be a starting point for possible adjustments.

NACTO Urban Street Design Guide: https://nacto.org/publication/urban-street-design-guide/
This comprehensive guide for street design focuses on an urban context, without land use included.

Robert Steuteville, Philip Langdon, and Special Contributors, *New Urbanism Best Practices Guide*, 4th Ed. (2009)
The following are highlighted topics summarized from additional best practice guidance on street design specifications in Chapter 8 Streets, with additional comments on considerations for affordable housing development in view of the city's current standards. See the text for full details and roadway design examples by roadway type.

- **Travel lane width:**
    - Research in this chapter suggests 10-foot to a maximum of 11-foot travel lanes enhances safety. "[Dan Burden of Glatting Jackson Kercher Anglin] says that research by Robert B. Noland, examining 24 years of data on all roadway types in all 50 states, 'concludes that 10-foot lanes for major roads (other than interstates) are safer than their wider-lane counterparts'" (p 136).
    - Consider lane width with street hierarchy and connectivity to disperse traffic and create small blocks for more options and destinations for pedestrians.
    - With regards to fire response, a street grid with ample connections and narrower streets in an urban context may support more timely response than in suburban areas presumably with wider roads. Grid connections may provide additional approaches to a site for fire response that may reduce the need for wider lanes for two trucks to pass each other (as needed on a cul-de-sac road).
    - The City of Green Cove Spring's moving lane widths range from 11 to 12 feet; this is an opportunity to evaluate narrower moving lane widths and whether that will reduce costs or otherwise facilitate housing and affordable housing development.
- **Street parking:**
    - Allowing street parking in addition to narrow lane widths supports "shared street mode" as opposed to free flow traffic, resulting in reduced travel speeds.
    - The City's street standards appear to indicate no parking accommodated in the street classification standards in Sec. 113-66, Code of Ordinances. If this is enforced operationally with signs, etc., consider whether allowing street parking could not only enhance safety, but address parking needs currently met on-site or reduce costs of roadway provision by housing and affordable housing developments.
- **Connectivity:**

- Promoting connectivity does not require a uniform grid, and many places promoting connectivity still allow cul-de-sacs where there are topographical barriers, for example.
- Historic grid city patterns make use of 400-by-200-foot blocks, with some blocks ranging up to 200 feet longer.
- The City's block length and width regulations call for consistency with adjacent areas, with a maximum of 2,200 feet and a minimum of 400 feet in length. Consider connectivity needs in conjunction with narrowing street widths; evaluate potential cost and land availability impacts of these factors for housing and affordable housing development relative to current standards.

- **Curb return radii:**
  - See SmartCode range of curb return radii: 5 to 20 feet in urban contexts.
- **Pedestrian streetscape elements and planted medians:**
  - Pedestrian streetscape elements and planted medians can also slow speeds and increase safety. Walkability expert Dan Burden is quoted in this chapter: "As a general rule, the width of the right-of-way of any street should be split 50/50 between walking and driving. The 50 percent of the physical space that serves pedestrians includes on-street parking buffers, tree lawns, and walkways" (p 151).
  - Consider how pedestrian streetscape and planted median requirements add to the cost of development. In view of safety and walkability benefits, evaluate opportunities to share costs of these elements for affordable housing rather than reduce or remove requirements.

Florida Housing Coalition SHIP Catalyst Training – Regulatory & Land Use Planning Issues Affecting Affordable Housing, Part II: Regulatory Reform for Affordable Housing (June 10, 2021):
https://www.flhousing.org/wp-content/uploads/2021/07/Land-Use-Planning-Workshop-2_Regulatory-Reform-for-Affordable-Housing.pdf
Habitat for Humanity of Pinellas and West Pasco Counties presented information on sidewalk costs in development. Evaluate opportunities to share these costs for affordable housing developments.

Policy Examples of Transportation Design Flexibility for Affordable Housing

The following are excerpts of code language allowing street design or other technical flexibility for affordable housing projects, along with additional comments where available in correspondence with staff.

Hillsborough County: Sec. 6.02.08.C, Land Development Code: *Sidewalks shall be constructed on each side of internal subdivision streets, except as follows… 3. In Affordable Housing developments where sidewalks are required on only one side of internal subdivision streets.*
Brevard County:

- Sec. 62-6310(d), Code of Ordinances: *For developments providing a minimum 30 percent of affordable, or 15 percent workforce housing units, the following requirements may be reduced for private right-of-way widths, road widths, driveway widths, drive aisle widths, and turn radii*

provided they are consistent with American Association of State Highway and Transportation Officials (ASHTTO) guidelines, or other similar guidelines or best practices for context sensitive design solutions, acceptable to the county for low volume traffic conditions and speeds.

- Evaluate opportunity to reference a more urban-context street design standard such as NACTO (see previous section).
- Correspondence with planning and zoning staff did not result in examples of affordable housing projects that had used this flexibility.

City of Tampa:

- Sec. 27-153.2.25, Code of Ordinances: *Exceptions to the requirements of these procedures may be made for subdivisions which have been certified by the city as affordable housing subdivisions and have been underwritten through the Mayor's Challenge Fund or other bona fide housing programs administered through the community redevelopment agency as follows… (b) Affordable housing subdivisions may also be exempt from subdivision technical requirements if the project incorporates or is an innovative design.*
- Correspondence with planning staff at the City of Tampa indicated projects using flexibility in the realm of reduced parking requirements. Based on prior experience, staff also indicated limitations to street design flexibility due to FDOT standards informing local street design standards. For larger developments where streets will be eventually turned over to the City, there may possibly be sidewalk width and curb adjustments, but it is unlikely. Note that there will be cost sharing with those improvements.
- Cost sharing may be an approach to consider as opposed to modifying the design standards themselves, as noted in the previous section.

City of Orlando: The City provides alternative housing transportation standards, including roadway typical section, in its Code of Ordinances section on alternative development standards for low- and very low-income housing projects, including roadway typical sections. See Sec. 67.606. - Alternative Housing Transportation Standards, Code of Ordinances (provided in separate document).

Shared Driveway Access

Regarding technical specifications of shared driveway access, townhomes may provide some useful parallels. The following are two examples from the City of Tampa (site construction plans are provided separately).

- 532 W. Plaza Place: rear-loaded townhomes with 15-foot alley access to driveways; note that this example has an access point on either end of the alley to local roads.
- 40 Bering Street: rear-loaded townhomes off a shared drive with only one access point to a local road; note that this drive is not an extension of a local road.

In deciding whether to permit a shared drive for residences as a dead end of a local street, considerations in addition to the technical specifications may include but are not limited to:

- The number of additional units that may be immediately gained if a design creates more buildable site area;
- The effect on connectivity and traffic dispersion if a road stub is not provided and a future connection is made more difficult or impossible to the adjacent parcel; this factor might also be

considered with effects on block sizes (i.e., is the block size still relatively small and connected even without the future road connection?);

- The effect on future redevelopment options to allow/add more density if a roadway connection is not made; and
- Options for accommodating parking on the street as opposed to on-site if on-street parking were to be allowed in the future, particularly if additional density were eventually allowed/added as part of redevelopment.

Regarding legal considerations in the private realm for shared access: ensure an agreement for use, maintenance, etc. of the shared asset.