



Traffic Advisory Committee

Policy Guidelines: Livable Local Residential Streets and Connectivity

**Adopted by the Traffic Advisory Committee
Last Update on September 8, 2005**

INTRODUCTION

The City of Napa Public Works Department (PWD) receives numerous requests and inquiries from local citizens and residents who wish to have their neighborhood streets not to connect to the public street system because of the perception of and concern for speeding and excessive vehicular traffic volumes on neighborhood streets. This policy guideline statement provides a frame of reference for the Traffic Advisory Committee (TAC) in its advisory role to the City Council, the Planning Commission, and City staff when the TAC discusses the need for street connectivity through neighborhoods.

Future connectivity of local streets in residential areas is needed to achieve the following citywide objectives:

- Adequate emergency vehicle access for fire and police
- Safe and adequate pedestrian and bicyclist access and connectivity
- Integration of old and new neighborhoods
- Safe and efficient ways to move around the city by car
- Efficient maintenance of the public street infrastructure
- Cost-effective connections and extensions of utilities in the City, such as water, sewer, flood control, PG&E power and gas, cable TV, and telephone
- Efficient delivery of public services like garbage collection, mail delivery, and street sweeping
- Equitable traffic distribution among neighborhoods

The policy guidelines herewith provide a frame of reference for the Traffic Advisory Committee (TAC) in its advisory role to the City Council, the Planning Commission, and City staff when the TAC discusses the need for street connectivity through neighborhoods, both old and new. These policy guidelines are not “standards” to be applied strictly; rather they are guidelines to help address the quality-of-life issue raised by unwanted traffic impacts.

I. GENERAL PLAN – STREET AND ROADWAY SYSTEM ¹

The City of Napa General Plan, *Envision Napa 2020*, identifies the following major transportation objectives in the Plan's Transportation/Circulation Element:

- Develop a transportation infrastructure that provides for an acceptable traffic flow and provides access to all destinations
- Create a citywide transportation system that allows users to choose from a variety of safe transportation options including an adequate system of streets, transit, pedestrian and bicycle facilities
- Minimize the negative effects of additional automobile traffic and other transportation

The General Plan states that roadways serve two functions that conflict from a design standpoint: (1) to provide mobility and (2) to provide property access. High and constant speeds are desirable for mobility, while low speeds are more desirable for property access, particularly in residential areas.

The Roadway Classification System defined in the General Plan consists of a set of roadway classifications that have been developed to guide Napa's long-range planning and programming (see Tables 3-2 and 3-3 of the General Plan). Roadways are systematically classified based on the linkages they provide and their function, both of which reflect their importance to the land use pattern and the traveler.

The Roadway Classification System (a.k.a. Street and Highway Classification System) defines "Local Streets" to have a primary function of providing access to parcels and to have no restriction to access. Local streets, which constitute the largest part of the City's circulation system, are defined in the General Plan to carry up to **5,000** vehicles per day (vpd).

II. GENERAL PLAN – GOAL AND POLICIES

The General Plan provides the following goal and policies, which should guide the TAC in its deliberation on future street connectivity through neighborhoods and the role of new development projects in achieving citywide transportation goals. ²

Goal T-1 To provide for extension and improvement of the City's roadway system to ensure the safe and efficient movement of people and goods

Policy T-1.1,d. Local Street Standards: Several local street cross sections are defined ³; minimum street standards are based on projected average daily traffic

¹ *Envision Napa 2020*, City of Napa General Plan Policy Document, Adopted Dec. 1, 1998, Reprinted with Amendments to Jan. 1, 2002

² *Envision Napa 2020*, City of Napa General Plan Policy Document, Adopted Dec. 1, 1998, Reprinted with Amendments to Jan. 1, 2002

³ The Community Development Department is leading an effort to amend the General Plan to remove the street cross sections from this document and place the new street cross sections in the Public Works Department *Standard Specifications and Standard Plans*.

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(ADT)... The Public Works Director shall determine which local street cross section is appropriate in each case, and may approve minor modifications to local street standards, provided safe and adequate public access and circulation are preserved. The City will also review and revise as necessary, existing policies which [sic] regulate which street designs are public and which are private. Criteria will be established to restrict the use of public streets in specific situations.

- Policy T-1.2* The City shall assess fees on new development sufficient to cover the fair share portion of that development's impacts on the local and regional transportation system.
- Policy T-1.3* The City shall implement the major roadway improvements identified in the General Plan Table 3-1 (i.e. future improvements to highways, arterials and collectors) and any others necessary to allow the circulation system to provide adequate levels of service to accommodate future development.
- Policy T-1.4* The City shall establish plan lines and require that new developments reserve rights-of-way for widening projects and other road improvements identified in the General Plan.
- Policy T-1.5* The City shall require that new development construct improvements identified in the Capital Improvement Program (CIP) as needed to serve the development.
- Policy T-4.2* The City shall require design of new local streets to balance circulation needs with neighborhood character while still providing an interconnected street network.
- Policy T-6.9* The City shall promote bicycle access in the site planning and design of all residential subdivisions over 20 units, and of all commercial or industrial projects over 20,000 square feet.
- Policy T-9.1* The City shall require sidewalks along at least one side of all new local streets, and both sides of new and reconstructed arterials and collector streets.
- Policy T-9.2* The City shall require appropriate pedestrian access in all new developments.
- Policy T-9.10* The City shall promote the improvement of the pedestrian environment whenever feasible, particularly on high traffic volume streets.

The General Plan's Table 3-1 identifies future improvements to highways, arterials and collectors within the City of Napa. The General Plan does not specify which local streets should be connected to achieve citywide transportation goals. These policy guidelines provide a

framework for the decision-making related to future street connectivity of local streets through neighborhoods to support citywide transportation goals and objectives.

III. NAPA RESIDENTIAL DESIGN GUIDELINES

The *City of Napa Residential Design Guidelines* provides the following design principles, which should guide the TAC in its deliberation on future street connectivity through neighborhoods and the role of new development projects in achieving citywide transportation goals.⁴

Neighborhood Design Principle 2: Evolving Infill Areas 2.22 Connections to the City

New development in evolving infill areas should be planned as part of an interconnected neighborhood of existing and future streets. They should be planned and designed as an extension of adjacent neighborhoods' auto, bicyclist, pedestrian, and open space systems.

- Gateways and edges of new development should promote landscape and street improvements as common amenities that are shared with adjacent neighborhoods in the future.
- Subdivisions should not be socially gated or distinguished as an enclave.
- New projects should provide connections of future streets.
- New projects should minimize the use of cul-de-sacs.
- Principal access roads into new development areas should be of similar scale as streets they are connected to.
- The street patterns at the edges of the new project area should be extended into the site.
- The design for new projects, and for retrofit of existing streets, should have emergency and service vehicle access that maintains the pedestrian-friendliness of the street.
- New subdivisions should use block patterns that increase access points for emergency vehicles.

Architectural Design Principle 3: Multi-Family Housing 3.32 Scale Transition

Neighborhood and architectural design concepts should provide for a transition in scale between multifamily streets and smaller single-family residential streets. The transition should respect the character, privacy and sunlight of adjacent properties without isolating individual houses or developments.

⁴ *City of Napa Residential Design Guidelines*, September 2004, prepared by City of Napa Planning Department with assistance by RACESTUDIO

- Projects should be designed to integrate with adjacent development.
- Opaque sound walls are discouraged.
- Multifamily and single-family houses interface should use a variety of design methods to ensure a well-integrated community.

Design concepts may include:

- Orienting units towards public streets and commons rather than neighboring backyards;
- Enclosing parking in smaller, scattered structures within multifamily projects to reduce the impact of parking lots and expansive carports on adjacent houses;
- Including screening and shading in the landscape plan
- Interfacing single and multifamily development with streets or open spaces; and/or
- Stepping down the mass and increasing side or rear yard setbacks of taller multifamily projects adjacent to existing single-family homes.

IV. POLICY GUIDELINES FOR LIVABLE LOCAL RESIDENTIAL STREETS

Current literature suggests that appropriate average daily traffic volumes (ADT) on local residential streets range from greater than 1,500 vehicles per day⁵ (vpd) up to 5,000 vpd⁶. The literature also recommends that—for livability—local neighborhood streets should have low traffic volumes in the range of 2,000 vpd⁷ up to 3,000 vpd⁸. Based on this review and a review of Napa’s local residential street volumes, **2,500 vpd** is recommended as an appropriate threshold for daily volumes in establishing livable residential local streets. Table 1 shows a sample of recent ADT counts for local residential streets.

The estimation of future ADT on a local residential street should be conducted for: (1) post-project conditions and (2) cumulative conditions. The daily trip estimation procedure should consider known or anticipated development projects in the entire neighborhood.

⁵ *Residential Streets*, 3rd Ed.; Walter M. Kulash, Principal Author; Urban Land Institute, National Association of Home Builders, American Society of Civil Engineers, and Institute of Transportation Engineers; 2002; Washington, D.C.

⁶ *Neighborhood Street Design Guidelines*, a Proposed Recommended Practice of the Institute of Transportation Engineers, 2003, Washington, D.C.

⁷ *Traditional Neighborhood Development Street Design Guidelines*, A Recommended Practice of the Institute of Transportation Engineers, 1999, Washington, D.C.

⁸ *Transportation and Land Development*, 2nd Ed.; Vergil G. Stover and Frank J. Koepke; Institute of Transportation Engineers; 2002; Washington, D.C.

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Granny units (or second units) should typically not be included in the trip generation calculation unless the proposed project is known to include rental units during the application process.

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- A. To maintain the livable and pedestrian-friendly quality of local residential streets, daily traffic volumes on these streets should generally not exceed **2,500 vpd**.
 - 1). New development projects should not cause the daily traffic volumes on local residential streets around the project site to substantially exceed **2,500 vpd**.
 - 2). New development projects should provide adequate street connectivity such that no local residential street around the project site substantially exceeds **2,500 vpd**.
 - 3). For pre-existing conditions where the daily traffic volumes already exceed 2,500 vpd, new development projects should not cause the daily traffic volumes on local residential streets around the project site to substantially exceed **3,000 vpd**.
 - 4). For pre-existing conditions where the daily traffic volumes already exceed 2,500 vpd, new development projects that cause the daily traffic volumes on local residential streets around the project site to substantially exceed **3,000 vpd** should explore and exhaust options for traffic calming pursuant to the TAC-approved *Citywide Guidelines for Traffic Calming and Neighborhood Traffic Management*, where feasible.

- B. To promote an equitable distribution of local traffic onto local residential streets, the maximum allowable new daily trips from a development project at a single point of street connection should be **500 vpd** (for example, daily trips from about 50 single-family homes).
 - 1). New development projects that generate over 500 vpd (for example, daily trips from about 50 single-family homes) or up to 1,000 vpd (for example, daily trips from about 100 single-family homes) should provide a minimum of two street connections to the public street system, preferably on different streets.
 - 2). New development projects that generate over 1,000 vpd or up to 1,500 vpd should provide a minimum of three street connections to the public street system, preferably on different streets.
 - 3). New development projects that generate over 1,500 vpd should provide a minimum of four street connections to the public street system, preferably on different streets.

- C. Emergency vehicle access and connectivity are a very important component of the Fire Department's ability to provide effective emergency response to the community. In addition to the concept of vehicle trips per day and peak hour trips that relate to the number of single-family homes and other proposed dwelling units, the number of street connections should promote the Fire Department's ability to provide effective emergency response to all neighborhoods.
- 1). The California Fire Code Sec. 902.1 allows for more than one fire-apparatus access road to be provided when it is determined by the Fire Chief that access by a single road might be impaired by vehicle congestion, condition of terrain, climatic conditions or other factors that could limit access.
 - 2). In addition, the scope of the National Fire Protection Association Standard 1141- Fire Protection In Planned Building Groups specifically addresses access into suburban and rural areas that would be impacted by one or more of the following:
 - o Limited water supply
 - o Limited Fire Department Resources
 - o Extended Fire Department response times
 - o Delayed alarms
 - o Limited access
 - o Hazardous vegetation
 - o Unusual terrain
 - 3). To mitigate these potential impacts, the standard requires access to be provided by a minimum of two distinctly separate routes, each located as remotely from the other as possible.
- D. New development projects should allow for the future connectivity of local streets in residential areas to achieve the following citywide objectives:
- 1). Adequate emergency vehicle access for fire and police
 - 2). Safe and adequate pedestrian and bicyclist access and connectivity
 - 3). Integration of old and new neighborhoods
 - 4). Safe and efficient ways to move around the city by car
 - 5). Efficient maintenance of the public street infrastructure
 - 6). Cost-effective connections and extensions of utilities in the City, such as water, sewer, flood control, PG&E power and gas, cable TV, and telephone
 - 7). Efficient delivery of public services like garbage collection, mail delivery, and street sweeping
 - 8). Equitable traffic distribution among neighborhoods

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- E. New development projects should demonstrate how their proposed layout and circulation plan maintain the livable and pedestrian-friendly quality of local residential streets around the project site, ensure adequate emergency vehicle access, and achieve citywide objectives using the guidelines IV-A, IV-B, IV-C, and IV-D above.
 - F. The review of new or proposed development projects with respect to these livable streets policy guidelines shall be conducted as part of the regular "Transportation Safety and Operations Review" during the Inter-Departmental Review (IDR) process.
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Table 1: Average Daily Traffic (ADT) Volumes on Local Residential Streets

| <i>Local Street</i> | <i>Location</i> | <i>ADT</i> | <i>Date</i> |
|---------------------|----------------------|------------|-------------|
| Chelsea Avenue | near Kilburn Avenue | 2,438 | May-03 |
| Hennessey Drive | near Davis Avenue | 2,415 | Jun-03 |
| Oxford Street | near Carol Drive | 2,172 | Mar-02 |
| S. Minahen Street | near Imola Avenue | 2,088 | Feb-04 |
| Villa Lane | near Firefly Lane | 1,832 | May-03 |
| Kilburn Avenue | near Chelsea Avenue | 1,627 | May-03 |
| Meadowbrook Drive | near Buhman Avenue | 1,360 | Mar-04 |
| Beckworth Drive | near El Capitan Way | 1,200 | Apr-03 |
| Austin Way | near Scenic Drive | 1,194 | May-03 |
| Firefly Lane | near Villa Lane | 1,178 | May-03 |
| Elm Street | near Franklin Street | 1,168 | Mar-03 |
| Twin Oaks Drive | near Buhman Avenue | 1,166 | Mar-04 |
| Sheridan Drive | near Stuart Way | 1,035 | Feb-04 |
| Morningside Drive | near Skylark Way | 915 | Feb-04 |
| Scenic Drive | near Austin Way | 751 | May-03 |
| El Capitan Way | near Beckworth Drive | 520 | Apr-03 |
| Davis Avenue | near Hennessey Drive | 237 | Jun-03 |
| S. Seminary Street | near Spruce Street | 118 | Feb-02 |