PLANNING COMMISSION MEETING STAFF REPORT

DATE OF MEETING: February 12, 2019

NAME OF APPLICANT: Midway City

AGENDA ITEM: Code Text Amendment of Title 16.13.44

ITEM: 2

Midway City is proposing a code text amendment to the City's Land Use Code. The amendment would create standards for cul-de-sacs that may include maximum length and the number of dwellings allowed to access from a cul-de-sac. The proposed ament would also adopt standards for existing nonconforming cul-de-sacs.

BACKGROUND:

Staff is proposing a code text amendment to address issues regarding cul-de-sacs and nonconforming roads that lack a second access. Recently, the City has received applications that has required decisions to be made about overall cul-de-sac length, extending already non-conforming cul-de-sacs, and development along City streets that are over 500' without a second access. The City's regulations for cul-de-sacs are not in the Land Use Title but are found in the City's Standard Specifications and Drawings which has allowed the City some flexibility. The issues of cul-de-sac length is becoming more frequent and staff feels that a code should be added to our land use title. The proposed code will make it clear what the standards are which will save staff time and land owner's time and it will leave the City on safer ground legally. Adding a code to Title 16 will make exceptions possible only through the granting of a variance which has strict standards.

There are two main issues.

1. The maximum length of a cul-de-sac and the number of units that should be allowed on one access.

2. How to manage proposed development on existing public roads that have one access and are over 500' in length, some close to a mile in length.

Therefore, the following code is proposed:

Section 16.13.44

B. ***Cul-de-sac unit density.*** *Cul-de-sacs may have up to a maximum of 11 dwellings, regardless of length or not exceed 500' in length with density that complies with the zoning code. Lots on cul-de-sacs greater than 500' in length must be deed restricted and noted on the plat so they can never be further subdivided. If the cul-de-sac ever becomes a through road then the deed restrictions and the plat note may be removed through the plat amendment process.*

C. ***Existing non-conforming roads exceeding 500' lacking a second point of access.*** *Property fronting any existing public road that exceeds 500' in length may be further subdivided as long as the proposal complies with the zoning code. If an existing public road has only one access, no new roads may be connected to the existing nonconforming road.*

Staff is proposing the 500' maximum length of a cul-de-sac is eliminated and the number of units on the cul-de-sac is established at 11. The number of units being established at 11 is calculated from the amount of homes that are allowed on a 500' cul-de-sac with 100' frontages. By eliminating the 500' length, the City is promoting larger lots and open space, as described in the General Plan. The City would require that all lots in development with a cul-de-sac that is over 500' in length are deed restricted, similar to the Rural Preservation Subdivision Code. There would also be a note on the plat informing the lot owners that the properties could not be subdivided. The only way to remove the plat note and possibly the deed restrictions would be through a plat amendment. That could only happen if the road changed from a cul-de-sac to a through road.

Regarding existing public streets that are nonconforming because they exceed 500' in length, the City would allow properties with existing frontage to subdivide but no new roads could be built without a second access. The proposed code would not allow a long, single access road to become more nonconforming but would allow property owners to use their existing frontage to subdivide. Legally, this is a sound code in the fact that the argument of a taking could not be made because the property would have development potential.

Staff feels that adopting the preceding two sections of code will make the rules clear and will clear up some issues that will continue unless a solution is found for these issues.

The following is information regarding cul-de-sac length that was prepared by staff for a previous Planning Commission meeting:

Currently Midway has a cul-de-sac limit of 500'. Heber City extended their limit to 800'. Wasatch County and the Fire District have a limitation of 1300'. Sources in literature vary widely in their recommendations for maximum cul-de-sac length, but the reasons given for the various dimensions (such as minimizing inconvenience to delivery people) are not very convincing though they should be considered. The general wisdom, however, suggest there should be a limit to cul-de-sac length and the number of units allowed to have access on one cul-de-sac. As streets get longer, properties accessible from only one direction become more isolated and difficult to reach. Moreover, the cul-de-sac ceases to be a street that provides access to a few properties but as the cul-de-sac length is increased, it becomes the access for more properties and traffic trips increase. This increase in traffic trips may even require the street be upgraded from a local street to a minor local with a different construction standard.

The book "Residential Streets", Second Edition, from the American Society of Civil Engineers, National Association of Homebuilders and the Urban Land Institute states the following on pages 54 & 55:

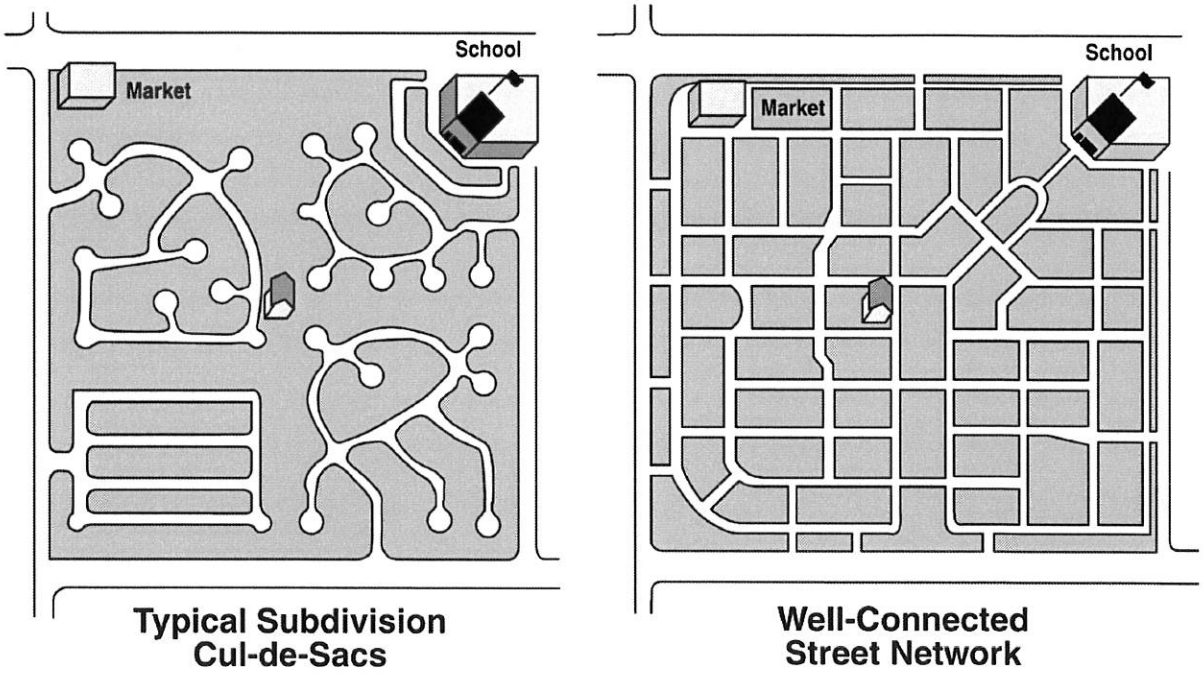
> *In general, traffic, volume and the number of housing units should be the factors that determine cul-de-sac length. A street with houses on 100-foot-wide lots can function well for a greater length than a street with 50-foot lots. For 100-foot-wide house lots, a street of 20 houses would result in a 1,000-foot-long street. For 50-foot-wide house lots, a cul-de-sac should be restricted to a length of approximately 500 feet. Assuming that a cul-de-sac should handle no more than 200 vehicle-trips per day and that each single-family home generates up to eight or 10 vehicle-trips per day, a cul-de-sac should accommodate a maximum of 20 to 25 houses. In some circumstances, including large lots or difficult terrain, lengths longer than 1,000 feet might be appropriate.*

There are benefits and disadvantages associated with extending the length limitation and in general allowing or discouraging cul-de-sacs.

- Reduced Speed - The main benefit of a cul-de-sac is reduced speed within the neighborhood though this can be accomplished on through roads through traffic calming devices such as narrower roads, trees, curved roads, and raised crosswalks.

- Reduced Traffic – The smaller number of lots on a cul-de-sac the less amount of traffic that will be produced. This is typically accomplished by limiting the length of the road thereby limiting the number of homes allowed along the road.
    - Nationally the average is 21-28 units per cul-de-sac
    - International Fire Code allows up to 30 units on a cul-de-sac
- Safety and Emergency Access – Both the Wasatch County Fire District and the Wasatch County Sheriff's Office discourage cul-de-sacs because of the limitation they create for access and circulation.
- Impacts on Traffic - With a short cul-de-sac, a driver can visually determine the dead-end road, reducing the amount of traffic within the neighborhood.
- Circulation – Cul-de-sacs greatly limit circulation. This becomes an inconvenience to residents and a major issue for emergency response. The limitation of access divides neighborhoods and forces some streets to bear the burden of higher traffic volume.
    - The general planning consensus is that cul-de-sacs should be discouraged.
    - Often when a cul-de-sac is allowed, a trail will be required from the end of the cul-de-sac to connect to another nearby cul-de-sac or street.
        - The trail provides connectivity for all residents and foot traffic.
- Water Lines - Another consideration is the length of dead-end water lines. With poor circulation waterlines often require public works to manually flush the line.
    - Dead-end lines may require up-sizing the line to provide proper fire flow.
- Impervious Surface – Cul-de-sacs can reduce the amount of imperious surface in a neighborhood which in turns reduces storm water runoff and development cost.
    - It also has the effect of reducing the urban heat island effect where a developed area has higher temperatures because those areas have more exposure to the sun.
- Road Maintenance – Snow removal on cul-de-sacs is more difficult for Public Works than on through streets.
- Addressing – Finding addresses and streets in a cul-de-sac is more difficult than with a connecting street development pattern.

- The following graphic shows examples of how a community can be developed using either a cul-de-sac development pattern or a connecting through street pattern:



- Developers always want to create cul-de-sacs because buyers prefer them and residents living on cul-de-sacs generally prefer them also.

Wasatch County currently only allows cul-de-sacs under very limited circumstances. These include the following:

- Unusual drainage
- Unusual topography
- Land ownership configurations exist which make other designs undesirable or impossible
- Where street plans for the area do not require through circulation.

POSSIBLE FINDINGS:

- The number of lots allowed on a cul-de-sac over 500' in length would be 11.
- The number of units allowed on cul-de-sacs 500' or less would be amount allowed by the zoning code.
- The proposal helps promote larger lots and open space which is a goal described in the General Plan.
- Allowing properties to develop along existing nonconforming public streets greater 500' In length will help avoid takings claims and allow property owners more flexibility.

ALTERNATIVE ACTIONS:

1. Recommendation of Approval. This action can be taken if the Planning Commission feels that the proposed language is an acceptable amendment to the City's Municipal Code.

    a. Accept staff report
    b. List accepted findings

2. Continuance. This action can be taken if the Planning Commission would like to continue exploring potential options for the amendment.

    a. Accept staff report
    b. List accepted findings
    c. Reasons for continuance
        i. Unresolved issues that must be addressed
    d. Date when the item will be heard again

3. Recommendation of Denial. This action can be taken if the Planning Commission feels that the proposed amendment is not an acceptable revision to the City's Municipal Code.

    a. Accept staff report
    b. List accepted findings
    c. Reasons for denial