Agenda

Planning Commission - Title 49 Committee
City and Borough of Juneau

April 20, 2016
Marine View 4th Floor, Room 414
3:30 PM

I. **ROLL CALL**

II. **APPROVAL OF AGENDA**

III. **AGENDA TOPICS**

- **A.** Street Standards
- **B.** Lot line adjustments
- **C.** Coordination between the Title 49 and Subdivision Review Committees regarding Code changes.
- **D.** Prioritization of Code changes

IV. **COMMITTEE MEMBER COMMENTS AND QUESTIONS**

V. **ADJOURNMENT**

Community Development

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DATE: April 18, 2016

TO: Title 49 Committee

FROM: Jonathan Lange, Planner II
Community Development Department

FILE NO.: AME2016 0009

PROPOSAL: Text amendment to Title 49 regarding the Table of Roadway Construction Standards, CBJ 49.35.240.

The City and Borough of Juneau Code states in CBJ 49.10.170(d) that the Commission shall make recommendations to the Assembly on all proposed amendments to this title, zonings and re-zonings, indicating compliance with the provisions of this title and the Comprehensive Plan.

ATTACHMENTS:
Attachment A: Lane Width Studies
Attachment B: Previous Code Standards (pre-September 2015)
Attachment C: Current Table of Roadway Construction Standards (post-September 2015)
Attachment D: Comments
Attachment E: Zoning Atlas Overlay District Maps, Roadway Classifications – Maps A-D

BACKGROUND

In an effort to make streets safer for all users and to deal with substandard or non-conforming streets, staff proposes updates to Title 49 to the Table of Roadway Construction Standards, CBJ 49.35.240. Staff also proposes revisions regarding street reconstruction projects for nonconforming streets.

Studies have shown (see Attachment A) that decreased size of lane width provides for safer streets for all users, including motorists, pedestrians, and bicyclists. Decreased travel way widths cause drivers to drive slower and become more aware of the other uses, i.e. pedestrians, bicyclists, and parked cars, that are in the right-of-way. CBJ adopted plans, discussed below, recommend travel way widths that are smaller in width than that in current code.

Additionally, a few recent CBJ road reconstruction projects on non-conforming streets did not meet the current street standards in code. The proposed changes provide flexibility in construction standards for roadways.

DISCUSSION

After conducting research on other communities and in transportation studies, staff has determined that roadway standards should reflect our desire as a community to provide safe streets for all users. The transportation trend in street design known as Complete Streets, as discussed in the Juneau Non-Motorized Transportation Plan, are designed to provide safe access for all users:

> *"Pedestrians, bicyclists, transit riders and motorists of all ages and abilities are able to move safely along and across a Complete Street. Complete Streets in busy urban areas have features for buses, bicycles and pedestrians as well as for motorists. In more rural areas with less traffic and fewer pedestrians and cyclists, a paved shoulder may suffice to complete the street. The Complete Street movement encourages planning for all users across the transportation network. This does not mean that all streets need to be perfect for all modes, but that the transportation network needs to work for all modes."*

Complete Streets and the adopted plans mentioned below encourage smaller lane widths and larger sidewalk widths.

In discussions with the Engineering Department, staff has agreed that roadway and travel way widths can be reduced from what is reflected in current code. Engineering staff has also requested that the code be amended to allow for roads to be maintained, repaved or reconstructed, to their original constructed width. Only subdivision of land would trigger the need for non-conforming streets to be upgraded to current standards.

Staff also suggests removing Average Daily Trips (ADT) out of the Table of Roadway Construction Standards and replacing it with street type/designation per the Zoning Atlas Overlay District Maps, Roadway Classifications – Maps A-D (see Attachment E). This makes application of the code easier and more equitable.

COMPLIANCE WITH ADOPTED PLANS

Juneau Non—Motorized Transportation Plan 2009

4.3 Traffic Calming Measures

> *As travel speed is a major contributor to pedestrian and bicyclist injury, traffic calming is often considered as an element of non-motorized transportation planning. Any vehicle traveling more than 30 mph poses a threat to both cyclists and pedestrians. This does not necessarily mean that in order to increase walkability, motor vehicle speed needs to be decreased. More important is total travel time, meaning a trip at lower speeds with fewer stops can be just as efficient as a trip at higher speeds with more stops.*

It is difficult to alter an existing arterial to make it more usable for walkers and cyclists. In addition to timing traffic signals for a maximum 30 mph speed, there are several methods suggested by the Institute of Transportation Engineers to make existing arterials safer for non-motorized users. These include:

- *Narrower travel lanes – 11 foot lanes are adequate for traffic speeds of 45 mph or less.*

Decreasing travel way width can make streets safer for all users, pedestrians, bicyclists, and motorists.

Willoughby Plan 2012

A Connected Grid of Landscaped Streets and Sidewalks are the 'Bones' that Create Great Neighborhoods

<u>Narrow Streets, Wide Sidewalks, and On-Street Parking</u>. Willoughby District streets are narrow, which forces cars to travel slowly through the neighborhood contributing to neighborhood safety, low noise levels, low traffic volumes and, therefore neighborhood livability.

5.4 Investments in the Willoughby District

Public Sector Investments

<u>New streets, sidewalks, paths</u>. There will be a new connected grid of streets, most with two 11 ft lanes, on-street parking, 13 ft wide sidewalks, street trees, human-scaled lighting, street furniture, and crosswalks. This will make the Willoughby District more walkable, benefit local businesses, and reduce rush hour congestion. Lineal feet of sidewalks and pedestrian paths in the District will double, including a new 16 ft wide east-west running pedestrian path from Gold Creek Park to Whittier Street and new the civic plaza across the street.

As recommended in the Willoughby Plan, narrow travel lane widths can slow traffic, create more walkable areas throughout the CBJ, and make neighborhoods safer.

<u>COMPLIANCE WITH CBJ LAND USE CODE</u>

The proposed amendment to Title 49 will not create any internal inconsistencies within the Code. The Roadway Construction Standards have been evaluated for consistency. The proposed change is consistent with Title 49.

FINDINGS

Based upon the above analysis, staff finds that the proposed text amendment to Title 49 is consistent with the goals and policies in the Comprehensive Plan and other adopted plans, as well as Title 49.

STAFF RECOMMENDATION

Staff recommends that the Title 49 Committee forward the following draft text amendments to the Planning Commission for consideration.

1. See Proposed Table of Roadway Construction Standards and additional amendments below.

(h) Streets construction standards.

(1) Arterials. The subdivider is not responsible for the construction of arterial streets, but may be required to dedicate the necessary right-of-way during the platting process.

(2) Other streets. Other than arterials, street shall comply with the following:

Table 49.35.240 Table of roadway construction standards

~~Avg. Daily Trips (ADT)~~	~~Adopted Traffic Impact Analysis Required~~	Street Type	Sidewalks	Travel Way Width Min.	Street Lights	ROW Width[ii]	Paved Roadway Required	Publicly Maintained	Bike Lane
~~≥ 500~~	~~Yes~~	Arterial and Minor Arterial	Both sides	~~26 ft.~~ 24 ft.	At all intersections	~~60 ft.~~ 80 ft. to 100 ft.	Yes	Yes	Yes
~~212 to 499~~	~~Maybe~~	Collector	One side	~~24 ft.~~ 22 ft.	At all intersections	60 ft.	Yes	Yes	Yes
~~0 to 211~~	~~No~~		~~Not required~~ ~~One side~~	~~22 ft.~~	~~At intersection of subdivision streets and external street system~~	~~60 ft.~~	~~Yes~~	~~Yes~~	~~Yes~~
~~0 to 211~~	~~No~~	Local Access Street	Not required	~~20 ft.[i]~~ 20 ft.	At intersection of subdivision streets and external street system	60 ft.	No, if outside the urban service area[iii]	No	No

[i] Or as required by the Fire Code at CBJ 19.10.

[ii] ROW width may be reduced as prescribed at CBJ 49.35.240.

[iii] Paving of roadway is required for any street type located within the urban service area or within the Juneau PM-10 Non-Attainment Area - Maintenance Area Boundary map.

iv Travel way widths and sections specified in Assembly-adopted plans and regulations will generally take precedence over street widths and sections in this table.

v During street or utility maintenance projects, the Assembly may approve a travel way width less than that required in Table 49.35.240.

(3) Signs and markings. The subdivider must install street name signs, traffic control signs, and traffic control pavement markings in accordance with approved plans and the requirements of the current issue of the Manual on Uniform Traffic Control Devices, including the current Alaska Traffic Manual Supplement, published by the Alaska Department of Transportation and Public Facilities.

(i) Street waivers. The director, after considering the recommendations of the director of the engineering and public works department and of the fire marshal, may waive the following and no other street improvement requirements:

(1) Right-of-way relocation. If a plat is submitted for the purpose of relocating a right-of-way, the director may waive all or some of the construction requirements under the following conditions:

(A) The proposed relocation will improve access to abutting or neighboring property not otherwise adequately served.

(B) The subdivider has provided sufficient engineering information to demonstrate to the director of engineering and public works the feasibility of constructing a public street at the location of the relocated right-of-way.

(C) The relocated right-of-way and the resulting subdivision layout will conform to all the other standards of this chapter.

(D) The improvements required in the new right-of-way will not be less than those in the existing right-of-way.

(E) No additional lots are being platted.

(2) Stub streets.

(A) The director for minor subdivisions and the commission for major subdivisions may waive the full construction of a roadway within a right-of-way that is required to provide access to a bordering property, and does not provide required access to any lot within the subdivision. The commission or director may require provision of a roadbed, utility line extensions, or other appropriate improvements (See Figure 4).

Relationship Between Lane Width and Speed

Review of Relevant Literature

Prepared for the Columbia Pike Street Space Planning Task Force
by the Parsons Transportation Group
September 2003

Summary

Many factors influence a driver's choice of speed on an individual street. In addition to lane width, these factors include roadway curvature, roadside development, type of traffic control, and many others. It is challenging to isolate the effect of lane width on speed. Two general methods to quantify this relationship appear in the literature:

- ***Before-and-after studies of a single roadway segment (case studies).*** When a roadway is restriped to provide narrower lanes, before-and-after speed results can imply a relationship between speed and lane width. This method is desirable because when a single site is evaluated, the effects of lane width can be more carefully isolated. However, this method has two disadvantages. First, all restriping projects change something in addition to lane width. Even if curb lines are not changed, narrower lanes allow surplus pavement to be occupied by another feature, such as left-turn bays, on-street parking, or bike lanes—changes in speed may be attributable as much to these features as to the narrowed lanes. Second, because this method reports results from only a single site, the results are entirely dependent on characteristics of that site, and they may not apply to other sites with different characteristics.

- ***Studies of several roadway segments of varying lane widths.*** With this method, a researcher can determine the differences in speed among a large number of roadway segments with different lane widths and derive a relationship between lane width and speed. An advantage of this method is that it uses a much larger sample size, so the results are more likely to apply elsewhere. However, there are inevitably differences between the sites studied other than lane width. Lane width may contribute to all of the observed speed differences, or it may contribute to very little. For example, a street in downtown Washington with 12-foot lanes will probably have *lower* speeds than a commuter route into the city with 10-foot lanes. Researchers must attempt to select sites that minimize this source of error.

There is no consensus in the literature on the relationship between lane width and speed. Some studies have shown speed reductions of as much as 3 mph for every foot of lane narrowing; other studies show a more slight speed reduction of about 1 mph per foot of lane narrowing or no significant effect at all. The studies generally agree that there is wide variability between sites, suggesting that lane width alone is not responsible for the entire speed reduction.

Several studies have reported the use of lanes 10 feet wide (or slightly narrower) with no perceived operational difficulties to buses and trucks. The following examples of narrow streets exist in Washington, D.C:

- 18th Street, NW, between E and K Streets, has average lane widths of 9.5 feet and carries 9 buses per hour during peak hours.
- Connecticut Avenue, NW, between the Taft Bridge and Chevy Chase Circle, has average lane widths of 10 feet and carries 11 buses per hour during peak hours.

Buses measure about 8.5 feet in width, and side-view mirrors extend about a foot on either side, making the mirror-to-mirror width about 10.5 feet. Passenger vehicles measure about 6 feet in width, while large trucks and SUVs are often about 7 feet wide. Side-view mirrors usually add between 6 and 12 inches to vehicles' total width.

Although 10-foot-wide lanes are generally acceptable in the literature, there is a strong preference to provide wider curb lanes to ease bus operation, separate traffic from roadside drainage and drainage features, and better accommodate on-street bicycles. Often, curb lanes are assumed to be 2 feet wider than interior lanes.

Lane width does not appear to be correlated to collision rate. Narrower lanes have been both credited for reductions in collisions and blamed for increases in collisions. In both cases, lane width alone is not the primary cause of changes in collision rate. For instance, narrowing lanes to provide left-turn bays is very likely to decrease collisions, but the drop in collisions can be nearly entirely attributed to the left-turn provisions.

Annotated Bibliography

Copies of the documents summarized below are available upon request.

Harwood, Douglas W., "Effective Utilization of Street Width on Urban Arterials," National Cooperative Highway Research Program Report 330, Transportation Research Board, August 1990.

- "Projects where narrower lanes were installed to provide space for installation of a center two-way left-turn lane generally reduce accidents by 24 to 53 percent. Projects where narrower lanes were installed to provide additional through traffic lanes on an arterial street generally did not affect midblock accident rates, but did increase accident rates at intersections."
- "Four percent of highway agencies have used 8 ft lanes on urban arterials, while 42 percent of agencies have used lanes of 9 ft or narrower, and 88 percent of agencies have used lanes of 10 ft or narrower."
- "More than 67 percent of highway agencies that have implemented narrower lanes reported no adverse traffic operational or safety problems. Other agencies reported some specific problems including: increases in sideswipe accidents; straddling of lane lines, particularly by trucks and buses; and turning problems at intersections, particularly for trucks and buses."
- Lanes narrower than 12 feet reduce the capacity of a roadway. Streets with 11' lanes have 3% less capacity than streets with 12' lanes. Likewise, streets with 10' lanes have 7% less capacity than streets with 12' lanes; streets with 9' lanes have 10% less capacity than streets with 12' lanes.

- "Field observations do not suggest a major safety problem related to narrower lanes. It may be that many of the unforced encroachments on adjacent lanes are made in situations in which the driver is aware that no conflicting vehicles are present."
- "Narrower lane widths (less than 11 ft) can be used effectively in urban arterial street improvement projects where the additional space provided can be used to relieve traffic congestion or address specific accident patterns. Narrower lanes may result in increases in some specific accident types, such as same-direction sideswipe collisions."
- "Projects involving narrower lanes nearly always reduce accident rates [in conjunction with] installation of a center TWLTL[1] or removal of curb parking. . . . Projects involving narrower lanes whose purpose is to reduce traffic congestion by providing additional through lanes may result in a net increase in accident rate, particularly for intersection accidents."
- "Lane widths as narrow as 10 ft are widely regarded by urban traffic engineers as being acceptable for use in urban arterial street improvement projects. . . . Lane widths less than 10 ft should be used cautiously and only in situations where it can be demonstrated that increases in accident rate are unlikely. For example, . . . this study found that 9- and 9.5-ft through-traffic lanes can be used effectively in projects to install a center TWLTL on existing four-lane undivided streets. On streets that cannot be widened, highway agencies should consider limiting the use of lane widths less than 10 ft (1) to project types where their own experience shows that they have been used effectively in the past, or (2) to locations where the agency can establish an evaluation or monitoring program for at least 2 years to identify and correct any safety problems that develop."
- "Curb lanes should be wider than other lanes by 1 ft to 2 ft to provide allowance for a gutter and for greater use of the curb lanes by trucks."
- "Narrow lane projects do not work well if the right lane provides a rough riding surface because of poor pavement condition or the presence of grates for drainage inlets. . . . Projects with narrower lanes may be most satisfactory at sites with curb inlets that do not have grates in the roadway."
- "Curb lane widths of at least 15 ft are desirable to accommodate shared operation of bicycles and motor vehicles. . . . Decisions concerning implementation of projects with narrower lanes should consider the volume of bicyclists using the roadway and the availability of other bicycle facilities in the same corridor."

"Guidelines for the Location and Design of Bus Stops," Transit Cooperative Research Program Report 19, Transportation Research Board, 1996.

- "A traffic lane used by buses should be no narrower than 12 feet in width because the maximum bus width (including mirrors) is about 10.5 feet. Desirable curb lane width (including the gutter) is 14 feet."

Fitzpatrick, Kay, et al, "Design Speed, Operating Speed, and Posted Speed Practices," National Cooperative Highway Research Program Project 15-18 draft final report, July 2002. Summary published in **Transportation Research Board Compendium of Technical Papers, 2003.**

- "Access density is the number of access points (driveways and intersections) per mile. . . . Higher speeds [are] associated with lower access densities."

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[1] TWLTL = Two-way left-turn lane

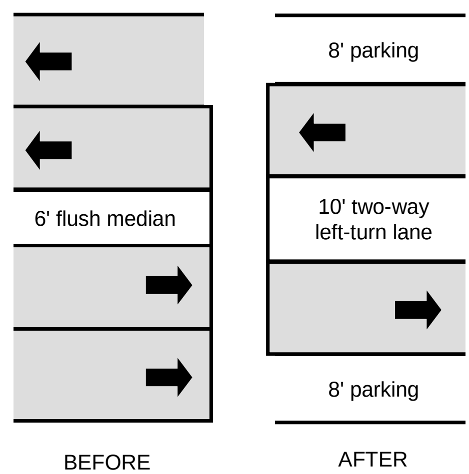
- "No relationship was apparent between lane width and speed."
- "While a relationship between operating speed and posted speed limit can be defined, a relationship of design speed to either operating speed or posted speed cannot be defined with the same level of confidence."
- "Design speed appears to have minimal impact on operating speeds unless a tight . . . curve is present."

Macbeth, Andrew G., "Calming Arterials in Toronto," Institute of Transportation Engineers Compendium of Technical Papers, 1998.

- "Toronto's arterial road traffic calming has relied on . . . a reduction in the number of traffic lanes. . . . On a four-lane street, drivers wishing to travel faster than others may simply change lanes to pass a slower vehicle. When a street has been narrowed to two lanes, . . . vehicle speeds are limited by the speed of the leading vehicle in a platoon."

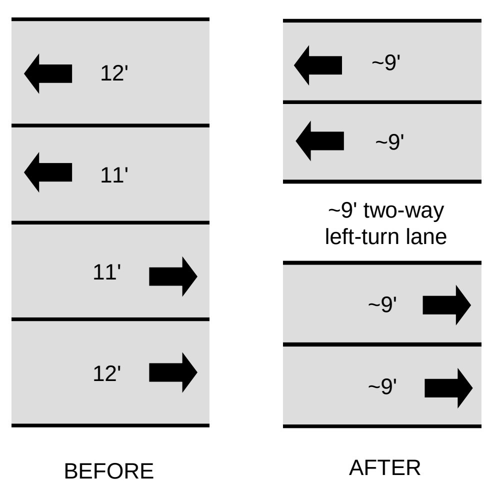
Skene, Michael, "'Traffic Calming' On Arterial Roadways?" Institute of Transportation Engineers Compendium of Technical Papers, 1999.

- "Most of the opposition [to traffic calming on arterial streets] . . . is from those who assume that traffic calming is a . . . movement to replace good engineering with bike lanes and slow inefficient traffic management schemes."
- Case study: Restriping of Cook Street corridor in Victoria, B.C., in November 1991. (See sketch at right.) The project's primary goal was reducing collisions, which were largely related to left-turning vehicles. Collisions dropped from 36 per year to 19 per year after the restriping. Average daily traffic is about 24,000 and dropped only slightly after restriping. Peak-hour volume dropped somewhat more; parallel arterial streets are available to accommodate traffic diversion. 85th percentile speeds were reduced from 32 mph to 29 mph, primarily due to loss of opportunities to pass slower-moving traffic.



Delabure, Brad; transportation planner, City of Victoria, B.C. Telephone conversation with R. Dittberner, September 22, 2003.

- Case study: Quadra Street corridor. As part of a landscaping and land-use revitalization project, the Quadra Street corridor was restriped from a 4-lane section to a 5-lane section with a two-way left-turn lane. (See sketch at right.) The goal of the project was providing a two-way left-turn lane without sacrificing capacity. Average speeds dropped from 30 mph to 25 mph, but much of the speed drop can be attributed to new landscaping (including street trees) and revitalized commercial development along the corridor. The street is a major transit route and houses several delivery-



intensive businesses, such as a furniture store. There have been only negligible operational problems with buses and trucks using the narrowed lanes.

West, James E., "Arterial Traffic Calming – Is It An Oxymoron?" Institute of Transportation Engineers Compendium of Technical Papers, 2000.

- "In Oregon, Special Transportation Areas (STA) have been designated in the Oregon Highway Plan. The STA designation is the state's way of formally recognizing certain sections of state highway as main streets, thus allowing the use of highway designs and mobility standards that are different from other highway designations, including the use of traffic calming features. An STA is intended to permit traffic movements along the main street to be balanced with the needs for local access and circulation."

Lum, Harry S., "The Use of Road Markings to Narrow Lanes for Controlling Speed in Residential Areas," *Public Roads* vol. 47 no.2, September 1983. Reprinted in ***ITE Journal* vol. 54, no. 6, June 1984.**

- "Pavement markings combined with raised pavement markers to create an impression of a narrower street have no effect on the mean speeds or the speed distributions of drivers on residential streets."

Martens, Marieke et al, "The Effects of Road Design on Speed Behaviour: A Literature Review," European Commission under the Transport RTD Programme, September 1997.

- "With decreased lane width, drivers show improved lane keeping, more accurate steering behaviour and a reduction in driving speed usually results. Yagar and Van Aerde (1983) found a reduction in speed of 1.1 mph for every foot of reduction in lane width beyond 13 feet." [Dimensions converted from metric.]
- "Both driving lanes and extra pavement strips on the left and right side of the road, for instance an emergency lane, contribute to the total amount of pavement width. This additional space [decreases] drivers' uncertainty, . . . something which usually leads to higher speeds. . . . The mean speed with a pavement width of approximately 20 feet is about 50 mph and with a width of 26 feet, the mean speed increases to about 55 to 60 mph." [Dimensions converted from metric.]
- "It is very difficult to measure the effect of pavement width itself, independently of other road design factors. This can probably explain the fact that the relationship between width of pavement and driving speed was established in some studies, . . . whereas in other cases no effects could be found."

Ewing, Reid, *Traffic Calming: State of the Practice,* Institute of Transportation Engineers, 1999.

- "Relative to wide streets, narrow streets may calm traffic. Vehicle operating speeds decline somewhat as individual lanes and street sections are narrowed (but only to a point). Drivers also seem to behave less aggressively on narrow streets, running fewer traffic signals, for example. Further, one study reports higher pedestrian volumes on narrow streets than on wide streets. . . .

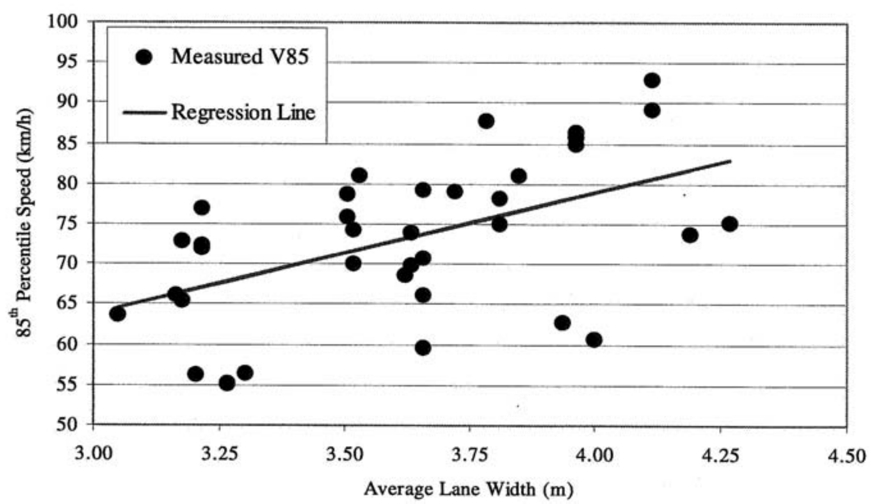
However, all other things being equal, bicyclists may prefer a wide street to a narrow street that has speeds 10 mph slower."

Heimbach, Clinton L. et al, "Some Partial Consequences of Reduced Traffic Lane Widths on Urban Arterials," Transportation Research Record 923, Transportation Research Board, 1983.

- Four-lane undivided urban roadways of various widths were analyzed to determine the effects of lane width on speeds and collisions.
- During off-peak hours, lane width correlates to speed at a rate of 0.6 mph per foot of lane width, as part of a multivariate expression with a correlation coefficient of 0.57. This suggests that narrowing lanes by one foot would tend to reduce speeds by 0.6 mph, when other factors are held constant.
- During peak traffic hours, the rate increases to 1.0 mph per foot of lane width, again as part of a multivariate expression, this time with a correlation coefficient of 0.53.
- Collisions increase as lanes are narrowed, but the relationship is not linear, so it cannot be expressed as a rate of collisions per foot of lane width. However, for typical values of other multivariate variables, narrowing lanes by one foot tends to increase collisions by 3 to 5 percent.

Fitzpatrick, Kay et al, "Design Factors That Affect Driver Speed on Suburban Arterials," Research Report 1769-3, Texas Transportation Institute, June 2000.

- On four-lane arterial streets, "speeds tend to be lower for narrower lanes. . . . When lane widths are 1 ft greater, [85th percentile] speeds are predicted to be 2.9 mph faster." [Dimensions converted from metric.] However, there is a substantial amount of site variability in the data, as illustrated by the plot at right.



- "The presence of a median (i.e., either a raised or a two-way left turn lane) indicated higher speeds than when no median was present." 85th percentile speed on streets without a median was about 38 mph, compared to speeds of 42 mph with a raised median and 44 mph with a two-way left-turn lane.
- Speeds decrease as the access density—number of intersecting driveways and intersections—increases. "The highest speeds for access densities above about 18 pts/mi are approximately 6 mph lower than the highest speeds for access densities below 18 pts/mi."
- In the studied data set, average speed was independent of signal spacing; however, signals in this study were relatively sparse, with an average of 2 signals per mile and never more than 4 signals per mile.

The Influence of Lane Widths on Safety and Capacity: A Summary of the Latest Findings

Theodore Petritsch, P.E. PTOE
Director of Transportation Services
Sprinkle Consulting

Problem –
The competition for space within a roadway right-of-way is fierce. It isn't just sidewalks and bike lanes battling "motor vehicle lanes" for the space. Drainage and utilities are also vying for their share of the right-of-way. And money for additional right-of-way is hard to come by. Also, adjacent property owners are not usually "friendly sellers" of land for roadway projects. Often times, something gets squeezed out – usually, it is the bicycle and/or the pedestrian facilities.

Background -
When faced with having bike lanes, and possibly sidewalks, eliminated from a roadway project, advocates for bike and ped facilities may ask, "Can't we narrow the travel lanes to less than twelve feet?" Very likely, the engineers will list apparently good reasons for not wanting to reduce the travel lane widths: twelve foot lanes are the AASHTO standard; reducing lane widths reduces safety; narrowing lane widths reduces the roadway capacity. Surely, given these well known facts, no one would seriously suggest narrowing lanes.

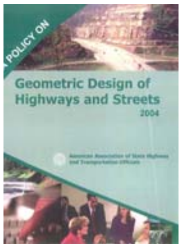
But what if these well known *facts* aren't true? What if we could narrow the lanes on a roadway without adversely impacting the operations of the roadway? These questions have been asked and, in large part, answered. The following is *The Truth about Lane Widths.*

Solution -
What is "the Standard"? The AASHTO *Green Book*[1] is a guide. On the first page of its Foreword it states, "The intent of this policy is to provide guidance…" Many states, however, have adopted the values in AASHTO as "standards." However, when considering using its specified values for design criteria, one must keep in mind two other statements from the *Green Book's* Foreword,

> *"Minimum values are either given or implied by the lower value in a given range of values. The larger values …will normally be used where the social, economic, and environmental impacts are not critical."*

With these fundamentals in mind, let's review the actual lane width guidance for urban arterial streets.

[1] AASHTO. *Geometric Design of Highways and Streets,* pg. xliii, AASHTO, Washington, D.C., 2004.



According to the AASHTO *Green Book*, for rural and urban arterials, lane widths may vary from 10 to 12 feet. It goes on to say that 12-foot lanes should be used where practical on higher speed, free flowing, principal arterials. However, under interrupted-flow (roads with signals) conditions operating at low speeds (45 mph or less) narrower lane widths are normally quite adequate and have some advantages.[2]

Given the above statements from AASHTO, 10-foot lanes should be considered the minimum standard.

But what about Safety? Safety is another oft cited reason for maintaining 12-foot lane widths. However, much research has been performed evaluating the crash impacts of narrowing lanes. This research found little to no support for the safety argument (with respect to urban roadways). Some of this research is summarized below:

NCHRP 330 *Effective Utilization of Street Width on Urban Arterials,*[3] in its implementation guidelines states,

> *"Narrower lane widths (less than 11 ft) can be used effectively in urban arterial street improvement projects where the additional space can be used to relieve traffic congestion or address specific accident patterns"*

It goes on to note that,

> *"all projects evaluated during the study that consisted exclusively of lane widths of 10 feet or more resulted in accident rates that were either reduced or unchanged."*

And recommends,

> *"Where streets cannot be widened, highway agencies should give strong consideration to the use of 10-ft lanes where they are necessary as part of a geometric improvement to improve traffic operations or alleviate specific accident patterns."*

Most recently, the Midwest Research Center[4] reported,

> *"A safety evaluation of lane widths for arterial roadway segments found no indication, except in limited cases, that the use of narrower lanes increases crash frequencies. The lane width effects in the analyses conducted were generally either not statistically significant or indicated that narrower lanes were associated with* ***lower*** *rather than higher crash frequencies. There were limited exceptions to this general finding." [emphasis added]*

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[2] AASHTO. *Geometric Design of Highways and Streets,* pg. 473, AASHTO, Washington, D.C., 2004.
[3] NCHRP Report 330 Effective Utilization of Street Width on Urban Arterials, Transportation Research Board, Washington, D.C., 1990.
[4] Ingred B. Potts, Harwood, D., Richard, K., *Relationship of Lane Width to Safety for Urban and Suburban Arterials,* Transportation Research Board, 2007 Annual Meeting.

And went on to say,

> *The research found three situations in which the observed lane width effect was inconsistent—increasing crash frequency with decreasing lane width in one state and the opposite effect in another state. These three situations are:*
>
> - *lane widths of 3.0 m (10 ft) or less on four-lane undivided arterials.*
> - *lane widths of 2.7 m (9 ft) or less on four-lane divided arterials.*
> - *lane width of 3.0 m (10 ft) or less on approaches to four-leg STOP-controlled arterial intersections.*
>
> *Because of the inconsistent findings mentioned above, it should not be inferred that the use of narrower lanes must be avoided in these situations. Rather, it is recommended that narrower lane widths be used cautiously in these situations unless local experience indicates otherwise.*

Based upon the above cited research, it appears that narrowing lanes to less than the "standard" 12-ft width does not usually degrade safety.

Yes, but there's still the capacity issue. The *Highway Capacity Manual*[5] (*HCM*) is the primary document used by planners and engineers to determine the capacity of roadways and intersections. In Chapter 16, pages 16-10 and 16-11, the *HCM* describes those factors which impact the capacity of signalized intersections – including an adjustment factor based upon lane widths. Essentially, the *HCM* shows that the saturation flow rate (capacity) of a lane at a signalized intersection is reduced by 3.33 percent for each foot of lane width less than 12 feet. Consequently, according to the *HCM*, the capacity of a 10-foot lane is only 93 percent of the capacity of a 12-foot lane.

However, in 2007 a literature search was performed as part of the Florida Department of Transportation *Conserve By Bike Program Study*.[6] This literature search was to evaluate findings of recent research from across the United on impacts to urban street capacity resulting States from lane narrowings. The findings are

> *"The measured saturation flow rates are similar for lane widths between 10 feet and 12 feet. For lane widths below 10 feet, there is a measurable decrease in saturation flow rate.* ***Thus, so long as all other geometric and traffic signalization conditions remain constant, there is no measurable decrease in urban street capacity when through lane widths are narrowed from 12 feet to 10 feet****".*[7] *[emphasis added]*

Capacity, therefore, is not degraded until lane widths are reduced to less than 10 feet.

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[5] Transportation Research Board, *Highway Capacity Manual*, Transportation Research Board, National Research Council, Washington, D.C., 2000.
[6] Sprinkle Consulting, Conserve By Bike Program Study Final Report, FDOT, Tallahassee, FL, 2007.
[7] John Zegeer, P.E., (past Chair, TRB Jighway Capacity and Quality of Service Committee) in a memo to Sprinkle Consulting Engineers, March 22, 2007.

Result –

1st Avenue North at 49th Street in St. Petersburg, FL
Photo Credit:
Michael Frederick, Manager
Neighborhood Transportation
and & Parking

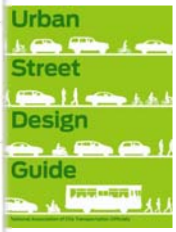
In general safety and capacity are not adversely impacted by reducing lanes widths to as little as 10 feet. If we refer back to the AASHTO *Green Book's* Foreword and ask, "Are there critical social, environmental and economic reasons that would justify using less than 12-foot lanes?" The answer, in urban areas, is often "yes." Accommodating pedestrians and bicyclists is a critical social issue: it makes our downtowns more livable, transit more viable, and provides for the mobility of those who cannot – or chose not – to drive. Accommodating more users in less space also addresses critical environmental issues: narrower lanes means less pavement (asphalt or concrete), less runoff, and less land consumed. Narrower (than 12-foot) lane widths reduce costs, a critical issue in times of shrinking budgets: smaller right-of-way costs, reduced costs for utility easements, reduced construction costs, reduced environmental mitigation costs. In addition to these obvious considerations, by reducing lane widths and better providing for the mobility of all transportation system users, we can reduce our dependency on fossil fuels and reduce motor vehicle emissions. Furthermore, increased walking and bicycling resulting from the provision of facilities will promote active lifestyles, help combat the growing obesity epidemic, and contribute to healthier more active communities. Realizing and taking advantage of the Truth about Lane Widths provides benefits for everyone.

Who to contact for more information -

Theodore A. Petritsch, P.E., PTOE
Senior Transportation Engineer
Sprinkle Consulting, Inc.
18115 US Hwy 41 N, Suite 600, Lutz, FL, 33549
813.949.7449
tap@sprinkleconsulting.com

MENU

National Association of City Transportation Officials



PURCHASE GUIDE

GUIDE NAVIGATION

Urban Street Design Guide

Lane Width

The width allocated to lanes for motorists, buses, trucks, bikes, and parked cars is a sensitive and crucial aspect of street design. Lane widths should be considered within the assemblage of a given street delineating space to serve all needs, including travel lanes, safety islands, bike lanes, and sidewalks.

Each lane width discussion should be informed by an understanding of the goals for traffic calming as well as making adequate space for larger vehicles, such as trucks and buses.

Existing

Existing

Redesign

Lane widths of 10 feet are appropriate in urban areas and have a positive impact on a street's safety without impacting traffic operations.

Discussion

Travel lanes are striped to define the intended path of travel for vehicles along a corridor. Historically, wider travel lanes (11–13 feet) have been favored to create a more forgiving buffer to drivers, especially in high-speed environments where narrow lanes may feel uncomfortable or increase potential for side-swipe collisions.

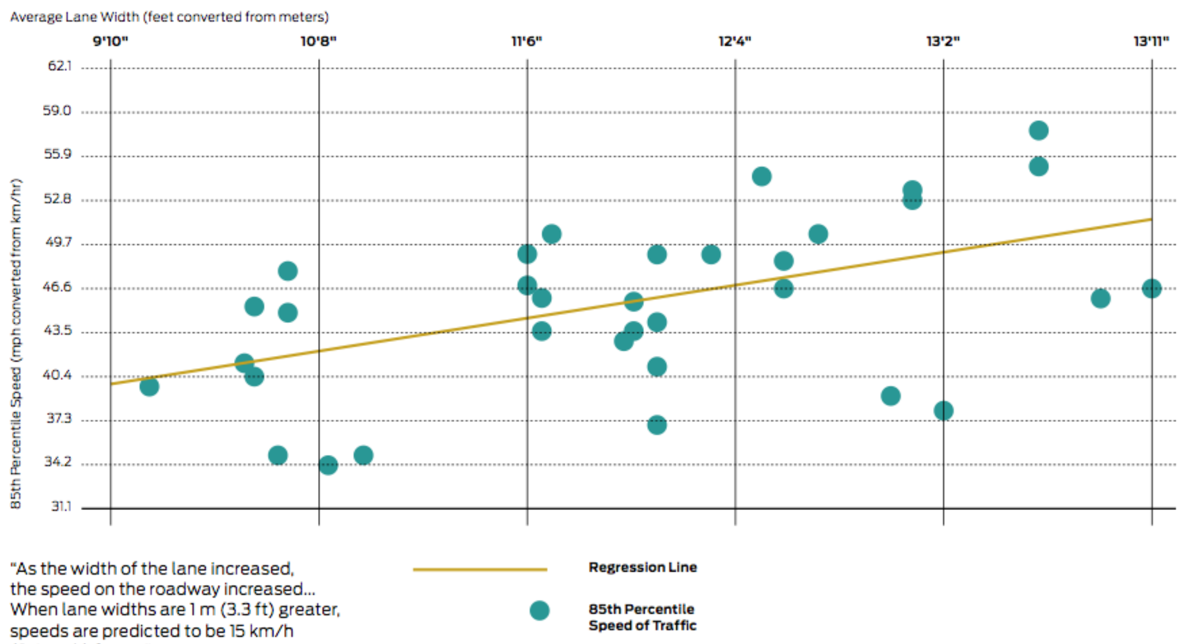
Lane widths less than 12 feet have also historically been assumed to decrease traffic flow and capacity, a claim new research refutes.[1]

+ More Info

The measured saturation flow rates are similar for lane widths between 10 feet and 12 feet...Thus, so long as all other geometric and traffic signalization conditions remain constant, there is no measurable decrease in urban street capacity when through lane widths are narrowed from 12 feet to 10 feet. Appendix A-P, p. A152, Florida Department of Transportation (2007). Appendix A-P and Appendix Q. Conserve By Bicycle Program Study Final Report. Tallahassee, FL: FDOT.

The relationships between lane widths and vehicle speed is complicated by many factors, including time of day, the amount of traffic present, and even the age of the driver. Narrower streets help promote slower driving speeds which, in turn, reduce the severity of crashes. Narrower streets have other benefits as well, including reduced crossing distances, shorter signal cycles, less stormwater, and less construction material to build.

Wider travel lanes are correlated with higher vehicle speeds.



"As the width of the lane increased, the speed on the roadway increased... When lane widths are 1 m (3.3 ft) greater, speeds are predicted to be 15 km/h (9.4 mph) faster."

Chart source: Fitzpatrick, Kay, Paul Carlson, Marcus Brewer, and Mark Wooldridge. 2000. "Design Factors That Affect Driver Speed on Suburban Streets." *Transportation Research Record* 1751: 18–25.

Wider travel lanes are correlated with higher vehicle speeds.

For multi-lane roadways where transit or freight vehicles are present and require a wider travel lane, the wider lane should be the outside lane (curbside or next to parking). Inside lanes should continue to be designed at the minimum possible width. Major truck or transit routes through urban areas may require the use of wider lane widths.

Lane widths of 10 feet are appropriate in urban areas and have a positive impact on a street's safety without impacting traffic operations. For designated truck or transit routes, one travel lane of 11 feet may be used in each direction. In select cases, narrower travel lanes (9–9.5 feet) can be effective as through lanes in conjunction with a turn lane.[2]

Optional

2 Parking lane widths of 7–9 feet are generally recommended. Cities are encouraged to demarcate the parking lane to indicate to drivers how close they are to parked cars. In certain cases, especially where loading and double parking are present, wide parking lanes (up to 15 feet) may be used. Wide parking lanes can serve multiple functions, including as industrial loading zones or as an interim space for bicyclists.

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3 For multi-lane roadways where transit or freight vehicles are present and require a wider travel lane, the wider lane should be the outside lane (curbside or next to parking). Inside lanes should continue to be designed

at the minimum possible width. Major truck or transit routes through urban areas may require the use of wider lane widths.

2-way streets with low or medium volumes of traffic may benefit from the use of a dashed center line with narrow lane widths or no center line at all. In such instances, a city may be able to allocate additional right-of-way to bicyclists or pedestrians, while permitting motorists to cross the center of the roadway when passing.

+ More Info

Location: Elmore, OH

Recommended

Lanes greater than 11 feet should not be used as they may cause unintended speeding and assume valuable right of way at the expense of other modes.

+ More Info

This includes the use of wide outside lanes for bicyclist accommodation. Wide outside lanes are not an effective means of accommodating bicyclists in urban areas.

Restrictive policies that favor the use of wider travel lanes have no place in constrained urban settings, where every foot counts. Research has shown that narrower lane widths can effectively manage speeds without decreasing safety, and that wider lanes do not correlate to safer streets.[3] Moreover, wider travel lanes also increase exposure and crossing distance for pedestrians at intersections and midblock crossings.[4]

See Crosswalks

+ More Info

Many transit agencies require that jurisdictions stripe lanes of 12-14 feet for safe operation. These policies are counter to the municipality's larger safety goals and may result in speeding by when these lanes are not in use by transit vehicles.

Use striping to channelize traffic and demarcate the road for vulnerable users.

+ More Info

Location: San Francisco, CA: Striping should be used to delineate parking and curbside uses from the travel lane.

1 Lane width should be considered within the overall assemblage of the

street. Travel lane widths of 10 feet generally provide adequate safety in urban settings while discouraging speeding. Cities may choose to use 11-foot lanes on designated truck and bus routes (one 11-foot lane per direction) or adjacent to lanes in the opposing direction.

Additional lane width may also be necessary for receiving lanes at turning locations with tight curves, as vehicles take up more horizontal space at a curve than a straightaway.
See Corner Radii

Wide lanes and offsets to medians are not required, but may be beneficial and necessary from a safety point of view.

Footnotes

+ More Info

1. Theo Petrisch, "The Truth about Lane Widths," The Pedestrian and Bicycle Information Center, accessed April 12, 2013, http://www.bicyclinginfo.org/library/details.cfm?id=4348.
2. Research suggests that lane widths less than 12 feet on urban and suburban arterials do not increase crash frequencies.
   Ingrid Potts, Douglas W. Harwood, and Karen R. Richard, "Relationship of Lane Width to Safety on Urban and Suburban Arterials," (paper presented at the TRB 86th Annual Meeting, Washington, D.C., January 21–25, 2007).

   Relationship Between Lane Width and Speed, (Washington, D.C.: Parsons Transportation Group, 2003), 1–6.

3. Eric Dumbaugh and Wenhao Li, "Designing for the Safety of Pedestrians, Cyclists, and Motorists in Urban Environments." Journal of the American Planning Association 77 (2011): 70.

   Previous research has shown various estimates of relationship between lane width and travel speed. One account estimated that each additional foot of lane width related to a 2.9 mph increase in driver speed.

   Kay Fitzpatrick, Paul Carlson, Marcus Brewer, and Mark Wooldridge,

"Design Factors That Affect Driver Speed on Suburban Arterials": Transportation Research Record 1751 (2000):18–25.

Other references include:

Potts, Ingrid B., John F. Ringert, Douglas W. Harwood and Karin M. Bauer. Operational and Safety Effects of Right-Turn Deceleration Lanes on Urban and Suburban Arterials. Transportation Research Record: No 2023, 2007.

Macdonald, Elizabeth, Rebecca Sanders and Paul Supawanich. The Effects of Transportation Corridors' Roadside Design Features on User Behavior and Safety, and Their Contributions to Health, Environmental Quality, and Community Economic Vitality: a Literature Review. UCTC Research Paper No. 878. 2008.

4. Longer crossing distances not only pose as a pedestrian barrier but also require longer traffic signal cycle times which may have an impact on general traffic circulation.

Street Design Elements

Sidewalks

References

Previous Standards

	Right-of-way width	Roadway width	Paved/gravel	Curbs**	Gutters**	Streetlights	Sidewalks**	Storm drainage system
Arterials – within and outside the Urban Service Boundary	100' for primary; 80' for secondary	N/A*	N/A*	N/A*	N/A*	N/A*	N/A*	N/A*
Collectors – within Urban Service Boundary	60'	32'	Paved	Yes	Yes	Yes	Both sides	Yes
Typical street – within Urban Service Boundary	50'	28'	Paved	Yes	Yes	Yes	Both sides	Yes
Local Access street – RR, D1, or D3 zone districts only – cannot exceed 600 feet in length and cannot serve more than 50 dwelling units – within Urban Service Boundary	60'	26'	22' of pavement***	No	No	Yes	One side	Yes
Collectors – Outside Urban Service Boundary	60'	32'	Gravel	No	No	No	No	No
Other streets – Outside Urban Service Boundary	60'	28'; 24' if maximum traffic is less than 250 ADT	Gravel	No	No	No	No	No

<u>* Developer is not responsible for construction of arterial streets</u>

<u> May be waived by the Commission</u>**

<u>* Pavement may be waived by the Commission for four or fewer lots</u>**

(h) *Streets construction standards.*

(1) *Arterials.* The subdivider is not responsible for the construction of arterial streets, but may be required to dedicate the necessary right-of-way during the platting process.

(2) *Other streets.* Other than arterials, street shall comply with the following:

Table 49.35.240 Table of roadway construction standards

Avg. Daily Trips (ADT)	Adopted Traffic Impact Analysis Required	Sidewalks	Travel Way Width	Street Lights	ROW Width[ii]	Paved Roadway Required	Publicly Maintained
≥ 500	Yes	Both sides	26 ft.	At all intersections	60 ft.	Yes	Yes
212 to 499	Maybe	One side	24 ft.	At all intersections	60 ft.	Yes	Yes
0 to 211	No	Not required	22 ft.	At intersection of subdivision streets and external street system	60 ft.	Yes	Yes
0 to 211	No	Not required	20 ft.[i]	At intersection of subdivision streets and external street system	60 ft.	No, if outside the urban service area[iii]	No

[i] Or as required by the Fire Code at CBJ 19.10.

[ii] ROW width may be reduced as prescribed at CBJ 49.35.240.

[iii] Paving of roadway is required for any street type located within the urban service area or within the Juneau PM-10 Non-Attainment Area - Maintenance Area Boundary map.

Jonathan Lange

From:	John Bohan
Sent:	Thursday, April 14, 2016 3:56 PM
To:	Jonathan Lange
Cc:	Michele Elfers; Ed Foster
Subject:	RE: Street Standards - Table of Roadway Construction Standards

Michele's comments for you as well.

John and Jonathan,
Here are my comments.
Bike Lanes – Details need to be worked out on bike lane/travel way. If minimum bike lane width is 6' and it is required on both sides, that is 12' add'l on a collector street, so it could be a 36' paved way. Can travel way/bike lane be combined, should there only be one side bike lane depending on road location/destination? I agree with John's point of higher speeds on wider roads, maybe on the collector/minor collector we should look at the design to keep narrower roads, lower speeds and incorporation of bike amenities. There needs to be some more information on this one.

Note on Page 7 – I know there is some history on this one that I have not been involved with, but I am wondering if some in the field visits with Law, CDD and Engineering might help all to understand the difficulty of implementing this standard on previously approved streets.

Thanks,
Michele

Thanks
John Bohan, PE
CBJ Chief CIP Engineer
155 S. Seward St
Juneau AK 99801
(907)586-0876 fax 463-2606

From: John Bohan
Sent: Thursday, April 14, 2016 3:54 PM
To: Jonathan Lange
Cc: Michele Elfers; Ed Foster
Subject: RE: Street Standards - Table of Roadway Construction Standards

Jonathan,

Thanks for the chance to weigh in. We should talk about this. I am available to discuss tomorrow if you wish.

Street type Definitions…: Change Names: Minor Collector to "Residential Street". Local Access to "Shared Driveway in Public ROW", or something like that…

Travel way Width: show minimum width – no developer has ever been punished for proposing to construct something greater than the minimum standard – not worth making it confusing.

Bike Lanes: Do not require Bike Lanes on streets smaller than Arterials…(maybe Minor Arterials depending on the intended definition) not practical or reasonable to expect developer to install. As written in the Table, every residential development that is expected to be paved would require bike lanes installed. It would cause more problems than helps in low volume residential neighborhoods since speeds are already slow:

- Bike lanes on residential streets turn into parking lanes.
- How many 5' (? What is typical minimum width???) bike lanes are required? I don't think you can just install one on a road can you? You'd have to install 2 @ 5' would be 10 additional paved width.
- Increased development costs: Developer required to construct ~ 1/3 more roadway… increase road construction costs buy ~1/3 more.
- Higher traffic speeds (all CBJ residential roads are 20 mph with some exceptions) due to increased road width regardless of painting of travel lanes

Street Lights: Do not require them for Local Access (or "Shared Driveway in Public ROW") – that would be like requiring everyone applying for a driveway permit for a home with accessory apartment to install a street light.

Note IIII on page 6: DELETE. – WE have already discussed that CBJ Road reconstruction projects do not belong anywhere in Title 49. Existing CBJ maintained Roads have already been accepted for maintenance to the Title 49 standards at the time they were constructed. The Street reconstruction (routine roadway maintenance , remodel etc.), utility projects, and other projects constructed by CBJ are on CBJ accepted and as you already are aware, typically do not fit the mold of new requirements because of ROW limitations, encroachments etc... These roadways do not fit within Title 49, as Title 49 is for NEW DEVELOPMENT only (not routine maintenance or remodels), and existing, already accepted streets should not even be referenced anywhere in Title 49.
If the Assembly wishes an existing CBJ street to be upgraded, they have the ability to express this interest / Direct it be done through the CIP process and also direction by the Assembly PWFC.

Is there a way to avoid a piecemeal development on a smaller "grandfathered" plat - similar to what has happened with the Dunn Street Development? Is this the place to trigger parking / traffic configurations – decisions made by the developer that prevent the CBJ from accepting the road (development almost all the way to the ROW line, back out parking, no snow removal /storage locations, no dedicated cul-de sac or hammerhead etc…)

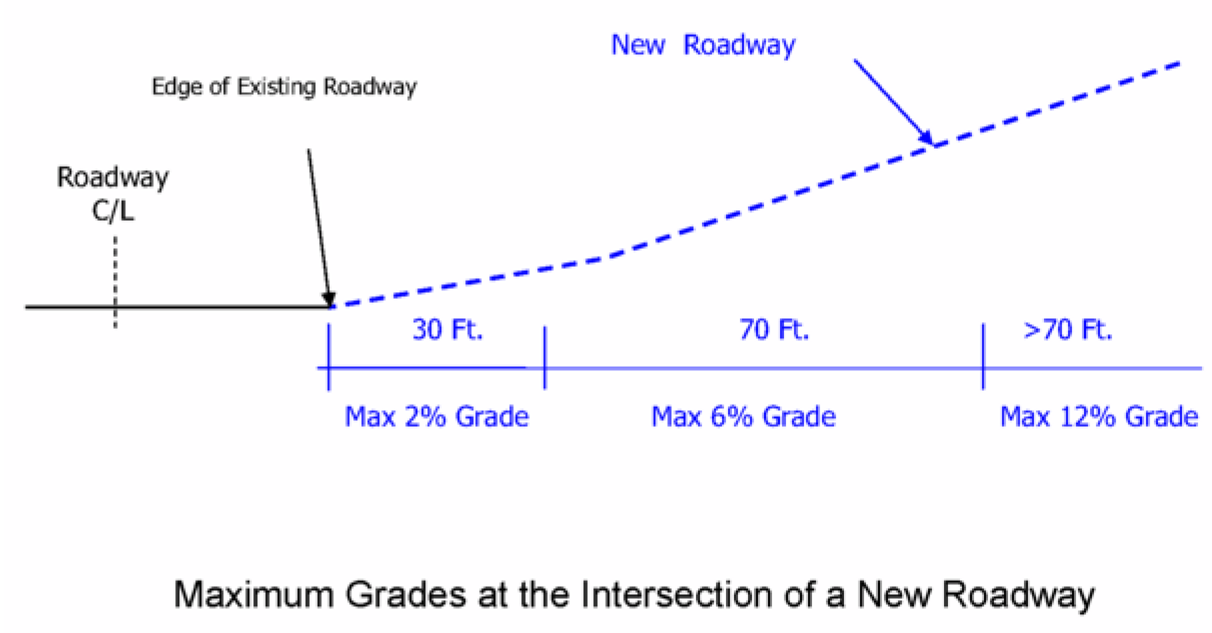
Grade Sketch: 49.35.240 (e): Is not consistent with CBJ Standard Details or ADOT Driveway / Approach Road Standards … Recommend you review with Ron King and GE for current standards.

CBJ Standard Detail Road Section Notes:

NOTES

1. MAXIMUM ROAD GRADE SHALL BE 12%.
2. CENTERLINE ROAD GRADE WITHIN 100' OF INTERSECTIONS SHALL BE A MINIMUM OF –2% FOR 20' AND A MAXIMUM OF 6 MEASURED FROM EDGE OF PAVEMENT.
3. MINIMUM GRADE FOR CONCRETE GUTTER SHALL BE 0.5%.
4. RIGHT OF WAY AND ROADWAY PRISM SHALL BE CLEARED IN ACCORDANCE WITH SECTION 02201 – CLEARING AND GRUBI
5. EXCAVATION AND EMBANKMENTS SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 02202 – EXCAVATION AND EI
6. ALL CUT AND FILL SLOPES SHALL BE SEEDED IN ACCORDANCE WITH SECTION 02710 – SEEDING AND THE MANUAL OF S BEST MANAGEMENT PRACTICES AS APPROVED BY THE ENGINEER.
7. ALL CUT AND FILL SLOPES SHALL BE TOPSOILED IN ACCORDANCE WITH SECTION 02709 – TOPSOIL AS APPROVED BY TI

(3) *Grade.* The grade for the approach leg of a new roadway at an intersection must not exceed two percent
existing roadway. The grade for the next 70 feet of the new roadway must not exceed six percent (See F

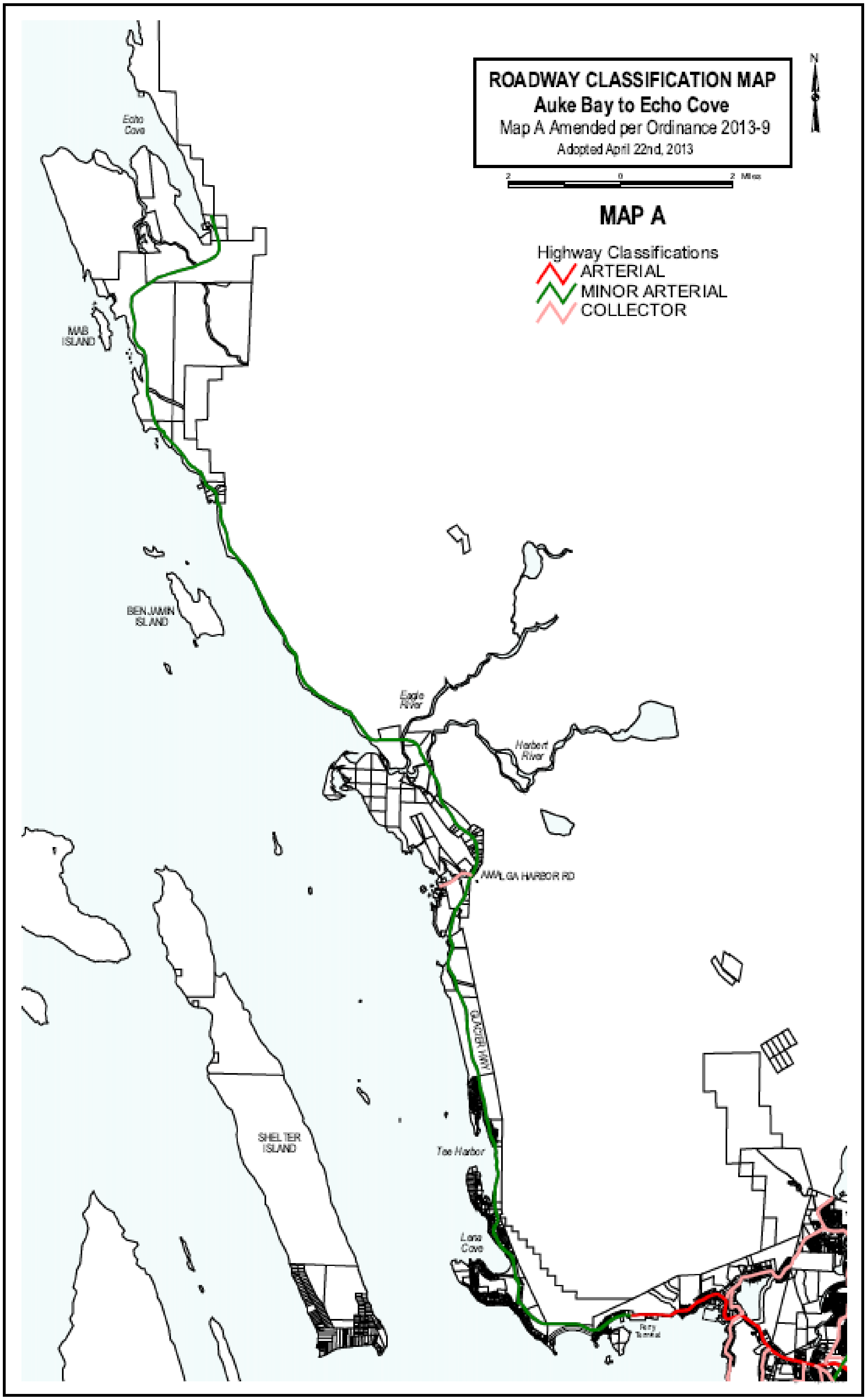


Thanks
John Bohan, PE
CBJ Chief CIP Engineer
155 S. Seward St
Juneau AK 99801
(907)586-0876 fax 463-2606

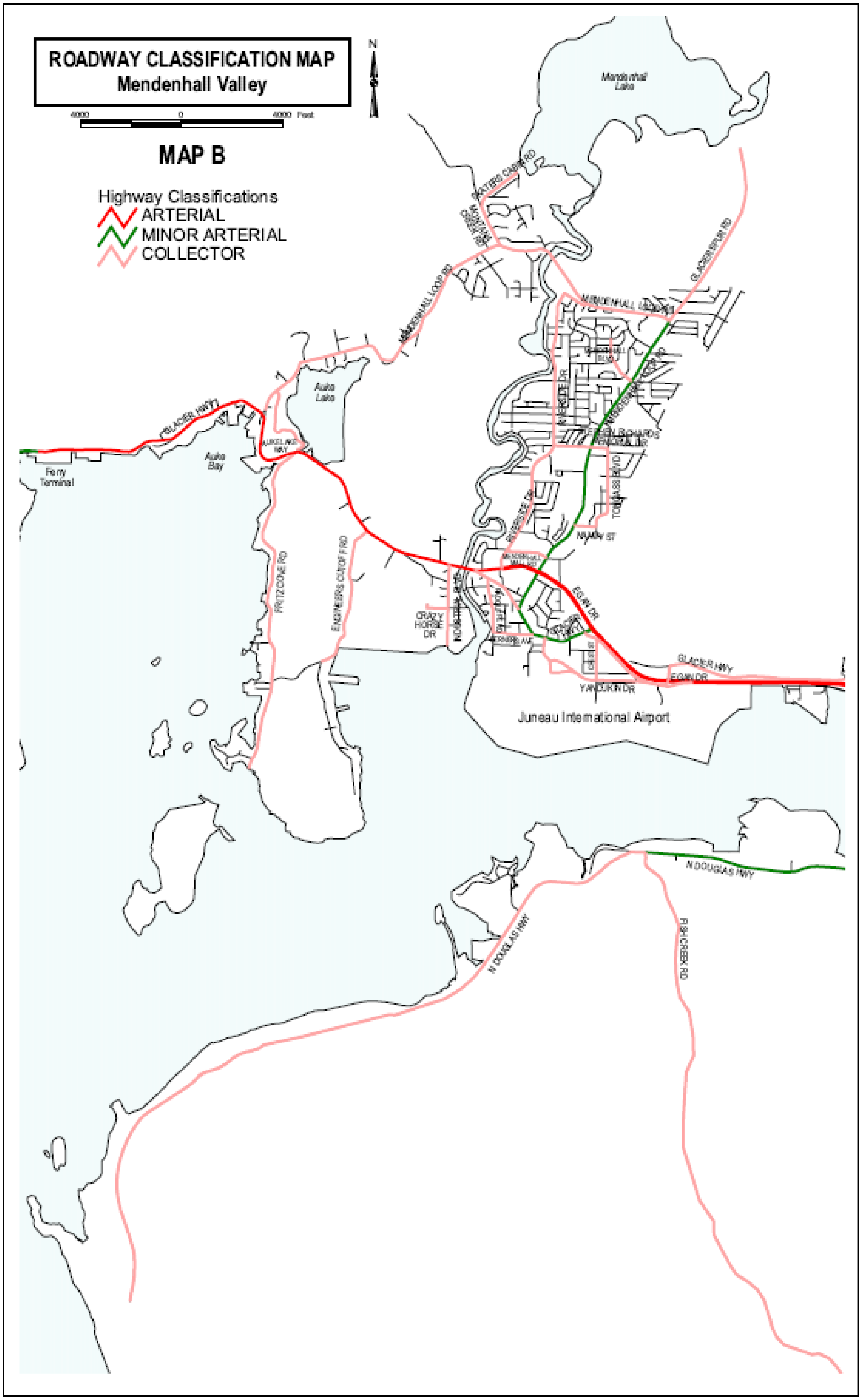
From: Jonathan Lange
Sent: Monday, April 11, 2016 1:05 PM
To: John Bohan; Ed Foster; Michele Elfers
Subject: Street Standards - Table of Roadway Construction Standards

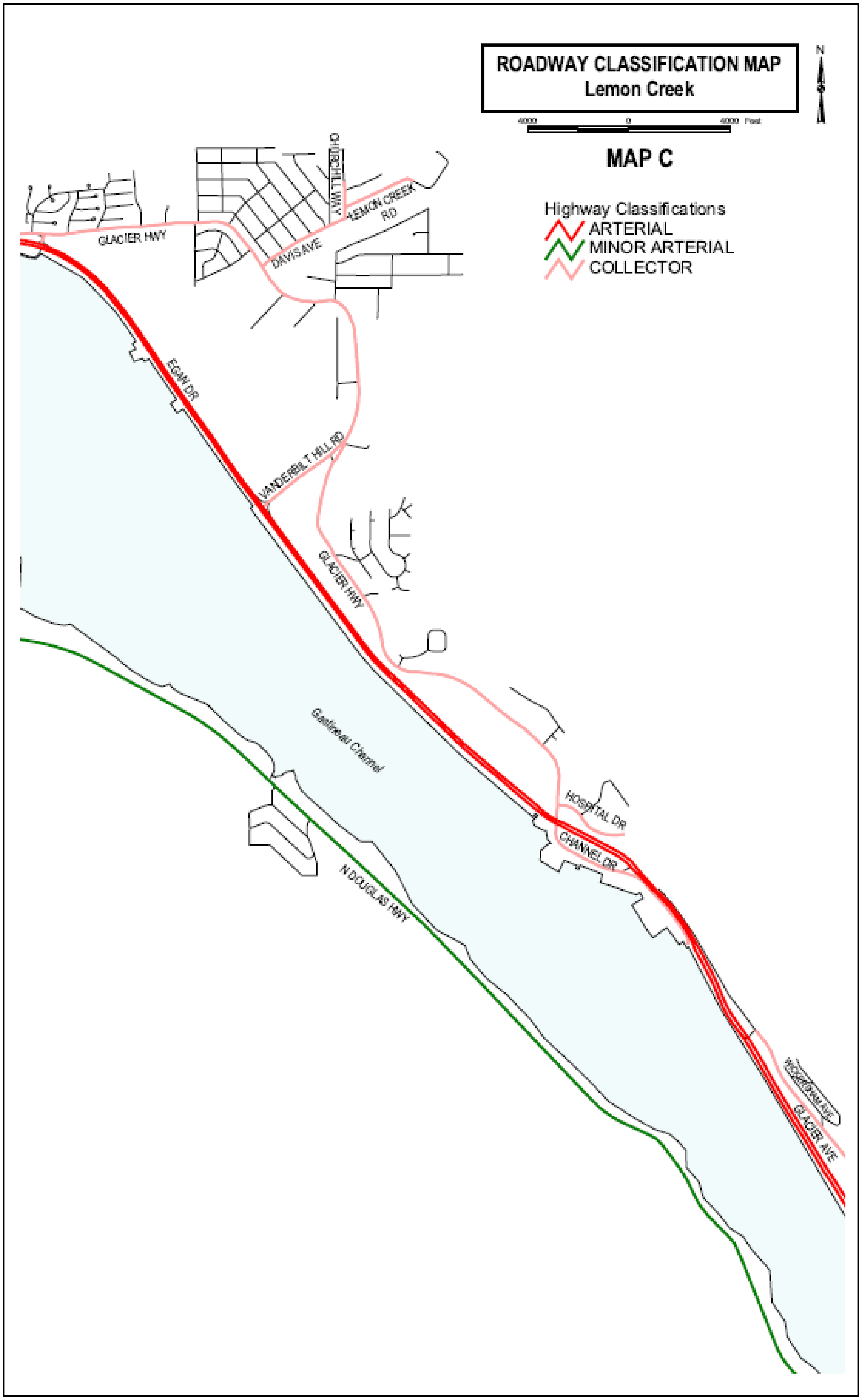
Hello,
As we have talked about before, I am working on changes to the Roadway Construction Standards table found in the Land Use Code, Title
49.35.240. https://www.municode.com/library/ak/juneau/codes/code_of_ordinances?nodeId=PTIICOOR_TIT49LAUS_CH49.35PUIM_ARTIIST
Please review the attached document, that includes the previous, current, and a few proposed regulations and tables. Page 5 and 6 are the proposed draft new tables. Please let me know which one you prefer and please let me know any comments or questions.
I am trying to get these draft tables to the Title 49 committee next week, the 20th. Could you please do a quick review of this as soon as possible or by Thursday of this week? Sorry for the quick turnaround.
Thanks for your help and please let me know if you have any questions or would like to meet and talk about this.

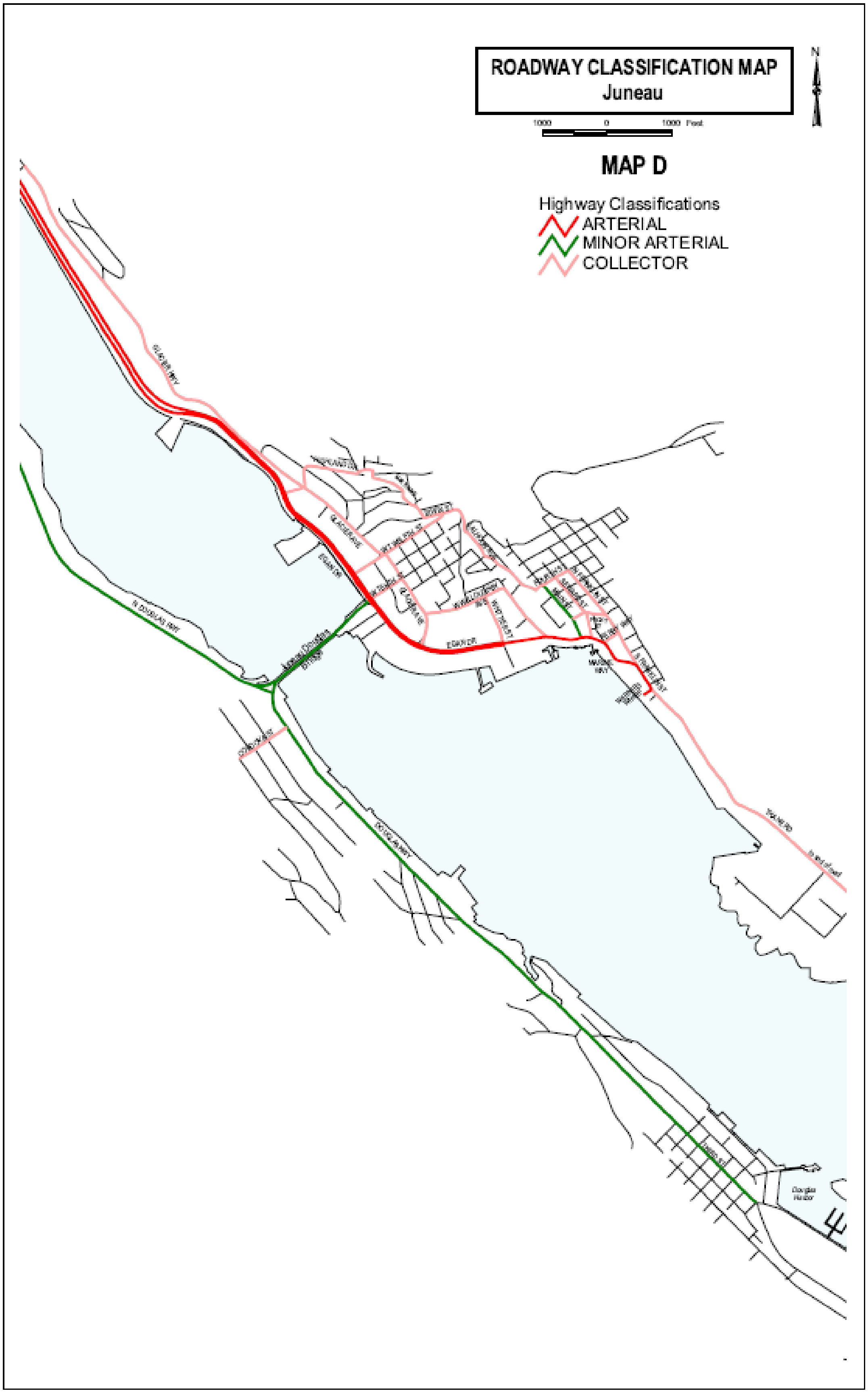
Jonathan Lange, CFM
Planner II, Community Development Dept.
City & Borough of Juneau, Alaska
155 S. Seward St. Juneau, AK 99801
Ph (907)586-0218
Jonathan.Lange@juneau.org



ATTACHMENT E


ROADWAY CLASSIFICATION MAP
Mendenhall Valley
MAP B
Highway Classifications
ARTERIAL
MINOR ARTERIAL
COLLECTOR
Juneau International Airport
Ferry Terminal
Auke Bay
Auke Lake
Mendenhall Lake
GLACIER HWY
EGAN DR
N DOUGLAS HWY
FISH CREEK RD
FRITZ COVE RD
ENGINEERS CUTOFF RD
YANDUKIN DR
GLACIER SPUR RD


ROADWAY CLASSIFICATION MAP
Lemon Creek
MAP C
Highway Classifications
ARTERIAL
MINOR ARTERIAL
COLLECTOR
GLACIER HWY
DAVIS AVE
CHURCHILL WAY
LEMON CREEK RD
EGAN DR
VANDERBILT HILL RD
GLACIER HWY
Gastineau Channel
HOSPITAL DR
CHANNEL DR
N DOUGLAS HWY
GLACIER AVE



ATTACHMENT E

CITY/BOROUGH OF JUNEAU
ALASKA'S CAPITAL CITY

MEMORANDUM

DATE: April 18, 2016

TO: Title 49 Subcommittee

FROM: Laura A. Boyce, AICP, Planner
Community Development Department

PROPOSAL: Consideration of proposed Title 49 Amendment regarding lot line adjustments

PROPOSAL FOR DISCUSSION

Community Development Department (CDD) staff would like input from the Title 49 Subcommittee about a proposed Land Use Code amendment regarding lot line adjustments. A lot line adjustment is a type of subdivision that results in the realignment of the property line between two existing parcels. This subdivision results in a reconfiguration of the original parcels, ending with the same number of parcels as at the start. In no instance are additional parcels created with a lot line adjustment.

Currently, a lot line adjustment would be considered a minor subdivision and is subject to the full minor subdivision preliminary plat and final plat processes as established in Code. This means that a lot line adjustment is subject to the submittal requirements in CBJ 49.15.411 and CBJ 49.15.412, such as providing topographical information, a drainage plan, and a soils report. A lot line adjustment must go through the entire subdivision review process, including all the submittal requirements, in order to move the lot line. In most cases, the two parcels are already constructed and the owners of the lots wish to move the boundary line a small amount.

Unlike a lot line adjustment, a lot consolidation - where the interior lot line between at least two parcels is removed and the number of resulting lots is less than the original lots – has an abbreviated process and review. The submittal requirements are less, namely because a survey isn't needed in order to remove an interior property line. In contrast, a lot line adjustment to move a property line does require a survey in order to create the adjusted parcels. Hiring a surveyor can be expensive and the more information required for the submittal, the more expensive the process can be. Staff proposes that the Code be amended to allow the director to waive certain subdivision requirements for these simple subdivisions. Staff recommends that no more than two parcels be considered for these simplified requirements.

Staff would like input from the Title 49 Subcommittee about lot line adjustments. CDD staff will provide sample Code language at the meeting.

155 So. Seward Street, Juneau, Alaska 99801-1397