

From: [Nicholas Davies](#)
To: [Transportation Commission](#)
Subject: Fwd: Fire lane-width street designs should include bike lane options (87320)
Date: Sunday, March 2, 2025 4:44:08 PM
Attachments: [image.png](#)
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Dear Transportation Commission,

This corresponds to item 87318 on your agenda this week. (I sent this to Traffic and Board of Public Works ahead of the BPW meeting.)

Section 6 of the Complete Green Streets guide ("Complete Green Streets & Alignment with Fire Code") was added to answer the question:

How can we build streets for calm traffic while meeting the fire code minimum width?

This question becomes very simple to answer if you consider the inclusion of a separated bike facility. Option 4 shows a low curb separating two vehicle travel lanes. A similar low curb can be used to separate a bike lane. This is becoming a standard design element in Paris, for example. My email to BPW below includes pictures of a couple examples.

About section 6, the staff presentation says:

- "• Estimated ADT for Neighborhood Street is 3,000 or less
- Typical Travelway is shared space for motor vehicle and bicycle users"

In other words, the figures in section 6 don't show separate bike facilities because these options are intended for use on low-volume streets that don't need a separate bike facility.

However, if inclusion of a bike facility helps us balance traffic calming vs. minimum width, then maybe it is worth including, even on low-volume streets. And usage patterns can change over the lifetime of a constructed street.

For example, a street that is constructed according to Option 2, with a 13 foot travel lane in either direction, can become quite a high-volume, high-speed street, and become quite challenging for non-car travelers to use and to cross. Or if a street is built according to Option 4 and the parking is underused, you effectively have a highway-like 20 foot travel lane in each direction. (If parking is used, I don't see why the parking lane would count towards the required width, but that's a Fire Department consideration.)

If you instead had two 10 foot travel lanes, and perhaps an 8 foot bidirectional, separated bike facility, the Fire Department would have their required width (with no chance of parked cars in their way), and the street would remain calm over time. And this would conform with the city's Modal Hierarchy.

Other ways to include bike facilities in these designs could be:

- * In Option 2, make the outside 5 feet in each direction a painted bike lane.
- * In cases where the required width is 20 feet, that could include one vehicle lane down the center, with merge/yield space to either side. This is a very common Dutch design.

I'm not necessarily looking for every option to explicitly include bikes, since city staff are

correct that not every low volume street needs to separate these users. However, designs that do include bike features can be so much more effective at balancing minimum width vs. traffic calming, that it'd be a mistake not to include them among the options.

Thank you,

Nick Davies
3717 Richard St

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From: **Nicholas Davies** <nbdavies@gmail.com>

Date: Sun, Feb 23, 2025 at 12:49 PM

Subject: Fire lane-width street designs should include bike lane options (87320)

To: <boardofpublicworks@cityofmadison.com>, <traffic@cityofmadison.com>

Dear Board of Public Works,

Your agenda this week includes updates to the Complete Green Streets guide, including street design options to accommodate minimum widths required for Fire Department access.

I'm concerned that none of these options include an on-street bike facility, and appear to prioritize parking over biking, in contradiction with Madison's adopted modal hierarchy. This is particularly baffling because while a bike lane can comprise part of the fire lane, an occupied parking lane functionally cannot.

While it's true that streets with very low traffic can also be naturally low-stress for cyclists, even without a dedicated facility, some of the design options could become high-stress as traffic increases. For example, a street that has 13 ft travel lanes in each direction (Option 2) can end up having a lot of vehicle traffic, a lot of speeding, and can become inhospitable to non-car users.

I encourage you to show options in this guide that include on-street biking facilities as one of the components that make up the required width. These could be just painted bike lanes, but even better would be a bidirectional bike lane with a mountable barrier.

This is becoming a standard design in Paris, where bike facilities have been retrofitted very quickly and effectively.

Here's an example, on Rue de Turbigo ([source](#))



The protective element would certainly provide haptic feedback to a driver crossing it unintentionally, but it would pose no barrier to fire access.

Note also how the bike lane helps "daylight" the intersection, keeping it free of visual blockers.

Here's an example of a mountable barrier protecting a one-way bike facility on Rue de Chateaudun ([source](#)):



This part of the Complete Green Streets guide is intended to answer the question: "How do we make our streets >20-26 ft wide without opening the door to reckless driving?"

It's really not a hard question if you just allocate some of that road width to other modes. Bike lanes can be a crucial component in solving this problem, because they can be part of the 20-26 ft required width, without being part of the street per se, as motorists experience it. It'd be a mistake not to include this solution in the guide.

Separated bus-only lanes can also be part of the mix. This could be a good fit if the street in question is on an existing route, or would provide a time-saving cut-through for a transit route, or if a development on the street in question is adding enough rider capacity to motivate a new stop.

Thank you,

Nick Davies
3717 Richard St