



## CITY OF OTHELLO PLANNING COMMISSION

**Virtual Meeting held via GoToMeeting**  
**January 19, 2021**  
**6:00 PM**

1. Call to Order - Roll Call

2. Minutes Approval

- a. Sept. 21, 2020
- b. Sept. 23, 2020 Special Meeting
- c. Dec. 21, 2020
- d. Jan. 7, 2021 Special Meeting

*(Note: The Nov. 16, 2020 minutes will be presented next meeting)*

3. Rental Licensing and Safety Inspection Program – Public Hearing and Recommendation to City Council

4. Traffic Calming - Discussion

***Next Regular Meeting is Tuesday, February 16, 2021 at 6:00 P.M.***

**Remote Meeting Instructions:**

**You can join the meeting from your computer, tablet or smartphone.**

<https://global.gotomeeting.com/join/854845757>

**You can also dial in using your phone.**

United States: [+1 \(872\) 240-3412](tel:+18722403412)

**Access Code:** 854-845-757

New to GoToMeeting? Get the app now and be ready when your first meeting starts:

<https://global.gotomeeting.com/install/854845757>



City of Othello  
Planning Commission  
September 21, 2020  
Selina Flores

### **CALL TO ORDER**

Due to the COVID-19 pandemic, this was a remote meeting held via GoToMeeting. Commissioner Chris Dorow called the meeting to order at 6:15 pm. This is an informal meeting due to only 1 commissioner being present.

### **ROLL CALL**

**Commissioners Present:** Chris Dorow

**Absent:** Chair Roger Ensz, Commissioner Kevin Gilbert, Commissioner Brian Gentry, 1 position vacant

**Staff:** Community Development Director Anne Henning; Building Inspector Tim Unruh; Code Enforcement Officer Heather Miller

Building & Planning Secretary Selina Flores

**Attendees:** Angel Garza, Lolo Barrera, Zachary Garza, Jesse "Weno" Dominguez, Bob Carlson, Council member John Lallas

No quorum established.

### **OPEN FLOOR TO ATTENDEES:**

**Commission Action:** Commissioner Chris Dorow invited attendees to introduce themselves and communicate their stances and proposals on topics of concern.

### **RESIDENTIAL LANDSCAPING:**

Attendee Angel Garza stated there were two reasons there should not be landscaping required before Certificate of Occupancy for single family homes:

**Reason 1:** He began by stating Palos Verdes LLC, did very well with their first development. He provides proof that the said development is fully landscaped and there isn't one property that isn't well maintained. Mr. Garza continued by explaining that he takes pride in the success of this development by making sure to follow up with the homeowners when their one year of purchase approaches. He stated that with this follow-up in place, he can remind the homeowner of the landscaping agreement they made. He also advocated for the buyer, stating that the less strict approach to landscaping allows the homeowner to take ownership and pride in their yard and gives it a more personal touch and appeal to the homeowner and neighboring development. It also allows the homeowner time to save money, decide whether or not they prefer to do the work themselves and also to find the most affordable deals on sod, curbing, rock, trees, etc. for their yard.

**Reason 2:** Mr. Garza explained that at this time, interest rates are very low which allows more people to qualify for home loans. If the landscaping was the responsibility of the developer, the developer would then have to include an additional (estimate) of \$5,000.00 to meet the minimum requirements which would include grass and around five sprinklers. The extra \$5,000.00 on the home loan could create a lesser chance of the home buyer qualifying for the purchase of the home. Mr. Garza states that he has seen several instances where the buyer barely qualifies by \$1,000.00-\$2,000.00. Mr. Garza asked to consider leaving the OMC the same for another year as a trial. He suggested better policing by keeping track of the closing days, sending letters at 9-month mark, and then at the year mark which would require a follow-up with a letter and phone call to the homeowner on the status on the landscaping.

Attendee Jesse "Weno" Dominguez provided clarification on the financing aspect of the home-buying process that was mentioned by Mr. Angel Garza. Mr. Dominguez stated that often the closing costs are rolled into the home loan which is approximately \$6,500.00. That amount can make or break for the home buyer and the purpose is to alleviate the financial pressure of paying the closing cost amount up front. Mr. Dominguez states that adding on another \$5,000.00 on top of the closing costs would make it almost impossible for them for the home buyer to qualify for the home loan.

Commissioner Dorow restated the reasons given by Mr. Angel Garza and asked if anyone else wanted to discuss the landscaping issue.

Moving on to the next topic, Ms. Henning noted that the meeting had been advertised as a public hearing on changes to the OMC for residential setbacks and garages. Mr. Lolo Barrera was present to discuss his reason for attending.

**GARAGE REQUIREMENTS:**

Attendee Lolo Barrera stated he recently submitted a letter to the City Council regarding making a change in the Othello Municipal Code to allow a garage to be converted into living space without having to replace the garage. Mr. Barrera began by explaining that his garage is located behind his home and that he does not use it for parking, he currently only uses it as storage. He also explained that he parks in the front of his home as it is easier access instead of manually opening the back gate to get his car into the small back garage. Mr. Barrera called the City of Othello to inquire about applying for a permit to convert the back garage into an additional living space for his family. He read the OMC and emphasizes the minimum 2 car garage space requirement. Mr. Barrera understands the reasoning for newer homes and developments but thinks there are different circumstances for older homes. He proposes the idea that the conversions will increase the property value and generate more revenue into taxes within the city. Mr. Barrera references Heather Miller the Code Enforcement Officer who told him there was a change in the municipal code restricting the conversion of garages but has seen others convert their garage with no permit or required inspections. Mr. Barrera would like the committee to consider inserting a clause for older homes with circumstances such as his.

Commissioner Dorow follows up with inquiry on whether the garage was attached to the home or not. Commissioner Dorow expresses the change in the OMC was due to the congestion of parking on the city streets. Then continues with another question on the clarification of where Mr. Barrera parks his car. Mr. Barrera states he has a 4-car cemented uncovered driveway in front. Since the parking is on Mr. Barrera's property, it would not congest the streets.

Ms. Henning propose that houses built before the garage requirement was adopted could be allowed to convert their garages to living space without replacing the garage. Of 31 Eastern Washington cities reviewed, only five other than Othello require garages. Of these, all but two have similar codes because they used to share the same City Attorney.

Heather Miller began commenting on findings after visiting Mr. Barrera's lot but connection was spotty.

Building Inspector Tim Unruh added that he accompanied Ms. Miller on the inspection to Mr. Barrera's home and found that the conversion would not create an issue as it is a large size lot and plenty of room to build a garage but from a city's point of view, covered parking places are required.

Mr. Barrera then asks, "Does a covered carport qualify as a covered parking place?"

Ms. Henning responded that a carport is not equivalent to a garage but that does not mean it cannot be reexamined.

Commissioner Dorow reiterated that consistency in the building code and limiting the amount of street parking are what drove the city to make this decision in the first place. He encouraged Mr. Barrera to give planning commission examples and solutions to consider and allow a better chance of a change being made to the OMC by the City Council.

Attendee Bob Carlson inputted the importance of the additional parking requirement being met in order to approve any conversion of a garage being made. If conversion of garages to living space is approved, he was concerned that accessory dwelling units would be created this way.

Moving to the next topic, Ms. Henning introduced Mr. Zachary Garza who had a proposal for another change in the OMC regarding residential setbacks. Mr. Garza requested the rear setback be changed from 5ft to 2f. He stated he was originally told 2ft which is the main reason he laid concrete for a 2ft setback. Mr. Zachary Garza clarified to Commissioner Dorow that he would only suggest this change for homes backed up against a canal and not another property until reviewed by the Planning Commission. Mr. Angel Garza agreed with Zachary to allow this change for homes against the canal only. He then followed by asking Ms. Henning what the regulation for an alley would be, in which she replied that it is now 5ft for an alley unless there is a garage which then would require an 8ft setback.

Inspector Tim Unruh stated no permit is required for structures under 200 sq. ft. The fire code is a 2ft setback side and rear, and anything less needs firewall protection. Those structures eventually are placed anywhere on the lot almost on a 0ft lot line which leaves no real way to enforce it due to no permit on file and no permission to enter the lot by law. He supports Mr. Garza's proposal of 2ft. when there is a canal behind but also suggests the change throughout the city to help with the weed problem currently behind those structures. Commissioner Dorow summarizes that all items presented today are valid but this item in particular, seems like a reasonable proposal with a fairly simple solution but would like a special meeting with the Planning Commission to then get a recommendation from council.

The public hearing was continued to a special meeting of the Planning Commission Wednesday, September 23, 2020 at 6:30pm.

Mr. Dorow thanked all of the guests for attending and adjourned the meeting.

#### **ADJOURNMENT**

Having no other business, the discussion meeting was adjourned at 7:45 pm. The next meeting is a special meeting with the continued public hearing Wednesday, September 23, 2020.

---

Date: \_\_\_\_\_  
Chris Dorow, Commissioner

---

Date: \_\_\_\_\_  
Selina Flores, Planning Secretary



City of Othello  
Planning Commission  
September 23, 2020  
Selina Flores

### **CALL TO ORDER**

Due to the COVID-19 pandemic, this was a remote meeting held via GoToMeeting.  
Chair Roger Ensz called the meeting to order at 6:01 pm.

### **ROLL CALL**

**Commissioners Present:** Brian Gentry, Chris Dorow, Roger Ensz

**Absent:** Commissioner Kevin Gilbert. One position vacant

**Staff:** Community Development Director Anne Henning; Building Inspector Tim Unruh;  
Building & Planning Secretary Selina Flores; Code Enforcement Officer Heather Miller

**Attendees:** Angel Garza, Lolo Barrera, Zachary Garza, Bob Carlson, Council member John Lallas

### **APPROVAL OF PLANNING COMMISSION MEETING MINUTES**

**Action:** The Commissioners voted to accept the minutes from August 17, 2020 M/S: Brian Gentry/Chris Dorow

### **OMC SETBACK REQUIREMENTS CONSIDERATION:**

The public hearing advertised for Sept. 21 had been continued to this meeting. The public hearing was opened.

Ms. Henning explained that Zachary Garza asked to consider changing the rear yard setbacks from 5ft to 2ft. He stated that he had asked at City Hall and was given the incorrect information and started work without obtaining a permit, so when he tried to get a permit his project didn't meet setback. Therefore he would like the Commission to consider his request. His lot backs up to a canal. Ms. Henning pointed out that the reduced setback could apply only to homes that abut a canal.

Attendee Angel Garza supported the suggestion of changing the setback for homes against a canal. He felt that for fire safety, this should not be allowed for homes that have back yards abutting other homes. Eventually, if a canal is underground, the area would turn into a walkway or landscaping because even once the canal is piped, there cannot be any buildings placed on top.

Commissioner Dorow suggested adding another line to the OMC that allows an exception for a 2ft setback which would only apply to homes against a natural barrier such as a canal.

Ms. Henning responded that making exceptions could be problematic and suggests correcting the entire line on the OMC from 5ft to 2ft. Code allows 2ft projection into a setback to the property line.

Chair Ensz didn't agree because it is infringing, even if there may not be heavy equipment down the canal bank.

Ms. Henning stated she didn't foresee an issue because there is no approval for infringement on canal right of way. Mr. Ensz suggested only allowing a 1ft infringement and Ms. Henning responded that it is unlikely that a shed would be placed with a 2ft overhang.

Attendee Angel Garza stated the overhang can't be over property line, and Ms. Henning clarified that overhang is allowed into a side setback but not over the property line.

Chair Ensz questioned whether 2ft. is enough for fire safety. Attendee Angel Garza and Ms. Henning responded that 2ft. doesn't pose a problem for fire safety because generally the buildings consist of small sheds.

Chair Ensz opened the floor for any attendee to speak on the topic.

Mr. Zachary Garza asked for clarification on what the commission discussed during the first part of the meeting. His internet connection was weak so he decided to call into the meeting instead of accessing via computer.

Inspector Tim Unruh shared that when he is in the field, he sees smaller structures around town placed everywhere without a building permit due to being less than 200sq. ft. There is no way to enforce placement of these structures without a change to the code. As an inspector, 2ft. setback makes sense and it falls in line with fire code. If down the road, the owner plans to convert the building into an accessory dwelling unit, that wouldn't be possible due to dwellings needing to have a 5ft. setback.

Attendee Angel Garza asked if those smaller structures were placed on skids, is a permit required? Inspector Tim Unruh replied that most of the skids have a treated 6x6 wood underneath which is considered a wood foundation which means they would require a foundation.

Zachary Garza, 1500 E. Palos Verdes Lane, entered the call and restated he was told 2ft. setback but also he wouldn't want to leave 5ft because that would leave a big space that is not utilized. The canal behind him also means there is no one behind him.

Chair Ensz asked Mr. Garza what size building he plans to place on his property.

Mr. Garza replied it's 20x25 for a total of 500 sq. ft. He clarified that it's for utility use for storage to allow him to use his garage as a garage.

Chair Ensz asked for more comments before closing of the public hearing portion of this item. No comments, turned to commissioners for comments.

Commissioner Gentry wasn't familiar with the overhang issues but felt as though 2ft. against a canal is reasonable given the situation.

Inspector Tim Unruh also clarified that per the building code there is a maximum 4-inch overhang allowed with a 2ft. setback.

Chair Ensz stated he is in agreement with the proposed 2ft. setback when it's against a canal but doesn't want to use the term "natural barrier" until there is better clarification.

Commissioner Dorow stated the only example currently in Othello would be the canal but there might be other examples in the future.

Chair Ensz made a motion to recommend a change in the Othello Municipal Code that allows the 2ft. rear setback (with maximum 4" overhang) for homes up against the canal only.

M/S: Chair Roger Ensz/Chris Dorow

#### **GARAGE CONVERSION REQUIREMENTS:**

Ms. Henning continued to the next item on the agenda and recapped Mr. Lolo Barrera's request to convert his current garage into a living space. Mr. Barrera expressed it is a big financial commitment to convert the garage and construct a new garage all at once. Ms. Henning stated it seemed reasonable to not require the garage to be replaced if there was enough parking. She pointed out that other nearby cities such as Ephrata, Moses Lake, and Royal City only require one covered parking space. Of 31 Eastern Washington cities reviewed, only 5 require any covered parking. She also pointed out that many garages aren't big enough to fit two vehicles inside. Many garages are used for storage or exercise rooms, so what is the value in requiring two covered spaces and what's the reason for penalizing people for wanting to have additional living space?

Commissioner Gentry stated that from his experience, most Othello houses have already converted their garages to living space. He isn't sure when that requirement came into effect and questioned whether people converted their garages into living spaces without permits.

Chair Ensz stated he was surprised to see how many cities didn't require garages and agrees that many people do not use garages for cars and instead for storage. Do we change the garage rule or keep it?

Commissioner Dorow stated that when the garage issue was presented, the decision was made for the sole purpose of managing the on-street parking issue. If we change that, how is that going to be enforced?

Chair Ensz opened up the public hearing for comments and opinions.

Attendee Lolo Barrera, 1006 E. Elsinore Street, began with his intent of the conversion which was to create additional living space for his family. He reassured the committee that he wouldn't use it as a rental of any sort. Currently his garage for parking is located behind his home and must be accessed through the alley and a gate. Mr. Barrera purchased the home in 2006 and has not parked in the garage due to the inconvenience. His street compared to other newly developed streets allows for more room to park and even drive through, so converting his garage would not affect how he currently parks, which is in the driveway of his home and not on the street.

Chair Ensz located the property online to better understand that the garage is on the East property line and asked Mr. Barrera how many available parking spots there are in front. Mr. Barrera confirmed that there are four available parking spots.

Code Enforcement Officer Heather Miller confirmed that she and Inspector Tim Unruh visited the site and saw that there was a significant percentage of homes in that neighborhood that had garage parking through the alley and enough street parking available.

Chair Ensz replied that his concern is who should be allowed garage conversions and under what conditions without triggering other problems such as allowing one person and then making it allowable throughout the town especially with new subdivisions turning their garages into living spaces.

Commissioner Dorow explained that changing the garage conversion requirement in the OMC initially was to reduce the congestion of cars in the street and wasn't in place until 2008. Commissioner Dorow suggested a change in the verbiage of the OMC to state houses built before a specific year can convert their garage but any houses built after that date can't.

Attendee Bob Carlson agreed with Commissioner Dorow's proposal but added that he felt a minimum of 3 off street parking spaces would need to be available before the garage conversion occurs. Chair Ensz agreed with both and suggested determining required parking spaces based on number of rooms in the home. Commissioner Dorow suggested a ratio but didn't encourage requiring only two parking spaces to avoid any potential parking problems.

Code Enforcement Officer Heather Miller agreed that three parking spaces doesn't quite suffice due to the history of the items on record for the City of Othello. In 1949 the first reference to garage uses was made, 1953 there was a suggestion for one off street parking, 1972 required 2 parking spaces, with the driveway counted as one space and the garage counted as the other (Ord. 441). On 3<sup>rd</sup> Ave through the 600-700 blocks the houses were built with single car garages and most of those were converted into living spaces. The requirement for a 2-car garage was added in 2008 (Ord. 1280).

Chair Ensz asked Angel Garza how he would feel seeing garage conversions in the subdivisions he built. Angel Garza responded that would most likely not happen due to having to go through the HOA, but for Sandhill Estates, Mr. Garza stated he would put enough parking spaces to make the development look good. But he feels that changes should be made to provide solutions for people in similar circumstances such as Mr. Barrera's, as long as it gives clean curb appeal. As many have mentioned, if this is allowed for one, it should be allowed for all.

Inspector Tim Unruh asked Angel Garza, "If Othello eliminated the garage requirement, what would stop a developer from building a ranch style home with no garage? What would Othello look like then?"

Mr. Garza replied that when permits are issued, there are site plans that need approval and a two-car garage is required in the OMC. It's in the older homes that are 1200SF homes that don't have garages. He doesn't suggest that he would not allow the OMC to be changed to allow no garages. He doesn't support Othello to grow that way but as a developer he looks at small details such as the placement of garage entrances from the main street.

Commissioner Dorow stated he noted 2008 previously because he is suggesting garages conversions should be allowed for homes built before 2008, because after 2008, the OMC required garages.

Chair Ensz asked Inspector Tim Unruh how this would be enforced if put in place.

Inspector Unruh responded that it can be difficult for a conversion to meet code because the space is changing from a utility use to a living space so insulation is required, as well as energy code, building code and mechanical code.

Chair Ensz stated that the conversion would change the size of the homes and should require an additional parking space. The wording in the OMC should reflect the number of bedrooms to the number of parking spaces required when the conversion is applied. The bigger the home, the more on-street parking should be required.

Ms. Henning mentioned that some thought should go into what extra parking does to the yard. If there are five rooms and five required parking spaces, that doesn't leave much room for the home to meet the 50% front yard landscaping requirement.

Chair Ensz answered that if they can't make it work, then the conversion will not be approved.

Commissioner Dorow stated that the current requirements are with the assumption that there should be a two-car garage and 2 additional parking spots so a four-bedroom house would have four on-property parking spots. He asked Ms. Henning if she agrees with what's proposed and if a motion should be made. Ms. Henning stated that she's heard a variety of suggestions, such as only allowing homes built before 2008 to convert and also a suggestion that a certain number of spaces should be available based on the number of bedrooms in the home. There needs to be a clear idea of what the motion would say.

Chair Ensz proposed that the motion would only refer to homes built before 2008 to convert and must have at least 4 parking spaces unless it's a five- to six-bedroom home, they have to propose a solution to meet that requirement.

Ms. Henning restated what Chair Ensz suggested, that 1- to 4-bedroom homes would need four parking spaces but anything more than that would require one more parking space per bedroom after four bedrooms.

Commissioner Gentry asked if this would apply to "legal bedrooms," because some homes have offices or dens that are used as bedrooms but not considered legal bedrooms.

Inspector Unruh stated that the building code states defines bedrooms as any area used for sleeping, and it requires a sleeping area to have an egress window and a smoke alarm.

Ms. Henning warned the commission to be careful because if the intent of the conversion is to use it as a bedroom, but the owner wants to avoid calling it a bedroom so they don't have to provide additional parking, then they may not install an egress window or smoke alarm just to avoid the parking requirements. Safety should be considered.

Commissioner Gentry felt the group was going down a rabbit hole by focusing on the bedrooms to parking spaces because there are so many different definitions of bedrooms and that would be difficult to enforce. Commissioner Dorow agreed and suggested setting a number such as 4 required parking spaces. He stated his home was built in the 1950's and has a one-car garage but allows for 3-4 total parking spaces.

Commissioner Gentry asked Ms. Henning what would stop someone from making their front yard all concrete. Ms. Henning referred to the landscape chapter of the OMC which states 50% of the front yard must be landscaped, with driveways allowed in the other 50%. The parking code states, dwellings have a minimum of two but not more than three concrete parking spaces in the front yard area and not more than four vehicles shall be parked in the front yard. That means you can have three concrete parking spaces and one gravel space.

Commissioner Dorow wanted input from Code Enforcement Officer Heather Miller and Inspector Tim Unruh on their opinion of four required parking spaces and if that seemed reasonable and enforceable to allow the garage conversion. Both agreed.

Ms. Henning asked if the three concrete spaces and one gravel space should be revisited? Chair Ensz and Commissioner Dorow both suggested there needs to be a minimum of four concrete parking spaces available if the garage conversion was proposed.

Code Enforcement Officer Heather Miller noted that if certain areas were required to be concrete, some of those would be on top of water boxes or on top of water lines which would then need to be torn through to be made accessible in case of water emergency. Most of the boxes are on the corner of the lots.

Chair Ensz would like a clause to be added as an exception if water access became an issue. Ms. Henning stated that leaving the parking code as is would allow for the one gravel space to be used in the water access area. Chair Ensz and the rest of the committee agreed to leaving it as is.

Chair Ensz wanted to know if the parking change was for all zones. Ms. Henning asked if there was a reason to restrict it to just one zone. Attendee Angel Garza thought R-3 and R-4 are more applicable but Chair Ensz was in favor of leaving it for any zone.

Motion to recommend to the Council that homes built in 2008 or earlier can convert their garages into living spaces but would need to provide a minimum of two and no more than four off-street parking spaces as a condition to that conversion.

M/S: Commissioner Chris Dorow/Chair Roger Ensz. All were in favor, no oppositions.  
Closed Public hearing at 7:18pm.

#### **LANDSCAPING REQUIREMENTS:**

Angel Garza stated there were various reasons he provided on Monday supporting there should not be landscaping required before Certificate of Occupancy for single family homes. He began by stating Palos Verdes LLC would like the owner to be responsible for their own landscaping to allow them to take pride in it. If he, as the builder, has to meet requirements, he will install just the basics: five sprinklers and grass seed. He felt if he installs minimal landscaping, it will stay that way. Sand Hill Estates is not an HOA and still looks appealing. As a builder, he would have to find landscapers from Tri-Cities to complete the landscaping work which would result in a big bill for the buyer of an additional \$4,000-\$6,000.

Chair Ensz stated there are local landscapers who could complete the work.

Mr. Garza continued that during the loan process, landscaping would raise the amount of the loan including closing costs, so if the landscaping was included, the buyer may not be approved for the loan.

Chair Ensz asked Mr. Garza whether he would be okay with a tax increase to hire another code enforcement officer.

Mr. Garza responded that the increase of his permit fees is enough and continued by stating he takes pride in his work and his development. When he meets homeowners, he takes the initiative to remind the owner that the landscaping and fencing needs to be completed before the year is up. He stated that Othello is not Tri-Cities and he disagrees with these proposed changes. The only reason the homes are selling so well during this time is due to low interest rates, but when rates increase, the landscaping will

become an issue and Othello will be the first to feel the downturn of the economy. Mr. Garza stated he takes money from his pocket at times to make sure things look good because he cares about Othello.

Commissioner Gentry was concerned that the requirements will limit what people can do on their property and it's better to have the owner take responsibility rather than having all homes look the same.

Inspector Tim Unruh stated Sand Hill Estates does look great, but he sees some houses that don't have landscaping for over 18 months. Using Mr. Garza's figure, a \$5,000 bond could be a solution.

Mr. Garza disagreed and responded that it would cost him an additional \$300,000 in bonds and he would rather put the yard in himself as a developer.

Commissioner Dorow stated that originally the landscaping requirements were passed without requiring front yards before C of O, but now the mayor has brought this to the attention of the commission, and it has to be addressed.

Angel Garza wanted to know how it is currently being enforced? Code Enforcement Officer Heather Miller replied that some people who get ticketed are non-responsive. She writes infractions, they don't appear in court and \$50.00 is added to their ticket.

Commissioner Dorow thought too much time and effort is spent trying to enforce it. Something has to be done so Heather could be putting effort into other areas, which is why the requirement is proposed to be changed. He would appreciate other ideas to manage this issue. It is not in anyone's best interest to approach it the way we have been.

Inspector Tim Unruh suggested a requirement to grade away from the foundation to be ready to seed and irrigate to allow new homeowners to get the work done faster and easier. Many owners don't have the equipment to complete the task so would have a better chance to do landscaping if the lot is left in better condition by the developer. Code Enforcement Officer Heather Miller also agreed grading or at least leaving good topsoil is a good start to manage this problem.

Commissioner Dorow stated it seems like a good start to solving the issue, but if there is more required then the Commission should discuss it.

Heather Miller stated there is more to address but grading and topsoil is a start and a good minimum requirement. Mr. Angel Garza agreed with that.

Chair Ensz asked what the cost of a \$5,000 bond for one year would be? \$500?

Angel Garza stated it takes a lot to get a bond as a builder, the developer would be responsible for that and it would be more work and more money. Bonds are the hardest things to deal with as a developer.

Mr. Dorow said he had asked Council member Maria Quezada (in her capacity as a banker) what the impact of landscaping would be on the homeowner's loan and she responded that it would be minimal. He asked Commissioner Brian Gentry, based on his experience as a Realtor, his opinion of the impact on the loan. Commissioner Gentry stated interest rates are helping but that \$5000 figure does eliminate some homeowners' chances of being approved for loans. Most of the time the buyers are maxing out what they can do, so placing a yard would be difficult.

Mr. Angel Garza agrees that financing \$5,000 in a 30-year term is more money than doing it within the year. Most buyers do each small project individually over time. He wants to take pride and not have to do minimal work to get a C of O.

Chair Ensz is leaning towards requiring the grading as part of the OMC as a start but would like to do more research to conclude what's best. Commissioner Dorow agreed there were several ideas that could work but would like to get more information and confirmation on how things work and what would really work for Othello.

Chair Ensz tabled the topic until further research could be completed.

Mr. Angel Garza thanked the committee for their time.

Chair Ensz asked Ms. Henning to include the topic in the agenda for the next meeting.

#### **ADJOURNMENT**

Having no other business, the meeting was adjourned at 7:55 pm. The regular October 19 meeting was cancelled in favor of the Commissioners attending the October 26 Council meeting for the presentation by the housing consultant. Next regular scheduled meeting is Monday, November 16, 2020.

---

Date: \_\_\_\_\_  
Roger Ensz, Chair

---

Date: \_\_\_\_\_  
Selina Flores, Planning Secretary



City of Othello  
Planning Commission  
December 21, 2020  
Selina Flores

### **CALL TO ORDER**

Due to the COVID-19 pandemic, this was a remote meeting held via GoToMeeting.  
Chair Roger Ensz called the meeting to order at 6:00 pm.

### **ROLL CALL**

**Commissioners Present:** Chair Roger Ensz, Alma Carmona, Kevin Gilbert, Chris Dorow

**Absent:** Brian Gentry

**Staff:** Community Development Director Anne Henning; Building Inspector Tim Unruh; Building & Planning Secretary Selina Flores; Code Enforcement Officer Heather Miller; City Engineer Shawn O'Brien; Police Chief Phil Schenck

**Attendees:** Bob Carlson

### **STREET WIDTH STANDARDS:**

City Engineer Shawn O'Brien began by introducing himself. He was asked to provide information on street width, a topic that has been discussed frequently over the years with little to no action taken. Now, with the new Sand Hill Estates development, the developer has submitted a street width variance request. The city wants to make sure that any variance being considered is consistent with future city street standards before moving forward. The city staff has held two meetings with the Council Water/Sewer/Street Committee. The first meeting was to introduce and discuss the variance request. The second meeting consisted of gathering information from other cities that include Ellensburg, Spokane, Walla Walla and Moses Lake, on their adopted street width, and the benefits of reducing street widths, including speed, accident frequency, accident severity, and pedestrian safety. The other cities averaged 34'-wide residential streets. Othello had the widest streets including collector and arterial streets. He also collected data from the police departments on enforcement issues regarding speed. The costs of construction and maintenance costs are higher with wider streets.

The purpose of the presentation is to get a recommendation from the commission whether to reduce the standard for new residential streets from the current 42'-wide road profile. While many sources recommend 28' for optimal safety on residential streets, Mr. O'Brien's recommendation would be 34', which should significantly slow traffic due to on-street parking without impeding normal 2-way traffic and without being such a drastic change from current standards. He also suggested narrower standards for new collector streets. A collector street takes traffic from residential streets to the main arterials. His recommendation would be 44ft. wide which would provide enough room for options including a 3-lane section with parking and a center turn lane, a 4-lane section with no on-street parking, or a 2-lane section with bike lanes and on-street parking. All of these use a 10' lane, based on current engineering guidance and TIB (Transportation Improvement Board) funding. TIB is a state funding agency that provides grants for city road projects. In scoring grant proposals, TIB awards maximum points for 10' lanes and reduces points the wider you go.

Police Chief Phil Schenck said he read the materials provided and agreed that the width of the streets contributes to the speed enforcement issues he sees daily. Crime Prevention Through Environmental

Design (CPTED) supports narrow streets and bulb-outs to slow traffic. He explained that to determine street speeds, traffic counters are put out to collect speeds from drivers, then the limit is set at 80% of the average speed. A good example of street configuration affecting speed is Gemstone Street, where the many vehicles parked along the street create a smaller lane causing drivers to slow down. There are fewer accidents on Gemstone Street as a result.

Chief Schenck reviewed the purpose of arterials, collectors, and residential streets and noted that Scooteny, Ash, Juniper, and even Hemlock are being over-used but should be treated as residential streets meaning the street design should slow drivers down to watch for children and help keep an eye out for strangers who don't belong in that particular neighborhood. Vehicles which should also not be seen in the streets are semi-trucks. Reducing street width will continue to discourage use of semi-trucks in residential areas. Only the people who live in that residential area should be driving there. A residential street should not be a bypass for a driver trying to avoid traffic lights.

Chair Ensz added that in addition to semi access, he has seen more and more vehicles pulling toys such as boats and RVs that are being parked on the street. Narrowing the streets will make it really tight, for example 14<sup>th</sup> Ave and Spruce, people park on both sides of the street so with a trailer it looks tight so people shift towards the center or into the oncoming lane. Chair Ensz shared that he recently went on a trip to Yakima and remembers commenting, "Othello sure has some nice streets compared to this." He then asked the commission what their opinion was and if they had any comments.

Commissioner Dorow began by stating that this topic has been brought up several times in the past and the main reason it has not been changed is due to citizen satisfaction. He stated that citizen satisfaction was the most important factor in making this decision. Aside from safety reasons, he wanted to know what other reasons contributed to making the streets wider.

Community Development Director Henning responded that cost would be another reason to consider narrower streets. Wider streets are more expensive to build and maintain. While the builder pays the initial cost, that cost is passed on to the home buyers, making homes less affordable. The cost for maintenance like crack seal, chip seal, and reconstruction is the city's responsibility forever. Ms. Henning also added that snowplowing should be better because there would be less snow to move. The large plows would still continue their main routes and there would be less clean up by the small trucks behind them.

City Engineer O'Brien continued by explaining by slowing down speeds, it improves livability of neighborhoods. Accidents rates go down along with the severity of the accidents. Other communities have taken their residential street widths down to 28' which makes cars pull over into gaps to allow for other traffic to pass. Looking at this topic as a developer, the cost is twice as much to build in Othello than it would be in Moses Lake. Those costs get passed to home buyers and increases the maintenance costs to maintain those streets.

Chief Schenck recalled times when his department participated in block parties and spoke with residents of Othello who stated that their main complaint was speed in their neighborhoods. He then asked Mr. O'Brien to give an estimate of how much it's costing the city to improve Ash St. to make it pedestrian friendly.

Mr. O'Brien stated that bulb-outs will be placed along the street in high traffic areas including on 7<sup>th</sup> Ave and 14<sup>th</sup> Ave. Some sidewalk is included in the project. The grant is for \$750,000.00. The purpose is to help

slow traffic at the intersections to reduce speed and reduce pedestrian exposure. The bulb-outs will reduce the distance a pedestrian is out in traffic to 24 ft. instead of the full width 40 ft.

Attendee Bob Carlson recalled times where this topic was brought to the Commission's attention, he stated it occurs about every 5-10 years or so. He continued by commenting on the recommendation listed in the report and expressed that he did not agree with a parking lane of 7ft. He stated that he did his own research by visiting Main St. and measured a total of 10ft. from the front of Time Out Pizza from the face of the curb to where the white line starts for on street parking. He noted that vehicles that were parked there did not have 3ft. of space. He felt there is no way that a full-size truck, SUV or enclosed trailer could fit in a 7' parking spot comfortably. He suggested 9-10ft instead of 7ft. to make it seem functional especially for boats, trailers etc.

Mr. O'Brien responded that he measured a City of Othello truck and he found that the wheelbase measured 6ft. 6 in. A parking lot space such as those at Walmart measures 9ft. wide which allows room for doors to open next to you. 7ft. forces cars to be tight up against the curb instead of leaving 1 ½ ft. between tires and curb. He asked how the Commission felt about boats, trailers etc. being parked along the street.

Bob Carlson replied that those vehicles are going to be there anyway. If they are parked there for a significant amount of time, it's enforced by giving that person 30 days to move. 8ft. 6in. is considered oversized.

Commissioner Carmona wanted to know if the reduction in the parking lane width would increase the number of cars getting side swiped or hit and runs?

Mr. O'Brien responded that he did not find any information that would support that in the study he reviewed.

Chief Schenck explained that the design is to make it obvious that low speeds are necessary to remain cautious in the residential areas.

Commissioner Gilbert added he owns bigger vehicles and enjoys the convenience of being able to easily maneuver through his street to park them at his property. However, his wife's constant concern about the speed of traffic through his neighborhood takes priority over his convenience. His children range from 1-13 years old who are constantly outside on their bikes or running around. If it were just him, he would lean more towards keeping the street widths the same. But the safety of his children is the main concern so making it inconvenient for vehicles to go fast carries more weight with the other half of him, which is the more important half, his children. He agreed with other comments regarding the width of the parking spots on the streets but regardless, if changes were made, other accommodations would have to be made. That would mean finding another place to park or even renting a storage unit. The inconvenience is still less important than the safety aspect of the topic of narrowing the street.

The Commissioners expressed that they found City Engineer O'Brien's presentation to be one-sided. Mr. O'Brien stated that he had looked for any information that contradicted the idea that narrower streets are safer, but he was not able to find anything. He encouraged the Planning Commissioners to do their own research, talk to other town commissioners to see if they had any other findings on benefits of wider streets, and take their time to come up with a recommendation.

Chief Schenck stated he would like to see center islands with trees down the middle of wide streets like Main, Scootney, and 14<sup>th</sup>.

**Action:** Chair Ensz made a motion to recommend that no changes be made to street width standards for future streets, Commissioner Dorow seconded the motion, vote was 3-1 with Commissioner Gilbert opposed.

#### **STREET CLASSIFICATIONS:**

City Engineer Shawn O'Brien explained that typically a city should have a map of street classification designation for any future streets to help planners and developers as the city expands. It is used to show how the network of arterial and collector streets will expand in the future. That way, a developer knows to plan for building a bigger street if the property they purchase includes an arterial or collector. The street classification map also typically includes existing streets to show the overall network. He could not find that the city has fully designated anything officially, so this is an attempt to designate exactly that. The goal is to have residential areas be within about 4 blocks from a collector street. Input and a recommendation from the Planning Commission would help provide a layout of what city classifications would be. This would be a living document that could change or adjust at any time as necessary.

Commissioner Alma Carmona noted that on the diagram shown, Hemlock Street is marked as a residential street but suggested maybe it would be better to change it to a collector street because that is how it is used.

City Engineer O'Brien explained that Hemlock Street runs parallel with Main Street, which is an arterial. The purpose of a collector is to move cars from local neighborhood streets to arterial streets to ease the flow of transportation to higher speeds. It would be better to encourage people to travel on Main Street, but instead they pick Hemlock Street to avoid the traffic lights, and then there is a problem with speeding and too much traffic through a residential area.

Commissioner Chris Dorow agreed with Commissioner Carmona in changing Hemlock Street to a collector and not a residential street.

Community Development Director Anne Henning reminded that the purpose of a collector is for traffic to get to an arterial and that Hemlock isn't where we want to encourage traffic to go. We want to encourage them to get to an arterial in the quickest way possible to help the flow of traffic. She clarified that more stop signs are not part of the proposed plan for any of the streets.

Chief Schenck noted that there's only one stop sign on Hemlock between 7<sup>th</sup> Ave and 14th Ave, on 11<sup>th</sup> Ave. Designating it as a collector would create more traffic and more congestion. He doesn't recommend changing Hemlock to a collector as people should be using Main Street as much as possible. He also stated that he strongly feels that collectors should have sidewalks.

Commissioner Dorow stated that Juniper looks as though it is a collector, and 10<sup>th</sup> Ave and 11<sup>th</sup> Ave are both collectors without having many sidewalks. He felt the placement of stop signs should be discussed as it's a high traffic area. When two collectors cross each other, it could become problematic.

Ms. Henning gave an overview of what each street label means and what the purpose of each street is. Juniper Street makes more sense as a collector since it is not only one block away from an arterial street like Hemlock Street is.

City Engineer O'Brien reminded everyone that the purpose is to create designations so that in the future, developers know that a collector street is required as they continue to build instead of just having all residential streets in new areas as the city expands. The existing streets really aren't affected. Had this been discussed and decided upon 30 years ago, we wouldn't have discussion about Ash Street, Hemlock Street, Juniper Street etc.

There was confusion about the designation of Ash Street, whether it was proposed as Residential or Collector. City Engineer O'Brien stated Ash Street should be considered residential. Chair Ensz asked if 4<sup>th</sup> Ave north of Main Street and Hamlet Street between Broadway Ave and 14<sup>th</sup> Ave should be collectors or left as residential.

City Engineer O'Brien stated that if Hamlet Street went all the way through, it could be designated as a collector, but its already built so designating it as a collector or not doesn't affect future construction. 4<sup>th</sup> Ave north of Main dead ends in a residential area but it could extend further.

Chair Ensz made a motion to recommend to accept the proposed street classifications, Commissioner Gilbert seconded, vote was 3-1 with Commissioner Dorow opposed as he would like more explanation on what will happen with 11<sup>th</sup> Ave and Hemlock Street.

#### **RESIDENTIAL RENTAL INSPECTION/LICENSING:**

Community Development Director Henning provided drafts of a residential rental licensing and inspection ordinance and checklist to obtain the direction on the topic from the Planning Commission.

Chair Roger Ensz stated he spoke with a number of landlords and they stated they didn't like the idea of more governmental control. How would the planning commission be able to satisfy them on that thought?

Ms. Henning replied that the only things that are being regulated are the items covered in the state Landlord-Tenant Act. If landlords don't want more government regulation that's understandable, but there are also situations where the tenants are afraid to bring attention to problems in their units so this would give us a way to protect the residents more.

Commissioner Chris Dorow stated the presentations brought forward by Code Enforcement Officer Heather Miller and Building Inspector Tim Unruh have been very thorough in addressing that they need more access and support to address basic compliance.

Commissioner Alma Carmona wanted information on who would be liable if Code Enforcement and Building gave sufficient notice on the changes that were needed to bring the unit up to code and if those weren't fulfilled, who would then be responsible or liable for completing those tasks.

Inspector Unruh stated that he has run into situations where dwelling units are in extreme violation of code that create poor living conditions for the tenant but the tenant is afraid to report those conditions due to fear of being evicted and having no other place to go. This ordinance will help take that pressure from them as tenants and give the authority to address the issue without any tenant involvement.

Commissioner Dorow was concerned that by approving this, could it potentially leave tenants on the streets with nowhere to go and if there is fear, how is that mitigated?

Code Enforcement Office Heather Miller started by explaining the landlord and tenant laws which require landlords to find alternative housing for the tenant if the unit is deemed unlivable. Othello doesn't have very many options when it comes to additional housing options so that could be very difficult. The fear of the tenant isn't because of the eviction but of the reality of not having a place to go so some prefer to stay in the place they're living despite the horrible living conditions.

Police Chief Phil Schenck added that having a program of inspections could reduce the likelihood of the rental units getting to the point of having to relocate the tenants. He addressed Commissioner Carmona's concern by adding that the liability issue for the city would be if we were choosing to ignore certain properties because of who the landlord was but the staff takes those things seriously and everyone is treated equally.

Ms. Henning asked the planning commission what they thought about requiring the license being posted in a multifamily or single-family unit. Chair Ensz stated that he as a landlord doesn't have a designated area where it could be posted but would prefer for it to be put in the lease. Commissioner Dorow agreed. Inspector Unruh expressed that if he were a prospective tenant, he would feel more confident seeing that license posted. Commission consensus was that the licensing documents could be provided to the tenant along with the lease paperwork, rather than a requirement to post the license in the unit.

Chair Ensz asked if a price should be set for what was discussed and proposed \$10 for the license per location or each dwelling. Ms. Henning proposed a sliding scale idea for owners with more properties. Code Enforcement Officer Heather Miller was in support of the \$10 fee per location and focusing more on problem areas that may need reinspection. Commissioner Dorow wondered if that is adequate compensation for the work that is being put in for this system. Code Enforcement Officer Miller said the \$10 fee to get in the door seems adequate but a reinspection fee could be charged when the inspector was having to return multiple times for the same issue.

Commissioner Dorow expressed his approval with the proposed rental licensing and inspection process. The Commission was in favor of holding the public hearing on the ordinance next month.

#### **ADJOURNMENT**

Having no other business, the meeting was adjourned at 8:16 pm. Next scheduled meeting is Tuesday, January 19, 2021.

\_\_\_\_\_  
Roger Ensz, Chair

\_\_\_\_\_  
Selina Flores, Planning Secretary



City of Othello  
Planning Commission  
January 7, 2021  
Selina Flores

### **CALL TO ORDER**

Due to the COVID-19 pandemic, this was a remote meeting held via GoToMeeting.  
Chair Roger Ensz called the meeting to order at 6:05 pm.

### **ROLL CALL**

**Commissioners Present:** Chair Roger Ensz, Alma Carmona, Kevin Gilbert, Brian Gentry, Chris Dorow

**Absent:** none

**Staff:** Community Development Director Anne Henning; Building & Planning Secretary Selina Flores; City Engineer Shawn O'Brien; Police Chief Phil Schenck; Mayor Shawn Logan

**Attendees:** Bob Carlson, Jose Garza, Councilmembers Jon Erickson, Corey Everett, and Genna Dorow; Othello School District Transportation Director Marian Shade; Othello School District Director of Projects/Risk Management Gregg Fultz

### **STREET SAFETY:**

**Action:** M/S Chris Dorow/Brian Gentry motion to vacate previous recommendation by the commission on street classification map due to not having enough information. 5-0 in favor.

Chair Roger Ensz stated he would like more information on the bulb-out project for Ash Street. He was concerned about trucks and other big vehicles being able to access the street. He felt it should be a collector. If it's classified as a residential street should stop signs be taken out?

Commissioner Dorow asked what will discourage travel on Ash Street?

City Engineer Shawn O'Brien stated the proposed improvements will not prevent vehicles from utilizing Ash Street the way they do now. The improvements are for safety, not to classify it as a collector.

Police Chief Phil Schenck agreed with Mr. O'Brien and stated he doesn't think the existing stop signs around Ash should be taken out since they assist in traffic flow around the schools.

Chair Ensz had provided a map of bus routes. Marian Shade, Othello School District Transportation Director, stated that OSD buses avoid Ash Street because of the traffic and the number of kids walking.

Commissioner Dorow stated he felt the travel lanes were adequate at the proposed bulb-out, 12' for each lane. He felt the design was manageable for maintenance.

Delivery trucks should be able to navigate the bulb-out the same as any other corner.

Commissioner Dorow stated that safety is good but he would like Ash to be classified as a collector due to it historically being used as a collector.

Chief Schenck reminded the Commission that a collector is supposed to empty an area. We want to encourage travel on arterials.

Bob Carlson asked why 14<sup>th</sup> isn't proposed as an arterial and if the stop signs on Juniper would be removed. City Engineer O'Brien said 14<sup>th</sup> can only collect traffic from one side since it abuts a canal on the other side. 7<sup>th</sup> Avenue can collect traffic from both sides so it needs to handle twice the traffic that 14<sup>th</sup> needs to. He did not anticipate any changes to the stop signs on Juniper resulting from classifications on the map.

Chair Ensz felt 7<sup>th</sup> should be an arterial. Chief Schenck pointed out building this street at arterial width would just make traffic go too fast. It would be better to encourage traffic to use Main & Highway 17 rather than Lee Road to get into town.

Bob Carlson pointed out that Olympia has stop signs from the north but not the south. He found it confusing. Chief Schenck agreed it should be consistent.

Chair Ensz asked if there would be stop signs where residential streets met a collector. City Engineer O'Brien stated he would want to look at each situation but probably yes.

Commissioner Dorow talked about the problem of 10<sup>th</sup> vs 11<sup>th</sup> Ave: There is a traffic signal at 11<sup>th</sup> and Main but 10<sup>th</sup> is the street that has sidewalks. He estimated moving the signal would cost \$1M. He wondered about the cost difference between moving the signal and putting sidewalks on 11<sup>th</sup>. He thought there might be funding available to move the signal.

Commissioner Alma Carmona noted that many kids walk on 11<sup>th</sup>.

Council member Jon Erickson noted that a decision as significant as whether to move a traffic signal should be based on a traffic study.

Chair Ensz mentioned 4<sup>th</sup> Avenue, 1<sup>st</sup> Avenue, and Hemlock near City Hall.

Commissioner Dorow noted there might be different street configurations for residential vs commercial, and maybe there should be a category for mixed residential/commercial, like Hemlock and Cedar.

City Engineer O'Brien reminded the Commission that the primary purpose of a street classification map is to show future streets, so the developer can be aware of the plans and should no longer ask the city to participate in the cost of building streets wider than a residential street. He agreed that a street designated as a collector should have sidewalks, and the city should work on adding sidewalks to existing collectors.

Council member Genna Dorow stated that a collector should be delivering traffic both directions. If there isn't a destination at both ends, it shouldn't be a collector, it's just a local street.

City Engineer O'Brien stated that if we think a street will need more than 3 lanes, it should be classified as an arterial.

**Action:** Commissioner Chris Dorow made a motion to endorse the Ash Street Safety Plan with bulb-outs as written, seconded by Commissioner Kevin Gilbert, vote 4-1 with Chair Ensz opposed as he doesn't think it will work well for large vehicles like garbage trucks and delivery trucks.

The Commission turned back to the street classification map. Commissioner Dorow would like more discussion of certain streets. Chair Ensz asked why the canal is being considered a barrier to the extension of Olympia Street. He felt Ash would be too narrow to be a collector, that it will be a pinch point. Even though most garbage collection is from alleys, there are some cans that get picked up on Ash. Council member Corey Everett mentioned that garbage trucks, delivery vehicles, and fire trucks are all 10' wide.

Chief Schenck brought up that it is more of an accident problem than a speed problem. Othello has twice the accident rate and twice the injury rate of what it should have.

Council member Everett felt making changes to Ash Street would just push the traffic one block north to Oak Street.

Chief Schenck stated any 40'-wide residential street will have speeding and accidents.

Commissioner Dorow stated comprehensive safety planning needs to happen. He was in favor of Ash Street being classified residential.

Chair Ensz asked if there is data on speeding locations. Chief Schenck responded that tickets aren't the best for slowing traffic, proper design is much more effective. New streets could be designed to reduce speeds. Police usually give 5 to 10 warnings for every ticket they write. He has data that people could stop by his office to see.

Bob Carlson asked why 1<sup>st</sup> Avenue is not classified as an arterial or collector. It is not really a local street. Mr. O'Brien agreed it could be a collector.

Chair Ensz liked the clarification that the classification map is mostly for new streets. Commissioner Dorow asked if changes based on classification will be made. City Engineer O'Brien responded that it is a living document and can be changed at any time.

**Action:** Commissioner Dorow made a motion to classify 1<sup>st</sup> Avenue from Fir to SR-26 as a major collector, seconded by Commissioner Carmona, 5-0 in favor.

Council member Everett felt the speed limit on 1<sup>st</sup> Avenue should be 35 mph.

City Engineer O'Brien mentioned that current standards are 42' width for residential streets. Before 2017, the standard was 40' and he has not been able to find any information on the increase to 42'. The current standard for collector streets is 48'. The current standard for arterial streets is 58', although it had been 60' before 2017.

Commissioner Dorow remembered the Planning Commission being consulted about street width standards by the previous Community Development Director. The Commission had asked what the streets were built at and were told 42', based on the Palos Verdes development. So that is what they used as a standard.

**Action:** Commissioner Dorow made a motion to recommend classifying 1<sup>st</sup> Avenue from Fir to SR-26, Cedar Avenue/Blvd from Broadway to 7<sup>th</sup>, and Hemlock from Broadway to 14<sup>th</sup> as collectors, seconded by Commissioner Carmona. Motion passed 5-0.

**Action:** Commissioner Dorow made a motion to recommend accepting the street classification map as modified, including keeping Ash as residential, seconded by Commissioner Brian Gentry. Vote 4-1 with Chair Ensz opposed to the Ash portion but in favor of the rest.

Commissioner Dorow noted that from the material presented, it appears Othello has uniquely high accidents. He would like to investigate how to address new streets. He would like to present a comprehensive street safety plan to the council. He noted some unique challenges, such as minimal transit, and few people currently walking or biking except recreationally.

Commissioner Carmona said she would like to see options for existing neighborhoods, especially uncontrolled intersections.

Chief Schenck noted that uncontrolled intersections on narrow streets slow traffic. Uncontrolled intersections on wide streets do not. He also noted that consistency is important. He mentioned that people use Gemstone as a collector to get to CBHA but shouldn't.

Commissioner Gentry felt there needs to be better driver education. He felt the rule about yielding to the right is not well known among Othello drivers.

Chief Schenck noted there were 180 accidents in 2020. 6 were at uncontrolled intersections where they just drove through. Others were at stop signs where people darted out after misjudging. He thinks it is inconsistency that causes a lot of the accidents.

Commissioner Dorow would like to revisit the street width discussion. He wants a comprehensive set of data that includes the distribution of accidents and what the main causes and factors are. What is the best approach for Othello to address accidents? He would like to address street width, sign placement, and other alternatives, for both current and future streets. The Commission's goal for the next 2 or 3 months should be to work through these issues. He would like to see a stop sign plan.

Council member Erickson mentioned that unwarranted stop signs can drive traffic to other streets where you may not want it. He is a big proponent of the MUTCD (Manual on Uniform Traffic Control). Stop signs are not speed control.

City Engineer O'Brien agreed, stating that if a jurisdiction is not following the MUTCD, they need to justify why not and accept the liability of not following the national standard.

Commissioner Gilbert mentioned that the stops signs behind TLC Meats don't function correctly and are often ignored. He would like to see studies.

Commissioner Carmona pointed out there may need to be different standards for new vs. existing.

Commissioner Dorow agreed that future development may need to be different from existing.

Chief Schenck asked the Commission to consider crime reduction and beautification along with safety.

**ADJOURNMENT**

Having no other business, the discussion meeting was adjourned at 8:20pm. Next scheduled meeting is Tuesday, January 19, 2021.

---

Date: \_\_\_\_\_  
Roger Ensz, Chair

---

Date: \_\_\_\_\_  
Selina Flores, Planning Secretary

TO: Planning Commission

FROM: Anne Henning, Community Development Director

MEETING: January 19, 2021

SUBJECT: Rental Licensing and Safety Inspection Program – OMC 4.40 – Public Hearing and Recommendation to City Council

Section 125 of RCW 59.18, the Residential Landlord-Tenant Act, allows cities to set up a program of licensing and inspection for rental units. Section 125 does not add any new requirements to what a landlord needs to provide, it just creates another mechanism for compliance with existing standards for a safe unit that can be rented.

Adopting a local licensing and safety inspection program gives us better tools ensure existing rental units are safe and habitable, as required by the Landlord-Tenant Act. By requiring inspections every 3 years, we are not relying on tenants to report problems and continue to work with us throughout what can be a multi-month process. Tenants can be worried about retaliation and may not want to draw attention to themselves. By removing reliance on long-term cooperation by a tenant, the rental licensing and safety inspection program helps us ensure decent housing for our residents and eliminates what can be months of trying to gain access to investigate substandard units and require compliance with basic life safety standards.

The Landlord-Tenant Act has basic standards of livability, including structural soundness, adequate plumbing including hot water, safe electrical wiring, sufficient egress, and control of insect or rodent infestations.

### **Staff Comments**

1. Many cities across the state have versions of a licensing and inspection ordinance, including Auburn, Bellingham, Bremerton, Lacey, Lakewood, Mountlake Terrace, Pasco, Prosser, Seattle, Sunnyside, Tacoma, Toppenish, and Tukwila. Some of these ordinances pre-date a change in the law in 2010, so can require inspections more frequently than every 3 years.
2. Because the purpose of the ordinance is compliance rather than cost recovery, the license fee is purposely low with no inspection fee. We want to make compliance with the ordinance as easy as possible for units with no problems.
3. Planning, Building, Code Enforcement, and Police staff have all been involved in drafting this ordinance. The City Attorney suggested several changes, which were incorporated into the current draft.
4. There have been questions about how many rental units would need to be inspected and the time needed for inspections. While we don't know how many units or how much time will be needed, we do know that only a fraction of the total units will need to be inspected. When there are multiple units on a single site, RCW 59.18.125 specifies that only a percent

of the total be inspected (unless any of the selected units fail.) In addition, units inspected by a government agency within the past 24 months may use that inspection rather than requiring a new inspection. Any new construction is exempt from inspection for the first 4 years. In practice, the most visible and problematic rentals will be the ones that draw the attention of staff first, so those will be the ones that receive compliance letters first. We expect that getting everyone into compliance will be a several-year process. But the goal of the program is to give us a better tool to address significant deficiencies in rental housing, which we will have as soon as we adopt the ordinance.

#### Procedural actions

| Action                             | Date                  |
|------------------------------------|-----------------------|
| Determined exempt from SEPA review | 12-23-20              |
| Introduced to City Council         | 1-4-21                |
| Public hearing notice published    | 1-6-21                |
| Planning Commission public hearing | Scheduled for 1-19-21 |
| City Council public hearing        | Scheduled for 1-25-20 |

#### Attachments

- Draft OMC 4.40, Rental Housing Licensing and Safety Inspection Program (1-12-21)
- Draft Inspection Checklist

**Public Hearing:** Notice of a public hearing was published and posted for January 19. The Planning Commission should hold a public hearing and take testimony on the proposed ordinances.

**Action:** The Planning Commission should discuss the rental licensing and safety inspection ordinance and make a recommendation to City Council.

***DRAFT Chapter 4.40***  
***RENTAL HOUSING LICENSING AND SAFETY INSPECTION PROGRAM***

Sections:

- 4.40.010 Purpose
- 4.40.020 Definitions
- 4.40.030 License required
- 4.40.040 Certificate of Inspection
- 4.40.050 Notice that rental is unlawful when certificate not provided
- 4.40.060 License denial, suspension, or revocation
- 4.40.070 Inspection required in event of notice of code violation
- 4.40.080 Immediate health and safety threats
- 4.40.090 No warranty by city
- 4.40.100 Correction notice prior to enforcement
- 4.40.110 Penalties
- 4.40.120 Appeals
- 4.40.130 Relocation assistance
- 4.40.140 Consistency with Chapter 59.18
- 4.40.150 Applicability
- 4.40.160 Severability

**4.40.010        Purpose.**

The City of Othello finds that establishment of a rental housing license and inspection program will protect the public health, safety, and welfare of tenants by encouraging the proper maintenance of rental housing, by identifying and requiring correction of substandard housing conditions, and by preventing conditions of deterioration and blight that could adversely impact the quality of life in Othello.

**4.40.020        Definitions.**

- (a) "Building Code" means all code provisions adopted in and throughout Chapter 14.04 OMC, Building Codes.
- (b) Certificate of Inspection. "Certificate of inspection" means the document signed and dated by a qualified rental housing inspector and submitted to the City as the result of an inspection conducted by a qualified rental housing inspector that certifies that the residential housing units there were inspected and comply with the requirements of OMC 4.40.040, Certificates of Inspection.
- (c) Dwelling Unit. For the purpose of this chapter, "dwelling unit" shall mean any structure or part of a structure which is used as a home, residence, or sleeping place by one or more persons, including but not limited to single-family residences, accessory dwelling units, duplexes, triplexes, four-plexes, townhouses, multifamily dwellings, apartment buildings, condominiums, and similar units.

(d) Qualified inspector means any of the following:

- (1) A City of Othello Building Inspector or Code Enforcement Officer;
- (2) An inspector certified by the United States Department of Housing and Urban Development for grant-required inspections;
- (3) A Washington State licensed home inspector;
- (4) An American Society of Home Inspectors certified inspector;
- (5) A private inspector certified by the National Association of Housing and Redevelopment Officials (NAHRO), the American Association of Code Enforcement (AACE), or other comparable professional association as approved by the Community Development Director;
- (6) An International Code Council Residential Building Code Inspector or Property Maintenance and Housing Inspector;
- (7) A Washington-licensed structural engineer; or
- (8) A Washington-licensed architect.

(e) "Rental property" means all residential dwelling units rented or leased on a single parcel of land managed by the same landlord.

(f) "Rental property complex" means all residential dwelling units rented or leased on a contiguous parcel or parcels of land managed by the same landlord as a single rental complex.

**4.40.030 License required.**

(a) Beginning        (date), no person shall make available for rent, or rent, lease, or let to the public, any residential dwelling unit as defined in this chapter without securing and maintaining a current rental housing license as required by this chapter.

(b) Exceptions. The following are not subject to this chapter:

- (1) A facility such as a hotel or motel offering lodging to guests for periods of less than 30 days are not dwelling units subject to this chapter, provided that if any guest resides for a period of 30 days or more, then such facility shall be subject to this chapter.
- (2) Housing accommodations in nursing homes or similar care facilities.

(c) License Content. Any person renting or making available for rent to the public any dwelling unit shall secure a license registering each dwelling unit. Registration shall include a certificate of inspection

warranting that each dwelling unit complies with the standards of OMC 4.40.040 and does not present conditions that endanger or impair the health or safety of the tenants.

(d) **Fee.** The annual rental housing license fee shall be \$10 for each rental property complex. All revenues received from this license fee shall be utilized exclusively for the cost of issuance of the license provided herein and the administration of this title. Issuance of the rental housing license shall be contingent upon submission of the certificate of inspection, as required by this chapter, payment of the fee provided above, and compliance with this chapter.

(e) **Inspection fees.** No fee is required for a City inspector to do an inspection to complete a Certificate of Inspection and one follow-up to check any needed corrections. If corrections remain and additional follow-up inspections are needed, those inspections shall be charged at the rate for a re-inspect fee per the Building Permit Fee Resolution adopted by the City Council.

(f) **Renewal.** The rental housing license shall expire one year from when it was issued. A rental housing license may be renewed each year by:

- (1) Paying the license fee for the next year on or before the date of the expiration of the current license, and
- (2) Submitting a renewal application updating the information contained in the original application, and
- (3) If it has been 3 years since the last certificate of inspection, submitting a certificate of inspection dated within 90 days of the date of the application for renewal.

(g) **Proof of license to be provided to tenant.** The owner or landlord shall provide a copy of the current rental license to tenants as part of the lease documents.

#### **4.40.040              Certificate of inspection**

(a) All rental properties shall be inspected every 3 years by a qualified inspector as defined in this chapter.

(b) To meet the requirements of obtaining and maintaining a rental housing license, all certificates of inspection submitted under this chapter must state that all units subject to inspection have been inspected, that all units inspected comply with the requirements of the building code and state law specified in or under the authority granted in this section, and that there are no conditions in the units inspected that endanger or impair the health or safety of a tenant. A qualified rental inspector inspecting a rental unit for a certificate of inspection under this chapter shall inspect for and certify

---

compliance with the following requirements of Chapter 59.18 RCW and the building code as defined in this chapter:

- (1) The minimum floor area standards for a habitable room as contained in the building code.
- (2) The minimum sanitation standards as contained in the building code.
- (3) The minimum structural standards as contained in the building code.
- (4) The occupancy standards as contained in the building code.
- (5) The minimum heating standards as contained in the building code.
- (6) The minimum ventilation standards as contained in the building code.
- (7) The minimum standards as contained in the building code.
- (8) The minimum standards for emergency escape windows and doors as contained in the building code.
- (9) The requirements for garbage and debris removal as contained in the building code.
- (10) The requirement to provide and test smoke alarms and carbon monoxide alarms as contained in the building code.
- (11) The requirements regarding fire sprinkler or fire alarm systems (if any) required by the building code.
- (12) The requirements regarding passive fire resistive construction components contained in the building code.
- (13) The requirements related to fitness for human habitation as set forth in RCW 59.18.060 (Landlord—Duties).

(b) The certificate of inspection shall be based upon a physical inspection of the dwelling units. The inspection shall have been conducted not more than 90 days prior to the date of application. The certificate of inspection shall be certified by a qualified inspector. All inspection certifications shall be submitted on forms provided by the City. No provision in this chapter is intended to impose building or fire code standards for existing structures beyond the standards for existing structures set forth in the building code.

(c) *Other Inspections.* Nothing herein shall preclude such additional inspections as may be conducted pursuant to the tenant remedy provided by RCW [59.18.0115](#) of the Residential Landlord-Tenant Act, at the request or consent of a tenant, or issued pursuant to a warrant.

*(d) Limitations and Conditions on Inspection of Units for Certificate of Inspection.*

1. The city may only require a certificate of inspection on a rental property once every three years.
2. A rental property that has received a certificate of occupancy within the last four years and has had no code violations reported on the property during that period is exempt from inspection until four years past the certificate of occupancy.
3. A rental property inspected by a government agency or other qualified inspector within the previous 24 months may provide proof of that inspection which the city may accept in lieu of a certificate of inspection. If any additional inspections of the rental property are conducted, a copy of the findings of these inspections may also be required by the city.
4. For properties with multiple units as specified in subsections (d)(5) and (6) of this section, the owner or landlord must send written notice of the inspection to all units at the rental property. The notice must advise tenants that some of the units at the property will be inspected and that tenants whose units need repairs or maintenance should send written notification to the landlord as provided in RCW [59.18.070](#). The notice must also advise tenants that if the landlord fails to adequately respond to the request for repairs or maintenance, the tenants may contact City of Othello officials. A copy of the notice must be provided to the inspector on or before the day of inspection.
5. If a rental property has 20 or fewer rental units, no more than four rental units at the rental property may be selected by the city to provide a certificate of inspection as long as inspection of said units reveals that no conditions exist that endanger or impair the health or safety of a tenant.
6. If a rental property has 21 or more rental units, no more than 20 percent of the units, rounded up to the next whole number, on the rental property, and up to a maximum of 50 units at any one property, may be selected by the city to provide a certificate of inspection as long as inspection of said units reveals that no conditions exist that endanger or impair the health or safety of a tenant.
7. If an owner or landlord is asked to provide a certificate of inspection for a sample of units on the rental property and a selected unit fails the initial inspection, the city may require up to 100 percent of the units on the rental property to provide a certificate of inspection.
8. If a rental property has had conditions that endanger or impair the health or safety of a tenant reported since the last required inspection, the city may require 100 percent of the units on the rental property to provide a certificate of inspection.
9. An inspector conducting an inspection under this chapter may only investigate a rental property as needed to provide a certificate of inspection.

10. If a rental property is part of a rental property complex, the provisions of this subsection (d) shall apply to the rental property complex as a whole.

(e) *Notice to Tenants.*

1. The landlord shall provide written notification of his or her intent to allow an inspector to enter an individual unit for the purposes of providing the city with a certificate of inspection in accordance with RCW [59.18.150\(6\)](#). The written notice must indicate the date and approximate time of the inspection and the company or person performing the inspection, and that the tenant has the right to see the inspector's identification before the inspector enters the individual unit. A copy of this notice must be provided to the inspector upon request on or before the day of inspection.
2. A tenant who continues to deny access to his or her unit is subject to the penalties in RCW [59.18.150\(8\)](#).

**4.40.050 Notice that rental is unlawful when certificate not provided.**

When a certificate of inspection is required for a specified rental housing unit under this chapter and a valid certificate of inspection has not been provided to the city, the city is authorized to notify the owner or landlord that until a valid certificate of inspection is provided to the city, it is unlawful to rent or to allow a tenant to continue to occupy the residential housing unit.

**4.40.060 License denial, suspension, or revocation.**

A. The license of any rental property may be denied, suspended, or revoked by the city based on one or more of the following grounds:

1. The registration was procured by fraud or false representation of fact;
2. The applicant or registration holder has failed to comply with any of the provisions of this chapter;
3. The applicant or registration holder is in default in any fee due to the city under this chapter;
4. The continued operation of any rental housing unit at the rental property will result in a danger to the public health, safety, or welfare by reason of the city being provided notice of a violation of the building code, the fire code, or violations of any other applicable city code or state law which endangers or impairs the health or safety of the tenant.

B. If the registration of any rental property is suspended or revoked, or an application for registration is denied, the rental property will be granted registration only after:

1. Any and all deficiencies on which the suspension, revocation, or denial was based have been corrected;
2. In the event an inspection has been required under OMC 4.40.070(a), the applicant has provided to the city a valid certificate of inspection that meets the requirements of OMC 4.40.040; and
3. The applicant pays the registration fee.

**4.40.070      Inspection required in event of notice of code violation.**

A. Whenever the city is provided notice of a violation of the building code or violations of any other applicable Othello Municipal Code with respect to a rental unit, the city is authorized to request to conduct an inspection of the rental unit under the building code or other applicable law or to pursue a warrant under RCW [59.18.150](#). The city may require proof that the tenant has provided notice to the landlord identifying the conditions prior to undertaking an inspection. If, after inspecting the rental unit, the city determines the rental unit violates any of the standards set forth in OMC 4.40.040, the city is authorized to suspend or revoke the registration as to that unit and to require the owner to provide to the city a certificate of inspection as described in OMC 4.40.040 prior to the rental unit containing the violation having its registration renewed or reinstated. Notwithstanding correction of the violation, the city may require that any other rental unit covered under the same registration on the property be inspected following the procedures of OMC 4.40.040.

B. If, during a two-year period, a property subject to this chapter has been subject to two or more notices of violation, orders, decisions, or determinations by the city, which if appealed have been upheld, finding a violation of any of the standards in the building code, the rental property shall be subject to inspection under OMC 4.40.040 during the following annual inspection period.

C. If a property subject to this chapter has been subject to any order, decision, or determination by the city, which if appealed has been upheld, finding a violation of any of the standards in the building code and resulting in a “do not occupy” order, the rental property shall be subject to inspection under OMC 4.40.040 during the following annual inspection period.

**4.40.080      Immediate health and safety threats.**

Nothing in this chapter shall limit the city’s ability to inspect properties and issue citations for property-related conditions that may constitute an immediate health or safety threat.

**4.40.090      No warranty by City.**

By enacting and undertaking to enforce this chapter, neither the City, its agents or employees, nor the City Council warrant or guarantee the safety, fitness, or suitability of any dwelling in the City or any unit

inspected under this chapter. Owners and occupants shall take whatever steps they deem appropriate to protect their interest, health, safety, and welfare.

#### **4.40.100 Correction notice prior to enforcement**

Before the city suspends or revokes a license or imposes the penalties set forth in OMC 4.40.110, the city shall serve a Notice and Order to Correct Violations, giving the owner or landlord written notice by personal service, posting in a conspicuous place on the property, or first class mail, stating the existence of a violation, that enforcement action is being considered, and the time period to correct the violation.

#### **4.40.110 Penalties.**

- (a) Prior to imposing any penalties set forth in this section, the city shall serve Notice and Order to Correct Violations under OMC 4.40.100.
- (b) Any person violating any of the provisions or failing to comply with any of the requirements of this chapter shall have committed a civil infraction and shall be punished by a fine of not more than \$1000. Each such person is guilty of a separate code infraction for every month during any portion of which any violation of any provision of this chapter is committed, continued, or permitted by such person.
- (c) Any person who knowingly submits or assists in the submission of a falsified certificate of inspection, or knowingly submits falsified information upon which a certificate of inspection is issued, shall, in addition to the penalties provided in subsection (b) of this section, be guilty of a gross misdemeanor.
- (d) In addition to the penalties provided above, any violation of this chapter may result in the revocation of the rental licenses provided in this title. Any violation of this chapter, including the determination by the City, after an inspection of the dwelling unit, that a condition exists which substantially endangers or impairs the health or safety of a tenant, may, in addition to the penalties provided above, result in the issuance of a notice of civil violation and be subject to the penalties as imposed under the provisions of this code.

#### **6.15.120 Appeals.**

- (a) *General.* Appeals of registration denials, revocations, or suspensions; other final, written decisions or determinations made by the city under OMC 4.40.050 (Notice that rental is unlawful when certificate not provided), 4.40.060(b) (Registration denial, suspension or revocation), or 4.40.070(a) (Inspection required in event of notice of code violation); and the written findings of an inspection by a city inspector relative to the application and interpretation of this code (i.e., decisions) may be appealed to the hearing examiner by filing a notice of appeal in the form specified in subsection **(B)** of this section at City Hall and paying the appeal fee of \$1000 within 14 days of issuance of the decision.

(b) *Form of Notice of Appeal.* A person appealing a decision must pay the applicable appeal fee and submit a completed notice of appeal which sets forth:

1. The decision being appealed and the date it was issued;
2. Facts demonstrating that the person is adversely affected by the decision;
3. A statement identifying each alleged error in the decision;
4. The specific relief requested; and
5. Any other information reasonably necessary to make a decision on the appeal.

(c) No suspension or revocation of a registration issued pursuant to the provision of this chapter shall take effect until 14 days after the mailing of the notice by the city and, if appealed, the suspension or revocation shall be stayed pending final action by the hearing examiner.

(d) The decision of the hearing examiner shall be final. The owner and/or the city may seek review of the decision by the superior court of Washington in and for Adams County within 21 days from the date of the decision. If review is sought as herein prescribed, the suspension or revocation shall be stayed pending final action by the superior court.

**4.40.130 Relocation Assistance.**

Per the Residential Landlord-Tenant Act (RCW 59.18), if repairs are needed to make the dwelling unit safe for occupancy, the property owner shall ensure the tenants have substitute housing, at no additional cost to the tenant, while the owner completes the repairs.

**4.40.140 Consistency with Chapter 59.18 RCW.**

The provisions of this chapter shall be interpreted in a manner that is consistent with the provisions of Chapter 59.18 RCW.

**4.40.150 Applicability.**

The provisions of this chapter shall apply in addition to the provisions of any other code provision or ordinance. Where there is a conflict, the more restrictive provision shall apply.

**4.40.160 Severability.**

If any section, sentence, clause, or phrase (i.e. provision) of this chapter or its application to any person or circumstance is held invalid or unconstitutional by a court of competent jurisdiction, such invalidity or unconstitutionality shall not affect the validity or constitutionality of any other provision and the remainder of this chapter, or the application of such provisions to other persons or circumstances, shall not be affected.

## Rental Housing Safety Inspection Checklist

Rental Property Address \_\_\_\_\_ Owner name \_\_\_\_\_

Rental Property Contact (Name, phone, & email) \_\_\_\_\_

Inspector \_\_\_\_\_ Date & Time of Inspection \_\_\_\_\_

**Note:** A box checked with pass requires no action; a box checked with fail denotes a deficiency or an aspect of the property requiring corrective action. Failed items with an asterisk (\*) and in bold face are deemed life-safety items and must be corrected and pass re-inspection within 10 days; all other failed items must pass re-inspection within 60 days. All items must pass to receive a Certificate of Inspection.

|           | Type of Inspection   | <input type="checkbox"/> Initial | <input type="checkbox"/> Re-inspection |      |      |
|-----------|--|----------------------------------|--|------|------|
| <b>1.</b> | <b>Exterior Site Conditions</b>  |                                  |  | Pass | Fail |
| 1.1       | <b>Address:</b> Units shall have the house or unit number clearly displayed on the front or side facing the street. Numbers shall be not less than 4" in height and minimum stroke width of 0.5".  | <input type="checkbox"/>         | <input type="checkbox"/>               |      |      |
| 1.2       | <b>Exterior Site:</b> Exterior property areas and premises shall be maintained in a clean, safe, and sanitary condition. All areas shall be free from garbage, debris, or conditions that would endanger the health and safety of the residents.                       | <input type="checkbox"/>         | <input type="checkbox"/>               |      |      |
| 1.3       | <b>Motor Vehicles:</b> Property has no inoperable or apparently inoperable vehicles.   | <input type="checkbox"/>         | <input type="checkbox"/>               |      |      |
| 1.4       | <b>Exhaust Vents:</b> Pipes, ducts, conductors, fans or blowers shall not discharge gases, steam, vapor, hot air, grease, smoke, odors or other gaseous or particulate wastes directly upon abutting or adjacent public/private property or that of another tenant(s). | <input type="checkbox"/>         | <input type="checkbox"/>               |      |      |
| 1.5       | <b>Accessory Structures:</b> Accessory structures, including detached garages, fences and walls, shall be maintained structurally sound and in good repair.  | <input type="checkbox"/>         | <input type="checkbox"/>               |      |      |
| 1.6       | <b>Defacement of Property:</b> Property is free of graffiti or other markings.   | <input type="checkbox"/>         | <input type="checkbox"/>               |      |      |
| 1.7       | <b>Grounds Maintenance:</b> Property and surrounding landscape properly maintained and kept free of noxious weeds and overgrown vegetation.  | <input type="checkbox"/>         | <input type="checkbox"/>               |      |      |
| 1.8       | <b>Driveway/Parking:</b> All driveways and parking spaces are maintained in good repair and are free from hazards.   | <input type="checkbox"/>         | <input type="checkbox"/>               |      |      |
| 1.9       | <b>Drainage:</b> The property is free of improper drainage causing excessive pooling or ponding. Drainage is maintained so as not to cause soil saturation detrimental to structures and lot usage.  | <input type="checkbox"/>         | <input type="checkbox"/>               |      |      |
| 1.10      | <b>*Garbage Disposal:</b> Property has adequate refuse removal for tenant(s). Garbage or rubbish shall not accumulate outside of trash receptacles.  | <input type="checkbox"/>         | <input type="checkbox"/>               |      |      |
| 1.11      | <b>*Rodents, Vermin or Insects:</b> The property is free of infestation of rodents, vermin, insects, or other pests.   | <input type="checkbox"/>         | <input type="checkbox"/>               |      |      |

Comments or corrective actions:

|           |  |                          |                          |
|-----------|--|--------------------------|--------------------------|
| <b>2.</b> | <b>Exterior Building Conditions</b>  | Pass                     | Fail                     |
| 2.1       | <b>Exterior Surfaces:</b> Exterior surfaces (other than decay-resistant woods) are protected from the elements and decay by means of protective covering or treatment. Exterior surfaces are maintained in good repair, and are structurally sound and watertight. | <input type="checkbox"/> | <input type="checkbox"/> |
| 2.2       | <b>Foundation:</b> Foundation is structurally sound, free of open cracks and breaks, is firmly supported and plumb, and is kept in a condition that prevents entry by rodents or other pests.  | <input type="checkbox"/> | <input type="checkbox"/> |
| 2.3       | <b>*Structural Components/Members:</b> Structural components/members are structurally sound, free of deterioration, are properly anchored, and are capable of safely supporting imposed live and dead loads.   | <input type="checkbox"/> | <input type="checkbox"/> |
| 2.4       | <b>*Exterior Walls:</b> Exterior walls are maintained in a safe and sound condition, protected from deterioration, are weatherproof and watertight, and are free of holes, breaks, and loose or rotting materials.   | <input type="checkbox"/> | <input type="checkbox"/> |

|      |   |                                      |                          |
|------|---|--------------------------------------|--------------------------|
| 2.5  | * <b>Roofs and Drainage:</b> The roof and flashing is sound, water tight, and does not have defects that admit rain. Roof drainage is adequate to prevent dampness or deterioration in the walls or interior portion of the structure. Roof drains, gutters, and downspouts are maintained in good repair. Roof water shall flow away from the building and away from adjacent property and is not to be discharged in a manner that creates a public nuisance.   | <input type="checkbox"/>             | <input type="checkbox"/> |
| 2.6  | * <b>Windows and Skylights:</b> Every window and skylight is in sound condition, good repair and weather tight. Openable windows are easily openable and capable of being held in position by widow hardware. All glazing is free of cracks or holes.<br><br>Note: If unmodified, glazing shall be in conformance with installation and location standards in place at the time of construction.  | <input type="checkbox"/>             | <input type="checkbox"/> |
| 2.7  | * <b>Doors:</b> Every door is in sound condition, good repair and weather tight. Glazing in doors shall be free of cracks or holes. Doors with locks are easily operable and secure the door tightly. Doors providing access/egress to a dwelling unit are equipped with a deadbolt lock designed to be readily openable from the side from which egress is to be made without need for keys, special knowledge or effort, except where the door hardware conforms to that permitted by the International Residential Code.<br><br>Note: If unmodified, glazing shall be in conformance with installation and location standards in place at the time of construction.  | <input type="checkbox"/>             | <input type="checkbox"/> |
| 2.8  | * <b>Stairs and Decks:</b> Every exterior stairway, deck, porch, balcony, and all appurtenances attached thereto, are maintained structurally sound, in good repair, with proper anchorage, and capable of supporting the imposed loads. Components are complete and adequately protected from decay.   | <input type="checkbox"/>             | <input type="checkbox"/> |
| 2.9  | * <b>Handrails and Guards:</b> Every exterior handrail and guard is firmly fastened and capable of supporting normally imposed loads and is maintained in good condition. Components are complete and adequately protected from decay. Every stair that has four or more risers shall have a handrail on one side of the stair and every portion of stair, landing, balcony, porch, deck, ramp or other walking surface that is more than 30" above the floor or grade shall have guards. Rails and guards shall comply with the code in place at time of construction.<br><br>Note: If modified, rails and guards shall comply with typical standards: Rails- 34-38" in height measured vertically above the nosing of the tread or finished floor of the landing or walking surface; Guards- not less than 36" in height measured above the floor or walking surface. | <input type="checkbox"/>             | <input type="checkbox"/> |
| 2.10 | <b>Chimney:</b> Chimneys or similar appurtenances are maintained structurally safe and sound, and in good repair.   | <input type="checkbox"/> Not Present | <input type="checkbox"/> |

Comments or corrective actions:

| 3. | Means of Egress   | Pass                     | Fail                     |
|----|---|--------------------------|--------------------------|
|    | * <b>Egress:</b> A safe, continuous and unobstructed path of travel is provided from any point in building or structure to an egress door without traveling through a garage. The egress door shall have a clear width of not less than 32" and height not less than 78" and shall open to the public way. Means of egress shall comply with the International Fire Code.   | <input type="checkbox"/> | <input type="checkbox"/> |
|    | * <b>Emergency Escape Openings:</b> Basements, habitable attics and sleeping rooms shall have not less than one operable emergency escape and rescue opening. Required emergency escape openings shall be maintained in accordance with the code in effect at the time of construction and shall be in accordance with the International Existing Building Code. Emergency escape and rescue openings shall be operational from the inside of the room without the use of keys or tools. Bars, grilles, grates or similar devices permitted provided the minimum net clear opening complies with the code in effect at time of construction and such devices are releasable or removable from interior without use of key, tool or force greater than that required for normal operation. Emergency openings shall be not more than 44" from the floor and have a net clear opening of 5.7 sf with a minimum height of 24" and minimum width of 20" (openings at grade or below grade shall be allowed a net clear opening of 5 sf). Window wells shall have a horizontal projection and width no less than 36" in either direction and shall be equipped with a permanently affixed compliant ladder if depth exceeds 44". | <input type="checkbox"/> | <input type="checkbox"/> |

|                                 |  |                          |                          |
|---------------------------------|--|--------------------------|--------------------------|
| Comments or corrective actions: |  |                          |                          |
| 4.                              | Interior Building Conditions   | Pass                     | Fail                     |
| 4.1                             | <b>*Structural Components/Members:</b> Structural components/members are structurally sound, free of deterioration, are properly anchored, and are capable of safely supporting the imposed loads.   | <input type="checkbox"/> | <input type="checkbox"/> |
| 4.2                             | <b>Interior Surfaces:</b> Interior surfaces, including windows and doors, are maintained in good, clean and sanitary condition. The interior is free of peeling/chipping, flaking or abraded paint; loose or damaged plaster/sheetrock; decayed wood or other defective surface conditions present that would exceed a combined 4 sf.  | <input type="checkbox"/> | <input type="checkbox"/> |
| 4.3                             | <b>*Stairs and Walking Surfaces:</b> Every stair, ramp, landing, balcony, porch or other walking surface is maintained in sound condition and good repair.   | <input type="checkbox"/> | <input type="checkbox"/> |
| 4.4                             | <b>*Handrails and Guards:</b> Every handrail and guard is firmly fastened and capable of supporting normally imposed loads and is maintained in good condition. Handrail and guard shall comply with height and location as specified above in Exterior Building Conditions, Article 2.10.   | <input type="checkbox"/> | <input type="checkbox"/> |
| 4.5                             | <b>Interior Doors:</b> Every interior door is fit reasonably well within its frame and be capable of being opened and closed by being properly and securely attached to jambs, headers or tracks as intended by the manufacturer of the attachment hardware.   | <input type="checkbox"/> | <input type="checkbox"/> |
| 4.6                             | <b>*Ventilation:</b> All habitable spaces and bathrooms have not less than one openable window that complies with the International Property Maintenance Code (IPMC) or mechanical ventilation, provided the mechanical system is operational and is discharged to the outdoors and not recirculated.<br>Clothes dryer exhaust ventilation installed independent of other systems and vent directly to the exterior.   | <input type="checkbox"/> | <input type="checkbox"/> |
| 4.7                             | <b>Lighting:</b> All spaces shall be provided with natural or artificial light sufficient to permit the maintenance of sanitary conditions, and the safe occupancy of the space and utilization of the appliances, equipment and fixtures.   | <input type="checkbox"/> | <input type="checkbox"/> |
| 4.8                             | <b>*Fire -Resistance-Rated Assemblies (including Opening Protectives):</b> Required fire-resistance rating of fire-resistance-rated walls, fire stops, shaft enclosures, partitions and floors are maintained and in good, operable condition.   | <input type="checkbox"/> | <input type="checkbox"/> |
| 4.9                             | <b>*Smoke Detectors:</b> Smoke detectors must be installed in the following locations: 1) On the ceiling or wall outside each separate sleeping area in the immediate vicinity of bedrooms; 2) in each room used for sleeping purposes; and 3) in each story, including basements but not including crawl space and uninhabited attics. Smoke detectors to be maintained in good working order.<br>Note: Individual smoke detectors are not required were a building fire alarm system is installed and properly maintained in accordance with Section 907 of the International Fire Code. | <input type="checkbox"/> | <input type="checkbox"/> |
| 4.10                            | <b>*Carbon Monoxide Detectors:</b> Carbon monoxide detectors must be installed in the hallway centrally located outside all sleeping areas and at the top of and bottom of stairs and shall be maintained in good working order.   | <input type="checkbox"/> | <input type="checkbox"/> |
| 4.11                            | <b>*Rodents, Vermin or Insects:</b> The property is maintained so as to be free from infestation of rodents, vermin, insects or other pests.   | <input type="checkbox"/> | <input type="checkbox"/> |
| Comments or corrective actions: |  |                          |                          |
| 5.                              | Room Size/Requirements   | Pass                     | Fail                     |
| 5.1                             | <b>Minimum Room Width/Height:</b><br>Width- All habitable rooms, other than a kitchen, shall be not less than 7' in any dimension. Kitchens shall have a minimum clear passageway of 3' between counter fronts and appliances or counter fronts and walls.<br>Height- All habitable spaces, hallways, corridors, laundry areas, bathrooms, toilet rooms, and habitable basement areas shall have a minimum clear ceiling height of 7'.   | <input type="checkbox"/> | <input type="checkbox"/> |

|                                 |  |                          |                          |
|---------------------------------|--|--------------------------|--------------------------|
|                                 | Note: If room(s) remains unmodified from original construction, minimum room dimension may comply with code in place at time of construction.<br>Additional exemptions provided under Article 404.3 of the IPMC; Efficiency/Studio unit exemptions provided under Article 404.6 of the IPMC.   |                          |                          |
| 5.2                             | <b>Room Area:</b><br>Every living room shall not contain less than 120 sf and every bedroom not less than 70 sf.<br>Note: If room(s) remains unmodified from original construction, minimum room size may comply with code in place at time of construction.   | <input type="checkbox"/> | <input type="checkbox"/> |
| 5.3                             | <b>*Prohibited Use: Kitchens and non-habitable spaces are not being used for sleeping purposes.</b>  | <input type="checkbox"/> | <input type="checkbox"/> |
| 5.4                             | <b>*Food Preparation: All spaces used for food preparation contain suitable space and equipment to store, prepare and serve foods in a sanitary manner.</b>  | <input type="checkbox"/> | <input type="checkbox"/> |
| Comments or corrective actions: |  |                          |                          |
| 6.                              | <b>Heating &amp; Plumbing Systems</b>  | Pass                     | Fail                     |
| 6.1                             | <b>*Heat Source:</b> Dwelling is provided with heating facilities capable of maintaining a room temperature of 68°F in all habitable rooms, bathrooms, and toilet rooms. Cooking appliances and portable unvented fuel-burning or electric space heaters are not to be used as a means to provide required heating.  | <input type="checkbox"/> | <input type="checkbox"/> |
| 6.2                             | <b>*Fuel-burning Appliances:</b> Any gas, wood, or fuel-burning appliance is of an approved type, properly installed, has gas shutoff valve within 3' of appliance, and maintained in safe working order.  | <input type="checkbox"/> | <input type="checkbox"/> |
| 6.3                             | <b>*Plumbing Connection:</b> Every plumbing fixture is properly connected to either a public water system or to an approved private water system, and to either a public sewer system or an approved private sewage disposal system.   | <input type="checkbox"/> | <input type="checkbox"/> |
| 6.4                             | <b>*Plumbing Lines:</b> All plumbing supply lines, waste lines, sewer lines, venting and plumbing stacks are functioning properly and are free from obstructions, leaks, or defects.   | <input type="checkbox"/> | <input type="checkbox"/> |
| 6.5                             | <b>*Plumbing Fixtures:</b> Dwelling unit has its own shower or bathtub, lavatory, water closet and kitchen sink. Lavatory is placed in the same room as the water closet or located in close proximity to the door leading directly into the room containing the water closet.   | <input type="checkbox"/> | <input type="checkbox"/> |
| 6.6                             | <b>*Plumbing Fixtures:</b> All plumbing fixtures, devices and appurtenances are functioning properly and have sufficient volume of water to function as designed. All fixtures are maintained in a safe and sanitary condition.  | <input type="checkbox"/> | <input type="checkbox"/> |
| 6.7                             | <b>*Water Closet Accessibility:</b> Every bedroom has access to at least one water closet and one lavatory without passing through another bedroom.  | <input type="checkbox"/> | <input type="checkbox"/> |
| 6.8                             | <b>*Water Heating Facilities:</b> Water heating facilities are properly installed, seismically secured ( <i>seismically secured</i> - anchored or strapped in upper one-third and lower one-third of appliance), and maintained and capable of providing an adequate amount of water to be drawn at every required sink, lavatory, bathtub, shower and laundry facility at a minimum temperature of 110° F and maximum temperature of 120° F.<br>An approved combination temperature and pressure-relief valve and relief valve discharge pipe (vented to outside to within 6" of ground, where required) shall be properly installed and maintained on all water heaters.<br>Gas-burning water heaters shall not be located in any bathroom, toilet room, bedroom, or other occupied room normally kept closed, unless adequate combustion air is provided.<br>Water heaters with an ignition source, where installed in a garage, shall have the ignition source elevated not less than 18" above floor ( <i>ignition source</i> - flame, spark or hot surface capable of igniting flammable vapors or fumes). | <input type="checkbox"/> | <input type="checkbox"/> |
| Comments or corrective actions: |  |                          |                          |
| 7.                              | <b>Electrical Systems</b>  | Pass                     | Fail                     |
| 7.1                             | <b>*Service:</b> The dwelling unit is served by a three-wire, 120/240 volt, single-phase electrical service having a minimum rating of 60 amperes. The electrical service panel is clearly   | <input type="checkbox"/> | <input type="checkbox"/> |

|                                 |  |                          |                          |
|---------------------------------|--|--------------------------|--------------------------|
|                                 | marked, has a protective face plate with no exposed knockouts or missing breakers/fuses, is clear of obstructions a minimum of 30" in front of panel, and is not located inside a closet.  |                          |                          |
| 7.2                             | <b>Receptacles:</b><br>All habitable spaces (i.e. spaces in structure for living, sleeping, eating or cooking) have at least two separate operable receptacles.  | <input type="checkbox"/> | <input type="checkbox"/> |
| 7.3                             | <b>Receptacles:</b> Laundry rooms shall have not less than one grounding-type receptacle or a receptacle with a ground fault circuit interrupter. Every bathroom shall have at least one receptacle. All bathroom outlets and kitchen outlets within 6' of a water source shall be protected by a ground fault circuit interrupter.  | <input type="checkbox"/> | <input type="checkbox"/> |
| 7.4                             | <b>*Receptacles:</b> All receptacle outlets have the appropriate faceplate cover for the location.   | <input type="checkbox"/> | <input type="checkbox"/> |
| 7.5                             | <b>*Electrical Hazards:</b> The dwelling unit is free of faulty electrical receptacles or switches, damaged or exposed wiring, improper wiring or improper fusing.   | <input type="checkbox"/> | <input type="checkbox"/> |
| 7.6                             | <b>*Electrical Hazards:</b> Flexible or extension cords are not used for permanent wiring, or for running through doors, windows, or cabinets, or concealed within walls, floors, or ceilings.   | <input type="checkbox"/> | <input type="checkbox"/> |
| 7.7                             | <b>*Luminaires:</b> Every hallway, interior stairway, toilet room, kitchen, bathroom, laundry room, boiler room and furnace room has not less than one operable electric luminaire. All habitable rooms must have an operable electric luminaire; bedrooms may have two outlets in place of luminaire.   | <input type="checkbox"/> | <input type="checkbox"/> |
| Comments or corrective actions: |  |                          |                          |
| 8.                              | Fire Safety  | Pass                     | Fail                     |
| 8.1                             | <b>*Storage of Fueled Equipment:</b> Fueled equipment is not stored, operated or repaired within the building; except in rooms constructed for such use or where approved by the fire code official and the fuel capacity does not exceed 10 gallons and the building is equipped throughout with an automatic sprinkler system.   | <input type="checkbox"/> | <input type="checkbox"/> |
| 8.2                             | <b>*Storage of Fueled Equipment:</b> Vehicles powered by flammable liquids, Class II combustible liquids or compressed flammable gases are not stored within the living space.   | <input type="checkbox"/> | <input type="checkbox"/> |
| Comments or corrective actions: |  |                          |                          |
| 9.                              | Swimming Pools, Spas, and Hot Tubs <input type="checkbox"/> Not Applicable   | Pass                     | Fail                     |
| 9.1                             | <b>General:</b> Pools, spas and hot tubs are maintained in a clean and sanitary condition, and in good repair.   | <input type="checkbox"/> | <input type="checkbox"/> |
| 9.2                             | <b>*Enclosures:</b> Pools containing more than 24" in depth are completely surrounded by a fence or barrier not less than 48" in height above the finished ground level measured on the side of the barrier away from the pool. Gates are self-closing and self-latching (gate shall positively close and latch when released from an open position of 6" from the gatepost). Where self-latching device is less than 54" above the bottom of the gate, the releasing mechanism shall be located on the pool side of the gate. Hot tub or spa shall be equipped with a cover that complies with ASTM F 1346. | <input type="checkbox"/> | <input type="checkbox"/> |
| 9.3                             | <b>Luminaires:</b> Pool and spa luminaires over 15 V shall have ground fault circuit interrupter protection.   | <input type="checkbox"/> | <input type="checkbox"/> |
| Comments or corrective actions: |  |                          |                          |

## INSPECTION RESULT

Pass

Fail – Corrections needed

Reinspection required by \_\_\_\_\_  
(date)

**Uninhabitable:** A structure/building shall be considered uninhabitable if it meets the following definition: IBC [A] 116.1 Conditions. Structures or equipment that are or hereafter become unsafe, insanitary or deficient because of inadequate means of egress, inadequate light and ventilation, or that constitute a fire hazard, or are otherwise dangerous to human life or the public welfare, or that involve illegal or improper occupancy or inadequate maintenance.

Note: A structure/building that is determined to be uninhabitable is required to be inspected by the City of Othello.

**Certification of Inspection:** By my signature, I certify that I have personally inspected this property and that this dwelling  does  does not comply with the standards set forth in the City of Othello Rental Housing Safety Inspection Program as authorized by OMC 4.40. I also understand that knowingly submitting a falsified certificate of inspection is a gross misdemeanor punishable by a fine up to five thousand dollars (\$5000). I hereby certify under penalty of perjury under the laws of the State of Washington that the foregoing is true and correct.

|                     |            |                           |
|---------------------|------------|---------------------------|
| Inspector Signature | Print name | Date & Place of Signature |
|---------------------|------------|---------------------------|

**Submittal of Inspection:** By my signature, I certify that I am authorized to submit the information provided in this checklist to the City of Othello in accordance with the City of Othello Rental Housing Safety Inspection Program as authorized by OMC 4.40. I understand this rental property must comply with all the provisions of the Rental Housing Safety Inspection Program and that I will be required to submit a certificate of inspection no later than once every three years for this property. I also understand that knowingly submitting a falsified certificate of inspection is a gross misdemeanor punishable by a fine up to five thousand dollars (\$5000). I hereby certify under penalty of perjury under the laws of the State of Washington that the forgoing is true and correct.

|                 |            |                           |
|-----------------|------------|---------------------------|
| Owner Signature | Print name | Date & Place of Signature |
|-----------------|------------|---------------------------|

#### Permit and Inspection May Be Required

Note: Correction of failed inspection items involving electrical, plumbing, mechanical, or structural systems and their components may require permits and inspections. Please verify with your utility provider for electrical and gas repairs and the City of Othello Building & Planning Department for mechanical, heating, plumbing, or structural repairs if a permit is necessary.

TO: Planning Commission

FROM: Anne Henning, Community Development Director

MEETING: January 19, 2021

SUBJECT: Traffic Calming – Discussion

At the January 7, 2021 special meeting, the Planning Commission requested information about traffic calming and making streets safer.

### **Staff Comments**

1. A few definitions of traffic calming:
  - a. “A system of design and management strategies that aim to balance traffic on streets with other uses”—Project for Public Spaces
  - b. “The combination of mainly physical measures that reduce the negative effects of motor vehicle use, alter driver behavior, and improve conditions for non-motorized street users” –Institute of Traffic Engineers
  - c. “The primary purpose of traffic calming is to support the livability and vitality of residential and commercial areas through improvements in non-motorist safety, mobility, and comfort. These objectives are typically achieved by reducing vehicle speeds or volumes on a single street or a street network. Traffic calming measures consist of horizontal, vertical, lane narrowing, roadside, and other features that use self-enforcing physical or psycho-perception means to produce desired effects”—Federal Highway Administration
  - d. Four-minute video on traffic calming:  
<https://www.youtube.com/watch?v=bkz026kKpRU>
2. As shown on the attached “Traffic Calming Fact Sheet”, traffic calming measures can be divided into 4 main categories:
  - a. Horizontal deflection—changing the straight path of the street. Examples: chicane, traffic circle.
  - b. Vertical deflection—changing the height of the street. Examples: Speed table, raised crosswalk.
  - c. Street width reduction—narrowing the street. Examples: Bulb-out, median island.
  - d. Routing restriction—keeping some vehicles out. Examples: Street closure, median barrier.
3. Descriptions of various traffic calming measures can be found at multiple sources including the following:
  - a. The attached fact sheets are downloaded from the Institute of Transportation Engineers Traffic Calming Measures page at <https://www.ite.org/technical-resources/traffic-calming/traffic-calming-measures/>

- b. Federal Highway Administration Office of Safety Programs “Traffic Calming ePrimer” at [https://safety.fhwa.dot.gov/speedmgt/traffic\\_calm.cfm](https://safety.fhwa.dot.gov/speedmgt/traffic_calm.cfm) . See Module 3, Toolbox of Individual Traffic Calming Measures.
  - c. Project for Public Spaces “Traffic Calming 101” at <https://www.pps.org/article/livememtraffic#THE%20TRAFFIC%20CALMING%20TOOLBOX>
  - d. Arroyo Grande, CA “Neighborhood Traffic Calming Guidelines” at <https://www.arroyogrande.org/DocumentCenter/View/3153/Neighborhood-Traffic-Calming-Guidelines-PDF>
4. Information on traffic safety specific to Othello and Washington was included in the Jan. 7 packet so is duplicated here. The Jan. 7 packet is available on the Calendar of the City’s website, by clicking on the meeting date at <https://www.othellowa.gov/calendar>
5. At the Jan. 7 meeting, the Commission asked for stop sign information specific to Othello. The “Othello Stop Sign Warrant Report” was included in the Jan. 7 packet. This report was prepared for the city by the transportation division of [T-O Engineers](#). The city was awarded a grant by [QUADCO](#), our regional transportation planning organization, to prepare this study. The Council held a public hearing on this report September 14, 2020. There were no comments from the public.

#### Attachments

- Traffic Engineers’ Epic Fail (Strong Towns)
- Designing Safe Streets and Neighborhoods (Local Government Commission Center for Livable Communities)
- Traffic Calming Fact Sheets, Introduction and description of each type (Institute of Transportation Engineers)
- 2 Photos Reveal Why the Key to Slowing Traffic is Street Design, Not Speed Limits (Strong Towns)

**Action:** The Commission should discuss traffic calming and provide direction to staff.

# Traffic Engineers' Epic Fail

Jon Larsen · April 25, 2017

Jon Larsen is a Strong Towns member and professional engineer. Today's guest article discusses the engineer's responsibility to design safe streets for everyone.

This last week, a junior high student was hit and killed in Syracuse, Utah while crossing the street at a crosswalk in front of his junior high school.

This story hits home to me for two reasons. First, I have a son this same age who I absolutely adore, and I can't imagine how bad it would hurt to lose him, especially in such a senseless way. Second, I believe that my profession (traffic engineering) has failed this young man, his family, his school, his community, and hundreds like them throughout this state and region. There's no other way to put it: This is failure. Epic failure. Someday as a profession and as a society, we will stop giving lip service to the concept of "Zero Fatalities" and make real change. I'm hoping it's sooner than later.

Let's take a look specifically at how we failed in this situation.





Image from Google Maps

There is an elementary school and a junior high school across the street from each other. This street should be one of the safest streets in the city. But it isn't.

A quick physics lesson: The force of impact from a car increases quadratically with speed. This means that doubling the speed quadruples the force of the impact. The statistics bear this out. A 40 mph street is about 5 times more deadly than at 20 mph street (see chart below).

Considering that kids are coming and going from these schools throughout the day due to extracurricular activities, etc., you would think that the permanent speed limit would be 20 mph. Maybe 25 mph. Nope. The speed limit on this street is 40 mph. Refer again to the chart as to why 40 mph is so much worse than 20 mph.



Source: [FHWA](#)

It gets worse. Some years ago, for my master's project, I looked at the impact of speed limits on the speed that people actually drive. In nearly every case, there was no correlation. Drivers choose their speed (without really even thinking about it) based on the design of the street, not the posted speed limit. The street separating these two schools in Syracuse was designed for speed, which means it was designed to kill.

I have no doubt that the driver who killed this young man meant no harm, but made



when crossing the street, but perhaps wasn't cautious enough. Obviously, human

error was at play. But the consequence for minor lapses in judgment shouldn't be death.



Image from Google Earth

This street is long, straight, and wide. Everything about this design tells the driver, "Go ahead, drive fast. It will be OK." Meanwhile, children are crossing at a marked crosswalk, lulled into a false sense of security. As a human being, and as a teenage boy in particular, the young man who was killed here was challenged in judging the speed of oncoming cars and the risk they pose to his safety. We set these kids up for failure in a big way, and we do this again and again all over the region and the country.

What's the solution? There are numerous other “traffic calming” treatments that could be added to this street, none of which really cost that much, especially when compared to the precious young lives that are at stake. If we can afford to add new



That said, the best, most lasting solution is to narrow the street until it's uncomfortable to drive fast. There have been some previous Strong Towns posts on the virtues of narrow streets. The benefits go well beyond safety, as articulated in ["Narrow Streets do More with Less,"](#) and ["Some Thoughts on Narrow Streets."](#)

I'm calling out my entire profession. This is a systemic issue, a tragic case of groupthink gone wrong. The change needs to come from the highest levels of leadership all the way down the chain. Just as important, change needs to come from policy makers (i.e. elected officials) who make it crystal clear that safety is more important than speed. The change needs to come from an educated public that understands this tradeoff and is OK with it. Until that happens, the tragedies will continue.

## Related stories



### Best of 2020: An Ordinary Intersection

An accidental photo essay courtesy of Street View provides us a look at the appallingly low standard for what we expect people who walk in suburbia to put up with.

Dec 17, 2020 ·  
Daniel Herriges



### Now Is the Time to End Traffic Fatalities. Here's a Simple Plan to Do It.

We've engineered our streets for high performance when we should be engineering them for safety. Now's the time to unwind the mess. Here's how to do it.



### Diverging Diamonds: Still Not the Pedestrian's Best Friend

Diverging diamonds are forever, apparently. But don't say they're *for* pedestrians.

Jun 15, 2020 ·  
Charles Marohn

## Caught in the Crosswalk

In *Caught in the Crosswalk*, the Surface Transportation Policy Project highlights some disturbing facts about pedestrian safety in California:

"Motor vehicle collisions are the leading cause of accidental death in California, resulting in over 3,000 fatalities every year."

"More than 20% of these deaths involve pedestrians" despite the fact that the number of people walking in our communities is on the decline. Children are especially vulnerable. "Being hit by a car while walking is the second leading cause of death for California children aged 5-12. Statewide, nearly 5,000 child pedestrians are injured annually."

Pedestrians often get short shrift in the traditional transportation planning process. "California pedestrians account for more than 20% of all traffic fatalities but receive less than one percent of federal traffic safety funding."

For information on this 1999 report, visit [www.transact.org](http://www.transact.org).



**Local Government Commission  
Center for Livable Communities**

1414 K St., Suite 250  
Sacramento, CA 95814-3966  
tel (916) 448-1198  
fax (916) 448-8246  
web [www.lgc.org](http://www.lgc.org)

# Designing Safe Streets and Neighborhoods

One of the difficulties in creating more walkable and bicycle-friendly neighborhoods is the concern over safety. Good design can help overcome some of the fears over personal safety and being victimized by crime, as a companion fact sheet explains. But of equal concern is the sense that many of our streets and avenues – even in residential neighborhoods – are not safe to walk or ride on because they are designed solely to move motor vehicles in large volumes and at high speeds.

**This perception is real: a disproportionately large number of pedestrians are killed and injured in California each year.** Children and seniors, the most vulnerable users of streets and sidewalks, are often at greatest risk.

What accounts for these numbers? Why are we seeing such a disproportionately high number of fatalities and injuries among pedestrians?

While a number of factors are responsible – including the minimal amount of funding for pedestrian safety projects – the way we have been designing and building our communities during the past 50 years lies at the root of the problem.

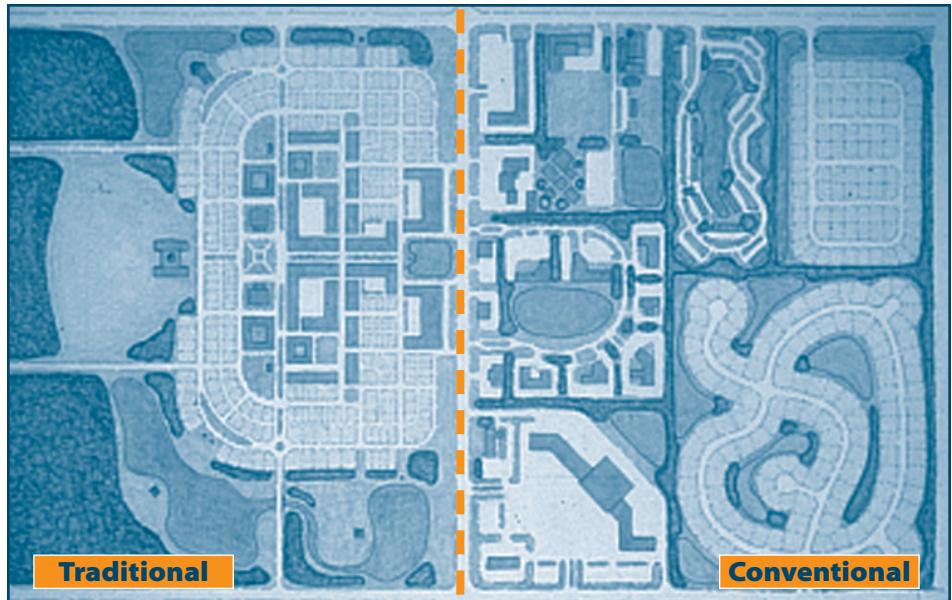


We have separated the places where we work from the places where we shop, and both have been separated from the places where we live. The only way to get from one point to another is by driving. It is no wonder that the typical U.S. household makes 10-14 vehicle trips every day.

# Poor Planning Results in Dangerous Streets

## Traditional vs. Conventional Patterns of Development

In the 1920s, zoning for separate uses became the basic tenet of modern city planning. Planners and others concerned with the public's health correctly argued that placing noxious, polluting industries close to where people lived was not a good thing. But, unfortunately, in the decades that followed the idea of separating uses was taken to an extreme and we started to treat retail and office uses as if they were noxious uses as well. As a result, today we need a 2,000-pound car to pick up a one pound loaf of bread.



As we've spread out more in this low-density sprawl pattern, we are driving more and driving longer distances. While California's population grew by 51% from 1970 to 1990, vehicle miles traveled increased by 117%. In addition to spreading out further and driving longer distances, we are also relying more and more on our cars for simple errands that we used to be able to do by walking.

We can gain a better understanding of how this has happened by comparing plans of two communities, a conventional one built after 1950 and a traditional one built in the 1920s.

The left side of the plan above shows the traditional pattern of development, the right shows the conventional. Each contains the same square footage of residential, commercial, retail, educational, and other uses. The only difference is how those uses are arranged. In the conventional pattern, different uses are strictly separated and neighborhood collector and local streets do not connect.

In the traditional pattern different uses are in close proximity to one

another and are laid out in shorter, connected blocks.

In the conventional neighborhood, a parent taking a child to the soccer field in the upper part of the diagram will have to make four trips (drop off, go home, pick up child and go home). All those trips will require getting on an arterial roadway and will increase the likelihood of traffic accidents.

Of course, retailers see tens of thousands of vehicles on the arterial and also want to locate there. Traffic engineers respond by building 8- and 10-lane arterials to handle the traffic. In the process we create large, congested roadways and an environment that is inhospitable for pedestrians and bicyclists.

In the traditional neighborhood, many of these trips are internal and don't impact arterial or regional roadways. And, because different uses are closer to one another, most of these trips are short enough that they can be made by walking or riding a bicycle. Short blocks and narrow, tree-lined streets encourage people to walk.



Traditional residential streets are narrow because the blocks are short, they don't have many houses on them and traffic volume is low. The narrow streets, and the placement of trees and houses closer to the street, slow cars down and create a comfortable environment for pedestrians.



Conventional streets are long, carry more traffic and are so wide that they encourage drivers to speed. Sidewalks are often attached to the curb and trees and houses are set back from the street so there is no buffer for pedestrians. As a result people don't feel safe and comfortable walking on these streets.

**"Several local jurisdictions are striving to make pedestrians a priority by improving sidewalks, slowing traffic, making crosswalks more visible...the more typical response to concerns about pedestrian safety is to remove crosswalks and let pedestrians fend for themselves."**

— *Caught in the Crosswalk*, 1999

## Speed Kills

**W**e can see that something is wrong with the way we are designing our residential streets in the fact that over half of all pedestrian fatalities occur on roadways that run through residential neighborhoods. (*STPP, Mean Streets, 1997*)

As streets get wider, drivers instinctively accelerate. Research has shown that wider streets – which encourage people to drive too fast – are also the streets that result in more crashes. As speeds go up, the risk to pedestrians and bicyclists increases significantly.

Aggressive enforcement of traffic speeding and other motor vehicle laws can help insure that drivers slow down and respect other users of the road.

However, if a street is designed to encourage drivers to travel at 45 mph instead of the posted 35 mph, police are often at a loss. First of all, police can't be present at all times.

Secondly, traffic enforcement agencies that try to address speeding on arterial and residential streets are often hamstrung by state laws which require that speed limits not

### WIDER STREETS = MORE CRASHES = MORE FATALITIES

**I**n 1999, planner Peter Swift studied approximately 20,000 police accident reports in Longmont, Colorado, to try to determine which of 13 physical characteristics at each accident location (e.g., width, curvature, sidewalk type, etc.) might account for the crash. The results are not entirely surprising: The highest correlation was between accidents and the width of the street. As streets got wider the number of accidents per mile per year increased. **The safest streets were narrow, slow, 24-foot wide streets; the most dangerous were 36-foot wide streets typical of new subdivisions.**

As one would expect, deaths and injuries to pedestrians increase significantly as the speed of motor vehicles goes up. The reason is obvious: As vehicle speeds increase a driver's ability to respond to danger is substantially reduced. But the relationship is not linear. At 15 mph, a vehicle will be able to stop forward movement in 73 feet. But double the speed to 30 mph, and it will take 196 feet. **At 40 mph, it will take over four times the distance for the car to stop.**

So, what happens when a person is hit at these speeds? At 15 mph, the odds of surviving are approximately 96%. But when a person is hit by a car traveling at 31 mph, the odds are significantly reduced. **And at 45 mph the odds of survival are just 17%.** (Source: *ITE, Traditional Neighborhood Development Street Design Guidelines, June 1997*)

be set any lower than the actual speed of 85% of the vehicles on a given street. This "85th percentile" law — adopted to prevent municipalities from setting up so-called "speed traps" — helps insure that high-speed streets are a self-fulfilling prophecy.

**"Often pedestrians are not even seen as legitimate users of the road. Until recently they were referred to as 'traffic flow interruptions' in the Highway Capacity Manual, the primary road design reference book for traffic engineers."**

— *Caught in the Crosswalk*, Surface Transportation Policy Project, 1999

## Solutions

**S**o how do we address these problems? One way is to make sure that when we design new communities we incorporate all the elements that result in a livable, pedestrian- and bicycle-friendly neighborhood.

**Healthy Street Design.** The Ahwahnee Principles for Livable Communities are a good place to start. They call for complete communities with a mix of uses, a central focus, walkable destinations, multiple connections and a mix of housing types and densities to support transit. In these communities –

based on the design of older traditional neighborhoods – we have to make sure that the streets are also well-designed: with short blocks, narrow, tree-lined streets with on-street parking and sidewalks that are at least five feet wide. (For more details, see the LGC's *Street Design Guidelines for Healthy Communities*.)

We can also retrofit some streets and arterials in conventional neighborhoods to slow down the speed of vehicles and improve the safety of pedestrians through what is known as "traffic calming."

Traffic calming slows vehicles on streets where drivers travel at higher speeds than is desirable. It is a way to reduce the negative effects of motor vehicles, alter driver behavior and improve conditions for the property owner, retailer, walker and bicyclist.

**Traffic Calming.** Traffic calming techniques consist of relatively simple physical changes to streets and sidewalks that help slow down vehicle speed and improve conditions for pedestrians and cyclists. For example, adding a landscaped median to a street that is too wide will not only slow down the cars but will create a refuge for pedestrians trying to cross the street. Traffic calming yields significant safety benefits. For example, adding small traffic circles at intersections resulted in the following reductions in crashes: 77% in Seattle, 58% in Portland, OR and 82% in Vancouver, BC. Curb extensions in Vancouver reduced crashes by 75% and narrowing streets reduced accidents by 74%. (Source: British Columbia Insurance Corporation, *Safety Benefits of Traffic Calming*, 1996) For a detailed discussion, see the LGC's *Streets and Sidewalks, People and Cars: The Citizens' Guide to Traffic Calming*.

# Focus on Livable Communities

## RESOURCES

"The Ahwahnee Principles for More Livable Communities." Local Government Commission. 1991. [www.lgc.org](http://www.lgc.org)

"Caught in the Crosswalk." Surface Transportation Policy Project. 1999. [www.transact.org](http://www.transact.org)

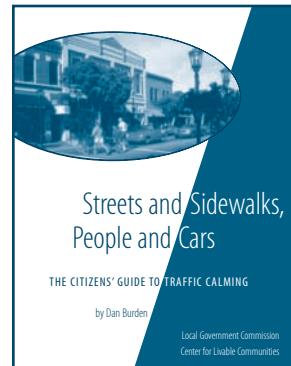
Burden, Dan. "Street Design Guidelines for Healthy Neighborhoods." Local Government Commission. January 1999. [www.lgc.org](http://www.lgc.org)

Burden, Dan. "Streets and Sidewalks, People and Cars: The Citizens' Guide to Traffic Calming." April 2000. [www.lgc.org](http://www.lgc.org)

"Mean Streets." Surface Transportation Policy Project. 1997. [www.transact.org](http://www.transact.org)

"Residential Street Typology and Injury Accident Frequency." Swift and Associates. February 1998. (303) 772-7052.

Traditional Neighborhood Development: Street Design Guidelines. Institute of Transportation Engineers. October 1999. [www.ite.org](http://www.ite.org)



This project is funded by the Physical Activity and Health Initiative, California Department of Health Services under a Preventive Health Services Block Grant from the U.S. Centers for Disease Control and Prevention. Work performed as part of a UC San Francisco contract.

# Introduction

## Purpose:

The purpose of these fact sheets is to provide transportation practitioners, public agencies, and the general public general facts and information regarding the most popular traffic calming measures used today. ITE and the Federal Highway Administration (FHWA) recently produced a Traffic Calming ePrimer (web link shown below), which documents the results of several decades of traffic calming experience in the United States, presenting a thorough review of current traffic calming practices. These fact sheets summarize information presented in the ePrimer.

**ITE/FHWA Traffic Calming EPrimer:** [https://safety.fhwa.dot.gov/speedmgt/traffic\\_calm.cfm](https://safety.fhwa.dot.gov/speedmgt/traffic_calm.cfm)

## Traffic Calming Measures Included:

A **horizontal deflection** hinders the ability of a motorist to drive in a straight path by creating a horizontal shift in the roadway. This shift reduces the ability of a motorist to maintain speed while comfortably navigating the measure.

- Lateral shift
- Chicane
- Realigned Intersection
- Traffic Circle
- Small Modern Roundabout/Mini-Roundabout
- Roundabout

A **vertical deflection** creates a change in the height of the roadway that typically forces a motorist to slow down to maintain an acceptable level of comfort.

- Speed Hump
- Speed Cushion
- Speed Table
- Raised Crosswalk
- Raised Intersection

A **street width reduction** narrows the width of a vehicle travel lane or roadway, so a motorist likely needs to slow the vehicle to maintain an acceptable level of comfort and safety. The measure can also reduce the distance required for pedestrian crossings, reducing exposure to vehicular conflicts.

- Corner Extension/Bulb-Out
- Choker
- Median Island
- On-Street Parking
- Road Diet

A **routing restriction** prevents particular vehicle movements at an intersection and is intended to eliminate some portions of cut-through traffic.

- Diagonal Diverter
- Closure
- Median Barrier/Forced Turn Island

## Measures Not Included:

A variety of other measures have been part of traffic calming efforts in jurisdictions throughout the United States. These measures are not included in these fact sheets for a variety of reasons, including:

- The measure is a standard traffic control measure typically used for improving traffic flow and has a secondary benefit for non-motorist safety
- The measure produces only a temporary benefit
- The measure requires additional enforcement beyond typical activities
- The measure has minimal or no measurable effect on vehicle speed or non-motorist safety

The excluded measures include:

- Signs
- Pavement Markings
- Gateways
- Corner Radius Reductions
- Textured Pavements and/or Rumble Strips
- Streetscaping/Landscaping

Although these fact sheets focus on mostly physical measures to calm traffic, non-physical measures can also be effective as part of traffic calming efforts. For example, education and enforcement efforts have long been used as part of neighborhood traffic calming programs and should continue to be considered as either supplements to self-enforcing physical means or as precursors to physical measures.

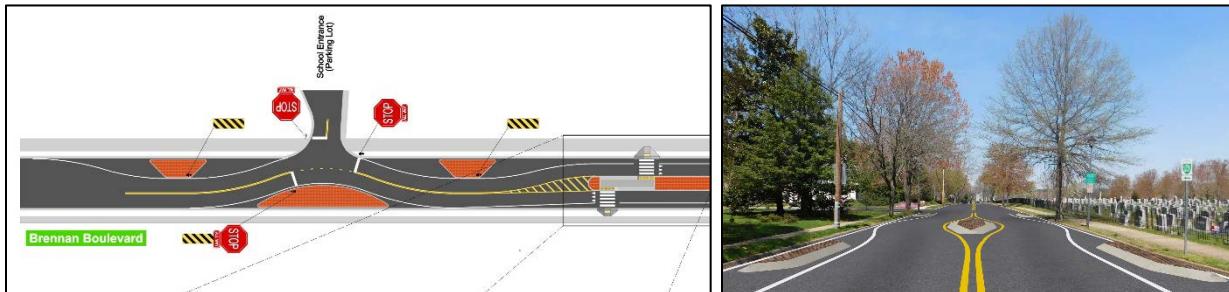
# Chicane

## Description:

- A series of alternating curves or lane shifts that force a motorist to steer back and forth instead of traveling a straight path
- Also called deviations, serpentines, reversing curves, or twists

## Applications:

- Appropriate for mid-block locations but can be an entire block if it is relatively short
- Most effective with equivalent low volumes on both approaches
- Appropriate speed limit is typically 35 mph or less
- Typically, a series of at least three landscaped curb extensions
- Can use alternating on-street parking from one side of a street to the other
- Applicable on one-lane one-way and two-lane two-way roadways
- Can be used with either open or closed (i.e. curb and gutter) cross-section
- Can be used with or without a bicycle facility



(Source: Delaware Department of Transportation)

**ITE/FHWA Traffic Calming EPrimer:** [https://safety.fhwa.dot.gov/speedmgt/traffic\\_calm.cfm](https://safety.fhwa.dot.gov/speedmgt/traffic_calm.cfm)

## Design/Installation Issues:

- Chicanes may still permit speeding by drivers cutting straight paths across the center line
- Minimize relocation of drainage features
- May force bicyclists to share travel lanes with motor vehicles
- Maintain sufficient width for ease of emergency vehicles and truck throughput

## Potential Impacts:

- No effect on access, although heavy trucks may experience challenges when negotiating
- Limited data available on impacts to speed and crash risk
- Street sweeping may need to be done manually
- Minimal anticipated volume diversion from street
- May require removal of some on-street parking
- Provides opportunity for landscaping
- Unlikely to require utility relocation
- Not a preferred crosswalk location
- Bus passengers may experience discomfort due to quick successive lateral movements

## Emergency Response Issues:

- Appropriate along primary emergency vehicle routes

## Typical Cost (2017 dollars):

- Reported costs range between \$8,000 and \$25,000

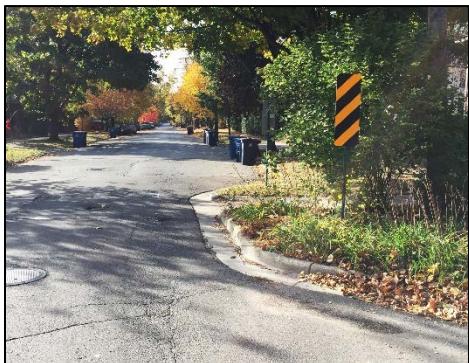
# Choker

## Description:

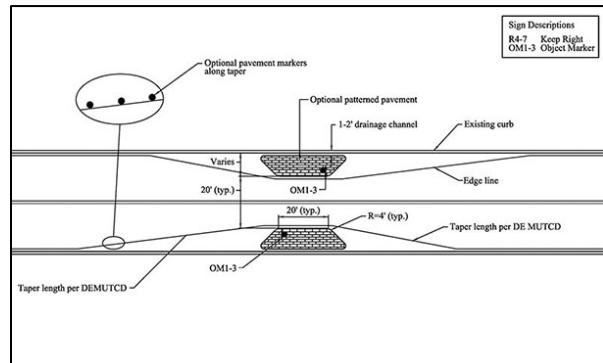
- Curb extension is a lateral horizontal extension of the sidewalk into the street, resulting in a narrower roadway section
- If located at an intersection, it is called a corner extension or a bulb-out
- If located midblock, it is referred to as a choker
- Narrowing of a roadway through the use of curb extensions or roadside islands

## Applications:

- Can be created by a pair of curb extensions, often landscaped
- Encourages lower travel speeds by reducing motorist margin of error
- One-lane choker forces two-way traffic to take turns going through the pinch point
- If the pinch point is angled relative to the roadway, it is called an angled choker
- Can be located at any spacing desired
- May be suitable for a mid-block crosswalk
- Appropriate for arterials, collectors, or local streets



(Source: City of An Arbor, Michigan)



(Source: Delaware DOT)

**ITE/FHWA Traffic Calming EPrimer:** [https://safety.fhwa.dot.gov/speedmgt/traffic\\_calm.cfm](https://safety.fhwa.dot.gov/speedmgt/traffic_calm.cfm)

## Design/Installation Issues:

- Only applicable for mid-block locations
- Can be used on a one-lane one-way and two-lane two-way street
- Most easily installed on a closed-section road (i.e. curb and gutter)
- Applicable with or without dedicated bicycle facilities
- Applicable on streets with, and can protect, on-street parking
- Appropriate for any speed limit
- Appropriate along bus routes
- Typical width of 6 to 8 feet; offset from through traffic by approximately 1.5 feet
- Locations near streetlights are preferable
- Length of choker island should be at least 20 feet

## Potential Impacts:

- Encourages lower speeds by funneling it through the pinch point
- Can result in shorter pedestrian crossing distances if a mid-block crossing is provided
- May force bicyclists and motor vehicles to share the travel lane
- May require some parking removal
- May require relocation of drainage features and utilities

## Emergency Response Issues:

- Retains sufficient width for ease of use for emergency vehicles

## Typical Cost (2017 dollars):

- Between \$1,500 and \$20,000, depending on length and width of barriers

# Closure

## Description:

- **Half closures** are barriers that block travel in one direction (creates a one-way street) for a short distance on otherwise two-way streets; sometimes called partial closures or one-way closures
- **Full-street closures** are barriers placed across a street to completely close the street to through-traffic, usually leaving open space for pedestrians and bicyclists; they are sometimes called cul-de-sacs, dead-ends, or mini-parks

## Applications:

- Appropriate for local streets (half and full), at intersection (half and full), or mid-block (full closure only)
- Typically applied only after other measures have failed or are deemed inappropriate or ineffective
- Typically found on closed-section roadways (i.e. curb and gutter)
- Can be applied with and without dedicated bicycle facilities and on roads with on-street parking
- Often used in sets to make travel through neighborhoods more circuitous
- Not appropriate along bus transit routes
- Can be used to assist crime prevention



(Source: James R. Barrera, Horrocks, New Mexico)

**ITE/FHWA Traffic Calming EPrimer:** [https://safety.fhwa.dot.gov/speedmgt/traffic\\_calm.cfm](https://safety.fhwa.dot.gov/speedmgt/traffic_calm.cfm)

## Design/Installation Issues:

- Potential legal concerns
- Can be placed at intersections or mid-block locations
- Barriers may consist of landscaped islands, walls, gates, side-by-side bollards, or other obstructions that result in openings smaller than the width of a typical passenger car
- Appropriate signing needed at entrances to full-closure street blocks
- May require modifications to maintain surface drainage capacity
- Should consider traffic diversion patterns and associated impacts
- Possible to make diverters passable for pedestrians and bicyclists

## Potential Impacts:

- Concerns regarding street network connectivity and capacity
- May result in traffic diverting to other local streets (should be used in groups/clusters)
- No significant impact on vehicle speeds beyond the closed block
- Can improve pedestrian crossing safety

## Emergency Response Issues:

- Full or half closures can increase response times and should not be used on roads/streets that provide access to hospitals or emergency medical services; half closures allow for a higher degree of emergency vehicle access than full closures
- Both closure types can be designed to allow emergency vehicle access with removable, or breakaway delineators or bollards, gates, mountable curbs, etc.

## Typical Cost (2017 dollars):

- **Full Closure** - <\$10,000 for simple closures, to \$100,000 for complex closures with drainage mods.
- **Half Closure** - \$3,000 for simple closure, to \$40,000 for complex closures with drainage mods.

# Corner Extension/Bulb-Out

## Description:

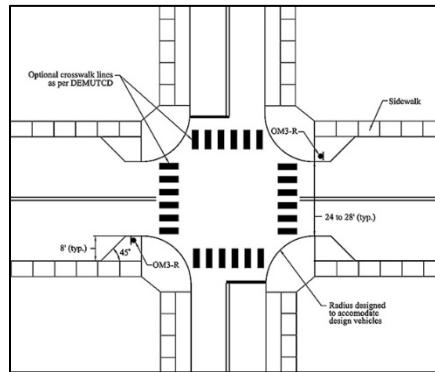
- Horizontal extension of the sidewalk into the street, resulting in a narrower roadway section
- If located at a mid-block location, it is typically called a choker

## Applications:

- When combined with on-street parking, a corner extension can create protected parking bays
- Effective method for narrowing pedestrian crossing distances and increase pedestrian visibility
- Appropriate for arterials, collectors, or local streets
- Can be used on one-way and two-way streets
- Installed only on closed-section roads (i.e. curb and gutter)
- Appropriate for any speed, provided an adequate shy distance is provided between the extension and the travel lane
- Adequate turning radii must be provided to use on bus routes



(Source: James Barrera, Horrocks, New Mexico)



(Source: Delaware DOT)

**ITE/FHWA Traffic Calming EPrimer:** [https://safety.fhwa.dot.gov/speedmgt/traffic\\_calm.cfm](https://safety.fhwa.dot.gov/speedmgt/traffic_calm.cfm)

## Design/Installation Issues:

- Effects on vehicle speeds are limited due to lack of deflection
- Must check drainage due to possible gutter realignment
- Major utility relocation may be required, especially drainage inlets
- Typical width between 6 and 8 feet
- Typical offset from travel lane at least 1.5 feet
- Should not extend into bicycle lanes

## Potential Impacts:

- Effects on vehicle speeds are limited due to lack of deflection
- Can achieve greater speed reduction if combined with vertical deflection
- Smaller curb radii can slow turning vehicles
- Shorter pedestrian crossing distances can improve pedestrian safety
- More pedestrian waiting areas may become available
- May require some parking removal adjacent to intersections

## Emergency Response Issues:

- Retains sufficient width for ease of emergency-vehicle access
- Shortened curb radii may require large turning vehicles to cross centerlines

## Typical Cost (2017 dollars):

- Cost between \$1,500 and \$20,000, depending on length and width of barriers

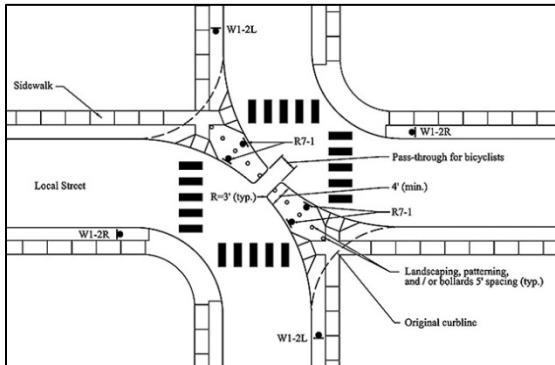
# Diagonal Diverter

## Description:

- Barriers placed diagonally across four-legged intersections, blocking through movements
- Sometimes called full diverters or diagonal road closures

## Applications:

- Typically applied only after other measures are deemed ineffective or inappropriate
- Provisions are available to make diverters passable for pedestrians and bicyclists
- Often used in sets to make travel through neighborhoods more circuitous



(Source: Delaware Department of Transportation)



(Source: PennDOT Local Technical Assistance Program)

**ITE/FHWA Traffic Calming EPrimer:** [https://safety.fhwa.dot.gov/speedmgt/traffic\\_calm.cfm](https://safety.fhwa.dot.gov/speedmgt/traffic_calm.cfm)

## Design/Installation Issues:

- Possible legal issues associated with closing public streets (e.g., business and/or emergency access)
- Can only be placed at intersections
- Can be used on both one-way and two-way streets
- Typically found on closed-section roads (i.e. curb and gutter)
- Typical maximum appropriate speed limit is 25 mph
- Maintain drainage as necessary to mitigate potential flooding
- Corner radii should be designed to allow full-lane width for passing motor vehicle traffic
- SU-30 default design vehicle
- Appropriate signing and pavement markings needed on approaches
- Openings for pedestrians and bicyclists should allow movement between all intersection legs
- Barriers may consist of landscaped islands, walls, gates, side-by-side bollards, or any other obstruction that leave an opening smaller than the width of a typical passenger car

## Potential Impacts:

- Concern regarding impacts to emergency response, street network connectivity, and capacity
- Should consider traffic diversion patterns and associated impacts
- No significant impacts on vehicle speeds beyond the approach to the diverter
- Not appropriate for bus transit routes
- Improved pedestrian and bicycle safety

## Emergency Response Issues:

- Should not be used on roads that provide access to hospitals or primary emergency services
- Restricts emergency vehicle access through intersections
- Can be designed to allow emergency vehicle access with removable, or breakaway delineators or bollards, gates, mountable curbs, etc.

## Typical Cost (2017 dollars):

- Typical cost of \$6,000 for diverter with limited drainage modifications

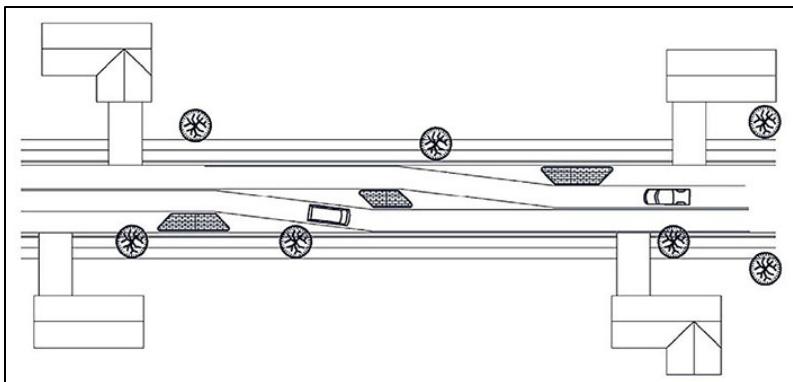
# Lateral Shift

## Description:

- Realignment of an otherwise straight street that causes travel lanes to shift in at least one direction
- A chicane is a variation of a lateral shift that shifts alignments more than once

## Applications:

- Appropriate for local, collector, or arterial roadways
- Appropriate for one-lane one-way and two-lane two-way streets
- Appropriate on roads with or without dedicated bicycle facilities
- Maximum appropriate speed limit is typically 35 mph
- Appropriate along bus transit routes



(Source: Delaware Department of Transportation)



(Source: Google Street View)

**ITE/FHWA Traffic Calming EPrimer:** [https://safety.fhwa.dot.gov/speedmgt/traffic\\_calm.cfm](https://safety.fhwa.dot.gov/speedmgt/traffic_calm.cfm)

## Design/Installation Issues:

- Typically separates opposing traffic through the shift with the aid of a raised median
- Applicable only to mid-block locations
- Can be installed on either open- or closed-section (i.e. curb and gutter) roads
- Location near streetlights preferred
- May require drainage feature relocation
- Should not require utility relocation

## Potential Impacts:

- Without islands, motorists could cross the centerline to drive the straightest path possible
- No impact on access
- May require removal of some on-street parking
- Limited data available on impacts on speed, volume diversions, and crash risk
- Provides opportunities for landscaping
- Can provide locations for pedestrian crosswalks

## Emergency Response Issues:

- Appropriate along primary emergency vehicle routes or on streets with access to hospitals/emergency medical services, provided vehicles can straddle the street centerline

## Typical Cost (2017 dollars):

- Reported costs range between \$8,000 and \$25,000

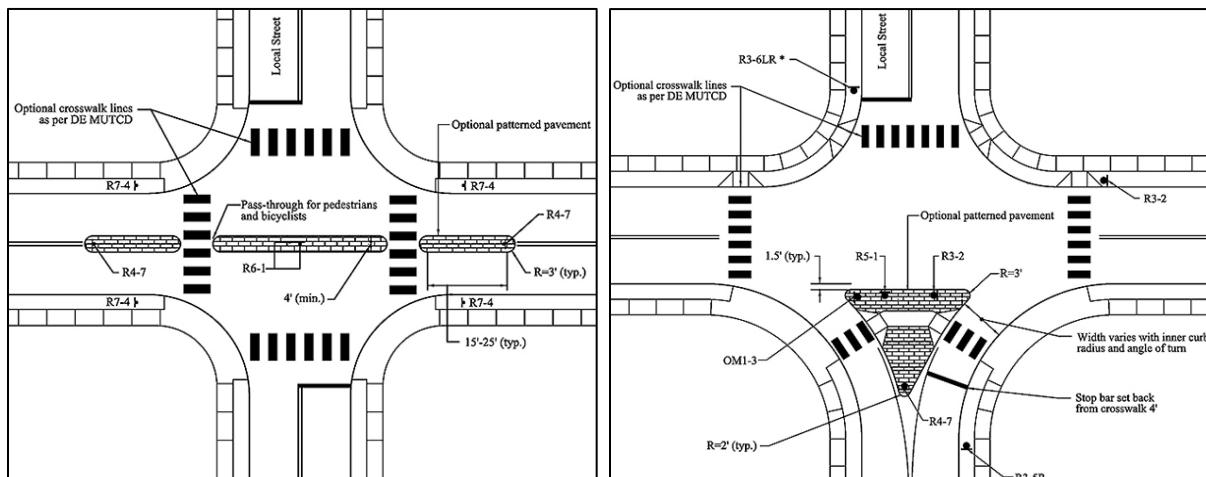
# Median Barrier/Forced Turn Island

## Description:

- Raised islands along the centerline of a street and continuing through an intersection that block the left-turn movement from all intersection approaches and the through movement from the cross street; also called median diverter, intersection barrier, intersection diverter, and island diverter
- Raised island that forces a right turn is called a forced turn island

## Applications:

- For use on arterial or collector roadways to restrict access to minor roads or local streets and/or to narrow lane widths
- Typically applied only after other measures have failed or been deemed inappropriate/ineffective
- Barriers are made passable for pedestrians and bicyclists
- Often used in sets to make travel to/through neighborhoods more circuitous



(Source: Delaware Department of Transportation)

**ITE/FHWA Traffic Calming EPrimer:** [https://safety.fhwa.dot.gov/speedmgt/traffic\\_calm.cfm](https://safety.fhwa.dot.gov/speedmgt/traffic_calm.cfm)

## Design/Installation Issues:

- Potential legal issues associated with blocking a public street (e.g., business/emergency access)
- Placed on major roads on approaches to and across intersections with minor roads
- Should extend beyond the intersection to discourage improper/illegal turn movements
- Barriers may consist of landscaped islands, mountable features, walls, gates, side-by-side bollards, or any other obstruction that leave an opening smaller than the width of a passenger car

## Potential Impacts:

- May divert traffic volumes to other parallel and/or crossing streets
- May require removal or shortening of on-street parking zones on approaches/departures
- May impact access to properties adjacent to intersection
- No significant impacts on vehicle speeds beyond the approaches to intersection

## Emergency Response Issues:

- Restricts emergency vehicle access using minor street
- Can be designed to allow emergency vehicle access

## Typical Cost (2017 dollars):

- Cost between \$1,500 and \$20,000, depending on length and width of barriers

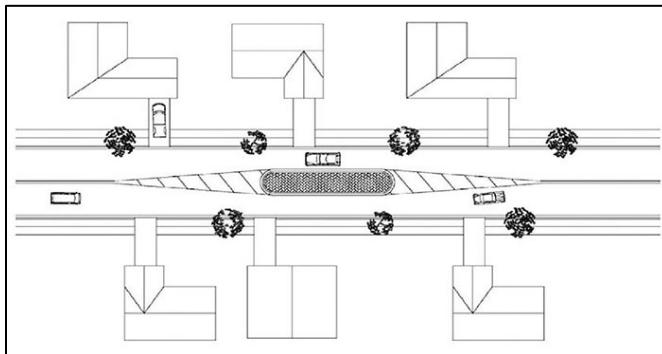
# Median Island

## Description:

- Raised island located along the street centerline that narrows the travel lanes at that location
- Also called median diverter, intersection barrier, intersection diverter, and island diverter

## Applications:

- For use on arterial, collector, or local roads
- Can often double as a pedestrian/bicycle refuge islands if a cut in the island is provided along a marked crosswalk, bike facility, or shared-use trail crossing
- If placed through an intersection, considered a median barrier



(Source: Delaware Department of Transportation)



(Source: James Barrera, Horrocks, New Mexico)

**ITE/FHWA Traffic Calming EPrimer:** [https://safety.fhwa.dot.gov/speedmgt/traffic\\_calm.cfm](https://safety.fhwa.dot.gov/speedmgt/traffic_calm.cfm)

## Design/Installation Issues:

- Potential legal issues associated with blocking a public street (e.g., business or emergency access)
- Barriers may consist of landscaped islands, mountable facilities, walls, gates, side-by-side bollards, or any other obstruction that leave an opening smaller than the width of a passenger car
- Can be placed mid-block or on the approach to an intersection
- Typically installed on a closed-section roadway (i.e. curb and gutter)
- Can be applied on roads with or without sidewalks and/or dedicated bicycle facilities
- Maximum appropriate speed limits vary by locale
- Typically not appropriate near sites that attract large combination trucks

## Potential Impacts:

- May impact access to properties adjacent to islands
- No significant impact on vehicle speeds beyond the island
- Little impact on traffic volume diversion
- Safety can be improved without substantially increasing delay
- Shortens pedestrian crossing distances
- Bicyclists may have to share vehicular travel lanes near the island
- May require removal of some on-street parking
- May require relocation of drainage features and utilities

## Emergency Response Issues:

- Appropriate along primary emergency vehicle roads or street that provides access to hospitals/emergency medical services

## Typical Cost (2017 dollars):

- Cost between \$1,500 and \$10,000, depending on length and width of island

# Traffic Calming Fact Sheets

March 2019 Update

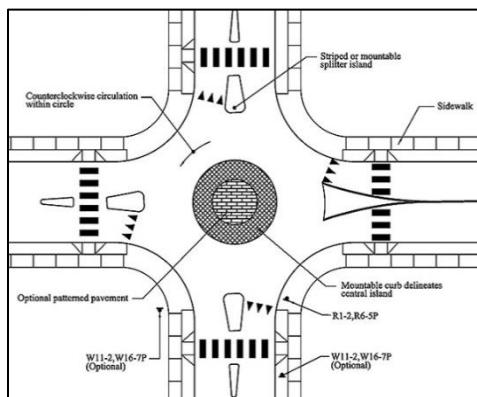
## Mini Roundabout

### Description:

- Raised islands, placed in unsignalized intersections, around which traffic circulates
- Motorists yield to motorists already in the intersection
- Require drivers to slow to a speed that allows them to comfortably maneuver around them
- Center island of mini roundabout is fully traversable, splitter islands may be fully traversable

### Applications:

- Intersections of local and/or collector streets
- One lane each direction entering intersection
- Not typically used at intersections with high volume of large trucks or buses turning left
- Appropriate for low-speed settings



(Source: Delaware DOT)



(Source: Gary Schatz)

**ITE/FHWA Traffic Calming EPrimer:** [https://safety.fhwa.dot.gov/speedmgt/traffic\\_calm.cfm](https://safety.fhwa.dot.gov/speedmgt/traffic_calm.cfm)

### Design/Installation:

- See NCHRP Report 672 for design details
- Typically circular in shape, but may be an oval shape
- Controlled by YIELD signs on all approaches with pedestrian crosswalks, if included, one car-length upstream of YIELD bar
- Preferable for roadway to have urban cross section (i.e., curb and gutter)
- Can be applied to road with on-street parking
- Can be applied to roads both with and without a bicycle facility. Bicycle facilities, if provided, must be separated from the circulatory roadway with physical barriers; cyclists using the circulatory roadway must merge with vehicles. Bicycle facilities are prohibited in the circulatory roadway to prevent right-hook crashes.
- Key design features are the fastest paths and path alignment.

### Potential Impacts:

- Slight speed reduction
- Little diversion of traffic
- Bicycle and motorist will share lanes at intersections because of narrowed roadway
- Large vehicles/buses usually drive over the center island for left turns

### Emergency Response:

- Emergency vehicles maneuver using the center island at slow speeds

### Typical Cost

- Cost is similar to bulb-outs because pedestrian ramps and outside curb lines usually have to be relocated

# On-Street Parking

## Description:

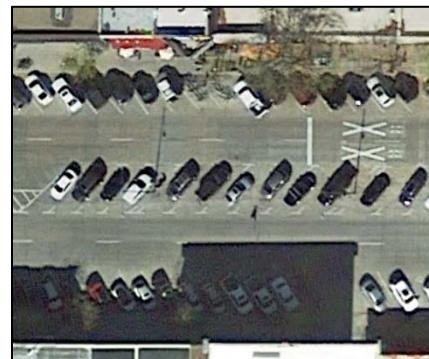
- Allocation of paved space to parking
- Narrows road travel lanes and increases side friction to traffic flow
- Can apply on one or both sides of roadway
- Can be either parallel or angled, but parallel is generally preferred for maximized speed reduction

## Applications:

- High likelihood of acceptability for nearly all roadway functional classifications and street functions
- More appropriate in urban or suburban settings
- Can be combined with other traffic calming measures
- Can apply alternating sides of street for chicane effect
- Can combine with curb extensions for protected parking, including landscaping for beautification
- Can apply using time-of-day restrictions to maximize throughput during peak periods
- Can be used on one-way or two-way streets
- Preferable to have a closed-section road (i.e. curb and gutter)
- Appropriate along bus transit routes



(Source: PennDOT Local Technical Assistance Program)



(Source: Google Earth, Fort Collins, CO)

**ITE/FHWA Traffic Calming EPrimer:** [https://safety.fhwa.dot.gov/speedmgt/traffic\\_calm.cfm](https://safety.fhwa.dot.gov/speedmgt/traffic_calm.cfm)

## Design/Installation Issues:

- Appropriate distance needed between travel lane and parking lane
- Impact is directly affected by demand; must have parked vehicles present to be effective
- If used for chicane effect, must verify parking demand to ensure that majority of spaces are occupied when effect is desired most during the day; can use parallel, angled, or combination
- Should not be considered near traffic circles nor roundabouts
- Should not be applied along median island curbs
- For lower-demand locations, can counteract negligible impact with curb extensions or other road-narrowing features

## Potential Impacts:

- Can be blocked in by snow during plowing operations; required vehicle removal
- May limit road user visibility and sight distance at driveways/alleys/intersections
- Can put bicyclists at risk of colliding with car doors
- May be impacted if other traffic calming measures are considered or implemented
- Provides buffer between moving vehicles and pedestrian facilities

## Emergency Response Issues:

- Preferred by emergency responders to most other traffic calming measures
- Requires consideration of design of parking lanes near hydrants and other emergency features

**Typical Cost (2017 dollars):**

- Approximately \$6000 or less (factor of design specifics and length of application); can be much higher

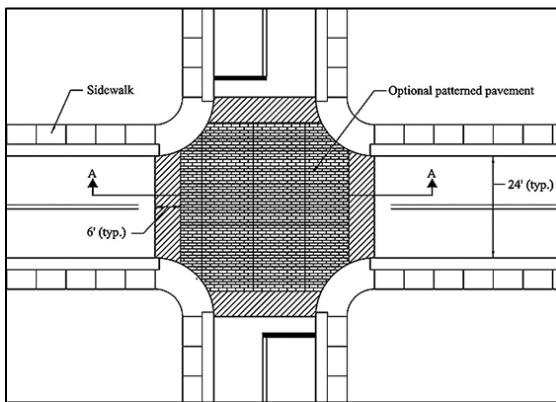
# Raised Intersection

## Description:

- Flat raised areas covering entire intersections, with ramps on all approaches and often with brick or other textured materials on the flat section and ramps
- Sometimes referred to as raised junctions, intersection humps, or plateaus

## Applications:

- Intersections of collector, local, and residential streets
- Typically installed at signalized or all-way stop controlled intersections with high pedestrian crossing demand
- Works well with curb extensions and textured crosswalks
- Often part of an area-wide traffic calming scheme involving both intersecting streets in densely-developed urban areas



(Source: Delaware Department of Transportation)



(Source: Chuck Huffine, Phoenix AZ)

**ITE/FHWA Traffic Calming EPrimer:** [https://safety.fhwa.dot.gov/speedmgt/traffic\\_calm.cfm](https://safety.fhwa.dot.gov/speedmgt/traffic_calm.cfm)

## Design/Installation Issues:

- Used at intersections with a maximum speed limit of 35 mph
- Typically rise to sidewalk level; appropriate if crosswalks exist on all four legs
- Appropriate if a dedicated bicycle facility passes through the intersection
- Detectable warnings and/or color contrasts must be incorporated to differentiate the roadway and the sidewalk
- May require bollards to define edge of roadway
- Storm drainage/underground utility modifications are likely necessary
- Minimum pavement slope of 1 percent to facilitate drainage

## Potential Impacts:

- Reduction in through movement speeds likely at intersection
- Reduction in mid-block speeds typically less than 10 percent
- No impact on access
- Can make entire intersections more pedestrian-friendly
- No data available on volume diversion or safety impacts

## Emergency Response Issues:

- Slows emergency vehicles
- Appropriate for primary emergency vehicle routes and streets with access to a hospital or emergency medical services

## Typical Cost (2017 dollars):

- Costs range between \$15,000 and \$60,000

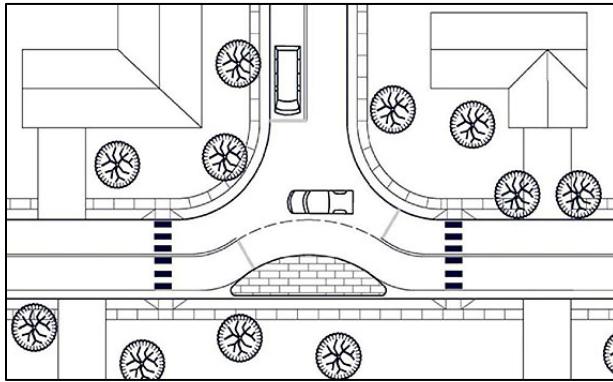
# Realigned Intersection

## Description:

- Reconfiguration of an intersection with perpendicular angles to have skewed approaches or travel paths through the intersection
- Also called modified intersection

## Applications:

- Appropriate for collector or local streets
- Most applicable at T-intersections
- Can be used where on-street parking exists
- Applicable on one-way and two-way roadways
- Most commonly installed on closed-section roads (i.e. curb and gutter)
- Can be applied with and without a dedicated bicycle facility
- Can be applied with or without on-street parking



(Source: Delaware Department of Transportation)



(Source: Delaware DOT)

**ITE/FHWA Traffic Calming EPrimer:** [https://safety.fhwa.dot.gov/speedmgt/traffic\\_calm.cfm](https://safety.fhwa.dot.gov/speedmgt/traffic_calm.cfm)

## Design/Installation Issues:

- Need to avoid relocating drainage features such as catch basins, concrete channels, valley gutters, inlets, and trench drains
- Bicyclists and motorists may have separate lanes or may share lanes at intersections
- Be cognizant of pedestrian crossing needs (e.g., ADA, wheelchair ramps at T-intersections)
- Default design vehicle SU-30
- Typical maximum speed limit of 25 mph
- May be appropriate for buses if adequate turning radii can be provided

## Potential Impacts:

- Limited-to-no impact on access
- Minimal anticipated diversion of traffic
- Can result in speed reductions between 5 and 13 mph within intersection limits
- Provides opportunity for landscaping
- Can improve pedestrian safety
- Consider additional intersection lighting

## Emergency Response Issues:

- Appropriate along an emergency vehicle route or on a street with access to hospital/emergency medical services
- Little impact on response time

## Typical Cost (2017 dollars):

- Costs range between \$15,000 and \$60,000

# Road Diet

## Description:

- Revision of lane use or widths to result in one travel lane per direction with minimum practical width, with goal of reducing cross-section; common application involves conversion of four-lane Two-way road to three-lane road – two through lanes and center two-way left-turn lane (TWLTL)
- Can also involve narrowing of existing travel lanes
- Alternate cross-section uses can include dedicated bicycle facilities, left-turn lanes, on-street parking, raised medians, pedestrian refuge islands, sidewalks, etc.

## Applications:

- High likelihood of acceptability for nearly all roadway functional classifications
- Can be applied in urban, suburban, or rural settings
- Appropriate for most common urban speed limits
- Can be applied at/near intersections or along road segments
- Appropriate along bus routes



(Source: Chuck Huffine, Phoenix, AZ)



(Source: Chuck Huffine, Denver, CO)

**ITE/FHWA Traffic Calming EPrimer:** [https://safety.fhwa.dot.gov/speedmgt/traffic\\_calm.cfm](https://safety.fhwa.dot.gov/speedmgt/traffic_calm.cfm)

## Design/Installation Issues:

- Must consider transitions from adjacent roadway sections and through intersections
- AADT can be considered but is not the primary volume factor that needs to be evaluated

## Potential Impacts:

- Usually reduces number of available travel lanes – impacts demand that can be accommodated; typical acceptable threshold of 1000 vehicles per direction during peak hour
- Reduction of through lanes tends to reduce speeds
- Can improve pedestrian crossing ease and safety
- Can improve bicycle accessibility if travel lanes can be used for shoulders/bike lanes instead

## Emergency Response Issues:

- Generally accepted from emergency services; leaves available space for through flow of emergency vehicles

## Typical Cost (2017 dollars):

- \$6000 or less, depending on physical geometric changes and length of application
- The biggest impact to cost involves signal modifications, if applicable; other primary costs include pavement marking and signing revisions
- Costs can be much higher if outside portion of pavement is converted to other non-motorized uses (dedicated bicycle facilities, sidewalks, grass buffers)

# Traffic Calming Fact Sheets

March 2019 Update

## Roundabout

### Description:

- Raised islands placed in unsignalized intersections around which traffic circulates
- Approaching motorists yield to motorists already in the intersection
- Requires drivers to slow to a speed that allows them to comfortably maneuver around them
- Different from traffic circles or mini-roundabouts; possible substitute for traffic signal control

### Applications:

- Intersections of arterial and/or collector streets
- One or more entering lanes
- Can be used at intersections with high volumes of large trucks and buses, depending on design



(Source: Grant Kaye)



(Source: PennDOT Local Technical Assistance Program)

**ITE/FHWA Traffic Calming EPrimer:** [https://safety.fhwa.dot.gov/speedmgt/traffic\\_calm.cfm](https://safety.fhwa.dot.gov/speedmgt/traffic_calm.cfm)

### Design/Installation:

- See NCHRP Report 672 for design details
- Design vehicle is determined specifically for each site ranging from emergency vehicles to over size/overweight vehicles
- Typically circular in shape but may be an oval shape
- Key physical elements are center islands, truck aprons, and splitter islands
- Controlled by YIELD signs on all approaches with pedestrian crosswalks, if included, one car-length upstream of YIELD bar
- Key design features include: fastest paths, swept paths, and path alignment
- Large vehicles circulating around the center island for all movements may traverse the apron
- Landscaping needs to be designed to allow adequate sight distance per NCHRP 672
- Preferable to have a closed-section road (i.e. curb and gutter)
- Bicycle facilities, if provided, must be separate from the circulatory roadway with physical barriers; cyclists using the circulatory roadway must merge with vehicles. Bicycle facilities are prohibited in the circulatory roadway to prevent right-hook crashes.

### Potential Impacts:

- Limited impact on access, except for access points immediately adjacent to intersection
- Limited impact on roadways with on-street parking
- May draw additional traffic but with reduced delays and queues

### Emergency Response:

- Appropriate for emergency vehicle routes or streets that provide access to hospitals
- Emergency vehicles may traverse the apron

### Typical Cost

- Cost varies widely by site, but is usually comparable to a traffic signal

# Speed Cushion

## Description:

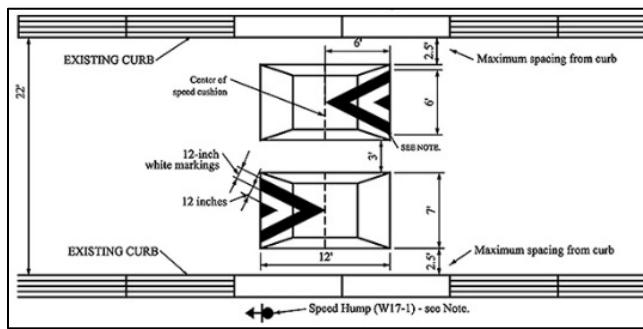
- Two or more raised areas placed laterally across a roadway with gaps between raised areas
- Height and length similar to a speed hump; spacing of gaps allow emergency vehicles to pass through at higher speeds
- Often placed in a series (typically spaced 260 to 500 feet apart)
- Sometimes called speed lump, speed slot, and speed pillow

## Applications:

- Appropriate on local and collector streets
- Appropriate at mid-block locations only
- Not appropriate on grades greater than 8 percent



(Source: James Barrera, Horrocks, New Mexico)



(Source: Delaware Department of Transportation)

**ITE/FHWA Traffic Calming EPrimer:** [https://safety.fhwa.dot.gov/speedmgt/traffic\\_calm.cfm](https://safety.fhwa.dot.gov/speedmgt/traffic_calm.cfm)

## Design/Installation Issues:

- Two or more cushions at each location
- Typically 12 to 14 feet in length and 7 feet in width
- Cushion heights range between 3 and 4 inches, with trend toward 3 - 3 ½ inches maximum
- Speed cushion shapes include parabolic, circular, and sinusoidal
- Material can be asphalt or rubber
- Often have associated signing (advance-warning sign before first cushion at each cushion)
- Typically have pavement markings (zigzag, shark's tooth, chevron, zebra)
- Some have speed advisories

## Potential Impacts:

- Limited-to-no impact on non-emergency access
- Speeds determined by height and spacing; speed reductions between cushions have been observed averaging 20 and 25 percent
- Speeds typically increase by 0.5 mph midway between cushions for each 100 feet of separation
- Studies indicate that average traffic volumes have reduced by 20 percent depending on alternative routes available
- Average collision rates have been reduced by 13 percent on treated streets

## Emergency Response Issues:

- Speed cushions have minimal impact on emergency response times, with less than a 1 second delay experienced by most emergency vehicles

## Typical Cost (2017 dollars):

- Cost ranges between \$3,000 and \$4,000 for a set of rubber cushions

# Speed Hump

## Description:

- Rounded (vertically along travel path) raised areas of pavement typically 12 to 14 feet in length
- Often placed in a series (typically spaced 260 to 500 feet apart)
- Sometimes called road humps or undulations

## Applications:

- Appropriate for residential local streets and residential/neighborhood collectors
- Not typically used on major roads, bus routes, or primary emergency response routes
- Not appropriate for roads with 85<sup>th</sup>-percentile speeds of 45 mph or more
- Appropriate for mid-block placement, not at intersections
- Not recommended on grades greater than 8 percent
- Work well in combination with curb extensions
- Can be used on a one-lane one-way or two-lane two-way street



(Source: City of Boulder, Colorado)



(Source: PennDOT Local Technical Assistance Program)

**ITE/FHWA Traffic Calming EPrimer:** [https://safety.fhwa.dot.gov/speedmgt/traffic\\_calm.cfm](https://safety.fhwa.dot.gov/speedmgt/traffic_calm.cfm)

## Design/Installation Issues:

- ITE recommended practice - "Guidelines for the Design and Application of Speed Humps"
- Typically 12 to 14 feet in length; other lengths (10, 22, and 30 feet) reported in practice in U.S.
- Speed hump shapes include parabolic, circular, and sinusoidal
- Typically spaced no more than 500 feet apart to achieve an 85th percentile speed between 25 and 35 mph
- Hump heights range between 3 and 4 inches, with trend toward 3 - 3 ½ inches maximum
- Often have associated signing (advance warning sign before first hump in series at each hump)
- Typically have pavement markings (zigzag, shark's tooth, chevron, zebra)
- Taper edge near curb to allow gap for drainage
- Some have speed advisories
- Need to design for drainage, without encouraging means for motorists to go around a hump

## Potential Impacts:

- No impact on non-emergency access
- Average speeds between humps reduced between 20 and 25 percent
- Speeds typically increase approximately 0.5 to 1 mph midway between humps for each 100 feet Beyond the 200-foot approach and exit of consecutive humps
- Traffic volumes diversion estimated around 20 percent; average crash rates reduced by 13 percent

## Emergency Response Issues:

- Impacts to ease of emergency-vehicle throughput
- Approximate delay between 3 and 5 seconds per hump for fire trucks and up to 10 seconds for ambulances with patients

## Typical Cost (2017 dollars):

- Cost ranges between \$2,000 and \$4,000

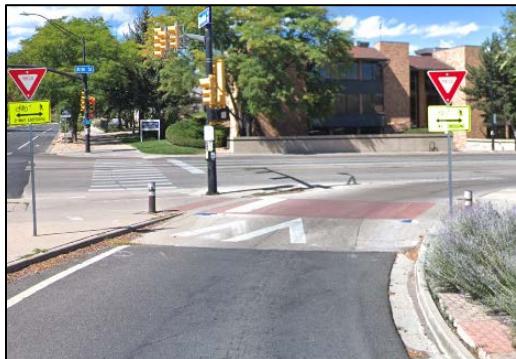
# Speed Table/Raised Crosswalks

## Description:

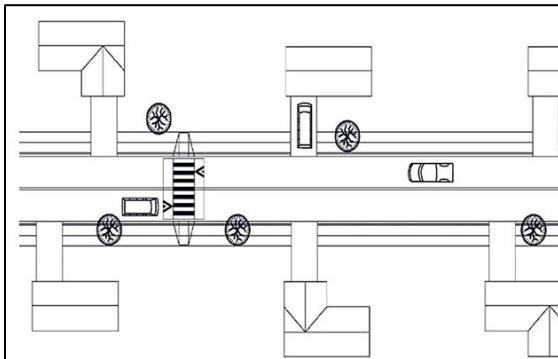
- Long, raised speed humps with a flat section in the middle and ramps on the ends; sometimes constructed with brick or other textured materials on the flat section
- If placed at a pedestrian crossing, it is referred to as a raised crosswalk
- If placed only in one direction on a road, it is called an offset speed table

## Applications:

- Appropriate for local and collector streets; mid-block or at intersections, with/without crosswalks
- Can be used on a one-lane one-way or two-lane two-way street
- Not appropriate for roads with 85<sup>th</sup> percentile speeds of 45 mph or more
- Typically long enough for the entire wheelbase of a passenger car to rest on top or within limits of ramps
- Work well in combination with textured crosswalks, curb extensions, and curb radius reductions
- Can be applied both with and without sidewalks or dedicated bicycle facilities
- Typically installed along closed-section roads (i.e. curb and gutter) but feasible on open section



(Source: Google Maps, Boulder, Colorado)



(Source: Delaware Department of Transportation)

**ITE/FHWA Traffic Calming EPrimer:** [https://safety.fhwa.dot.gov/speedmgt/traffic\\_calm.cfm](https://safety.fhwa.dot.gov/speedmgt/traffic_calm.cfm)

## Design/Installation Issues:

- ITE recommended practice – “Guidelines for the Design and Application of Speed Humps”
- Most common height is between 3 and 4 inches (reported as high as 6 inches)
- Ramps are typically 6 feet long (reported up to 10 feet long) and are either parabolic or linear
- Careful design is needed for drainage
- Posted speed typically 30 mph or less

## Potential Impacts:

- No impact on non-emergency access
- Speeds reductions typically less than for speed humps (typical traversing speeds between 25 and 27 miles per hour)
- Speeds typically decline approximately 0.5 to 1 mph midway between tables for each 100 feet beyond the 200-foot approach and exit points of consecutive speed tables
- Average traffic volumes diversions of 20 percent when a series of speed tables are implemented
- Average crash rate reduction of 45 percent on treated streets
- Increase pedestrian visibility and likelihood of driver yield compliance
- Generally not appropriate for BRT bus routes

## Emergency Response Issues:

- Typically preferred by fire departments over speed humps, but not appropriate for primary emergency vehicle routes; typically less than 3 seconds of delay per table for fire trucks

## Typical Cost (2017 dollars):

- Cost ranges between \$2,500 and \$8,000 for asphalt tables; higher for brickwork, stamped asphalt, concrete ramps, and other enhancements sometimes used at pedestrian crossings

# Traffic Circle

## Description:

- Raised islands placed in unsignalized intersections around which traffic circulates
- Approaching motorists yield to motorists already in the intersection
- Require drivers to slow to a speed that allows them to comfortably maneuver around them
- Approaches not designed to modern roundabout principals - no deflection

## Applications:

- Appropriate at intersections of local streets
- One lane each direction entering intersection
- Not typically used at intersections with high volumes of large trucks or buses turning left
- appropriate for both one-way and two-way streets in urban and suburban settings



(Source: Scott Batson)



(Source: Scott Batson)

**ITE/FHWA Traffic Calming EPrimer:** [https://safety.fhwa.dot.gov/speedmgt/traffic\\_calm.cfm](https://safety.fhwa.dot.gov/speedmgt/traffic_calm.cfm)

## Design/Installation Issues:

- Typically circular in shape but may be an oval shape
- Usually have landscaped center islands
- Recommend YIELD signs on all approaches
- Preferable for roadways to be closed-section (i.e. curb and gutter)
- Can be applied to roads with on-street parking
- Can be applied to roads both with and without dedicated bicycle facilities; bike lanes not striped in circulatory roadway
- Key design features include: offset distance (distance between projection of street curb and center island), lane width of circulatory roadway, circle diameter, and height of mountable apron for large vehicles

## Potential Impacts:

- Minimal anticipated traffic diversion
- Bicyclist and motorists will share lanes at intersections because of narrowed roadway
- Large vehicles/buses usually not able to circulate around center island for left turns
- Landscaping needs to be designed to allow adequate sight distance, per AASHTO
- Minimize routing of vehicles through unmarked crosswalks on side-streets
- May require additional street lighting

## Emergency Response Issues:

- Emergency vehicles maneuver intersections at slow speeds
- Constrained turning radii typically necessitates a left turn in front of the circle for large vehicles

## Typical Cost (2017 dollars):

- Typical cost is \$15,000, with a range between \$10,000 and \$25,000

# 2 Photos Reveal Why the Key to Slowing Traffic is Street Design, Not Speed Limits

Strong Towns · January 8, 2019

The cost of auto orientation—designing our towns and cities around the easy, fast movement of cars—is not just measured in dollars and cents. The number of U.S. traffic fatalities in 2017 topped 40,000 people. Nearly 6,000 of those people were on foot—a 25-year high. Each of those people had a unique story. Each of them had a family.

And after each high-profile crash, we all hear the same litany of advice from law enforcement and traffic safety professionals.

*"Be hyper-aware of your surroundings."*

*"Always obey the speed limit."*

*"Speed is a factor in 30 percent of crashes."*

*"Safety is a shared responsibility."*

And yet, we *know* that people are sometimes going to make mistakes. Even conscientious drivers make mistakes. People walking, going about their business, are going to make mistakes. No one is going to be hyper-vigilant every moment that they're out in the world. And why should we have to?

**We can't regulate our way to safety. We must *design* our streets to be safe.**

Two simple photos reveal what it means to design a street to be safe, versus counting on the speed limit alone to do the job. This meme was created by planner Wes Craiglow of Conway, AR, and shared on social media by the "Transportation Psychologist," our friend, Bryan Jones. We first shared it back in 2015, but it remains timeless, so here it is again:



Both are 20mph zones, but only one of them is designed like it.



As Wes points out: "The meme is intended to help viewers consider how different street designs makes you feel as a driver, and ultimately affect how you behave behind the wheel. Generally speaking, as depicted by the lower photo, narrower travel lanes, shorter block lengths, and a tree canopy, all contribute to drivers traveling more slowly. Conversely, wide lanes, long block lengths, and open skies, as seen in the upper photo, communicate to drivers that higher speeds are appropriate."

Look again at the two photos. Imagine yourself behind the wheel of a car on each street. On which street would you drive faster? On which street would you exercise more caution?

## **“Forgiving” Design is a Misnomer**

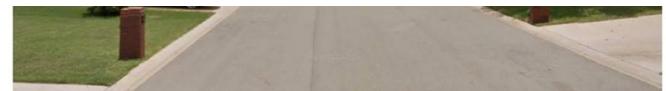
The first photo looks like tens of





Curbing the transportation

engineering profession calls “forgiving design.” The premise is simple: drivers will make occasional mistakes—veer a bit out of their lane, fail to brake quite hard enough—and if the street is wide, with high visibility in all directions, and free of immediate obstacles such as trees and fences, those mistakes won’t be catastrophic.



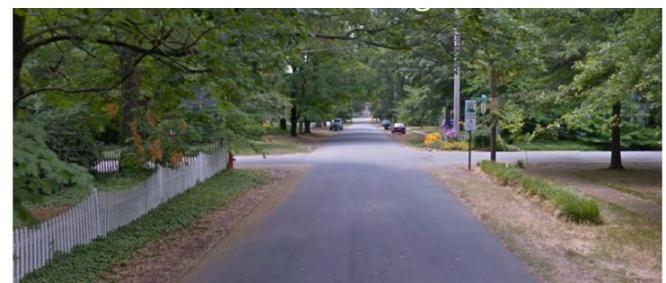
The problem: this street feels *too* forgiving to a driver. Too safe and comfortable. So drivers speed up. The engineers didn’t account for this aspect of human psychology.

This residential street is built like a four-lane highway, and so even though its legal speed limit is 20 miles per hour, it’s no surprise when somebody guns it up to 40 miles per hour or more down a street like this. It feels natural to do so. It feels safe. But it isn’t safe—because on a city street, unlike a freeway, there might be people around. People who will most likely be badly hurt or killed if a speeding driver hits them.

**Read transportation engineer Jon Larsen’s explanation of why the forgiveness of slow speeds is better than the “forgiving” design of wide streets.**

## The Paradox of Street Design: If It Feels a Bit Dangerous, It’s Probably Safer

The second photo, on the other hand, represents the most basic, frugal approach to designing a street for slow speeds. It’s not perfect. It lacks sidewalks or bicycle facilities, which some of our readers might take issue with—and yes, many places ought to have those things.



But this “slow street” does something really profound and important. It causes drivers to slow down, *whether or not* there’s a posted speed limit or law enforcement

73



intersection, where a red fire hydrant stands next to a white fence. The lack of visibility there is not a safety hazard: paradoxically, it's probably the single biggest

thing that promotes safety at this intersection. Because if you're driving here, and can't see whether a vehicle is approaching from the left, what are you going to do?

That's right. You're going to slow down.

**[Read Daniel Herriges's article on why narrow streets can deliver a ton of benefits to our cities and towns at low cost.](#)**

## Why 20 Miles Per Hour?

If we could keep most urban traffic to 20 miles per hour or less, we could eliminate the vast majority of deaths from car crashes in our cities and towns. We wouldn't eliminate mistakes—people, both inside and outside vehicles, are going to make them—but those mistakes would rarely be deadly.

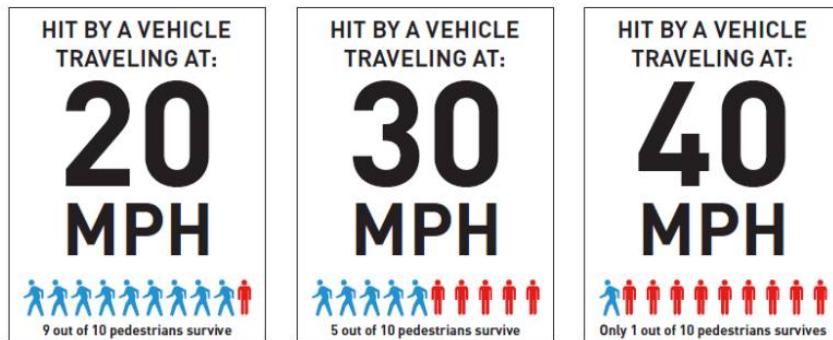


Image: Seattle Department of Transportation

The place for wide lanes and “forgiving design” is on a high-speed road. City streets, on the other hand, should be places for people. We know how to design streets that will slow down traffic automatically, without the need for heavy-handed enforcement, and regardless of what the speed limit sign says. We just need to do it.

**[Read Chuck Marohn's article on the crucial difference between a street and a road.](#)**