



# MEMORANDUM

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## Traffic Calming Work Session

**Item Type:** Informational Memorandum  
**Prepared For:** Mayor Castner and Homer City Council  
**Date:** October 8, 2024  
**From:** Dan Kort, Public Works Director  
**Through:** Melissa Jacobsen, City Manager

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Since July, Council Members Lord and Davis have been meeting with City staff periodically to discuss traffic calming. A series of traffic calming action items was developed by the Council Members and provided below for discussion, with comments from Public Works in italics -

### Traffic Calming Action Items

- **Road Design Criteria update**
  - **Longer-term project needs a deadline to come to Council**
  - **Internal staff review in progress, needs to be reviewed by Dan & Leon, then to Council**
  - **Ensure we are integrating recent “lessons learned” into policy**

*Neither the Public Works Director nor the City Engineer had time to pick up the Road Design Criteria Manual or the Homer Standard Specifications due to work load. This still remains a priority.*

- **Eric Lane Immediate Actions**
  - **New speed limit signs were recently installed by PWD (thank you)**
  - **PWD will place the SmartCart device in the sidewalk area ASAP**
  - **Consider a three-way stop at Mullikin & Fairview**

*Speed limit signs were installed in June. The SmartCart was deployed to Fairview Avenue/Eric Lane in early July. It was briefly taken to Ben Walters during the sidewalk construction project during the opening of school, then returned to Fairview Avenue/Eric Lane a couple weeks later. The Public Works Department had discussed the possibility of adding a 3-way stop sign to the intersection of Mullikin and Fairview, and are open to the idea.*

- **Staff draft up a list of capital needs for better traffic monitoring and data collection (coordinate with IT, HPD, and PWD) and provide to Jason/Rachel depending on \$\$ needs from Council action**
  - **Speed monitoring/data collection: smaller for mounting off the ground, ability to export data for analysis**
  - **Updated SmartCart – photo taking? Data collection, smaller footprint for easier placement?**

- **Engage with Community Development/Planning on interest in traffic data**

*Ordinance 24-46 was introduced on September 23<sup>rd</sup> and is scheduled for public hearing and second reading on October 14<sup>th</sup>. The purpose of this ordinance is to allocate \$40,000 to procure*

- *A new mobile speed monitoring device that collects traffic data*
- *Two additional post mounted devices that collect traffic data*

*The Public Works Department has recently purchased a radar and message board device with operating funds to be mounted on the existing mobile cart (SmartCart). The message board comes with traffic monitoring capability and a service subscription that includes access to a variety of reports that can be customized to meet our needs. The device has the capability to take an image and could potentially snap photos of vehicles exceeding the speed limit. We discussed this in a recent training meeting with the vendor who showed an example of a photo that was pretty clear with the shape of the car, however identifying information wasn't discernable, and they explained that quite commonly the car has already passed before the system can register a photo.*

- **Staff start drafting a list/menu of traffic calming options for the City**

*The City's 2024 Transportation Plan lays out potential traffic calming methods. Most of the traffic calming methods defined within the Transportation Plan are also called out in the Examples below. A majority of the traffic calming alternatives defined are for roads with pavement, curb and gutter. Many Homer roads are not applicable for most of the traffic calming methods proposed. There are very limited options for traffic calming applicable for gravel roadways.*

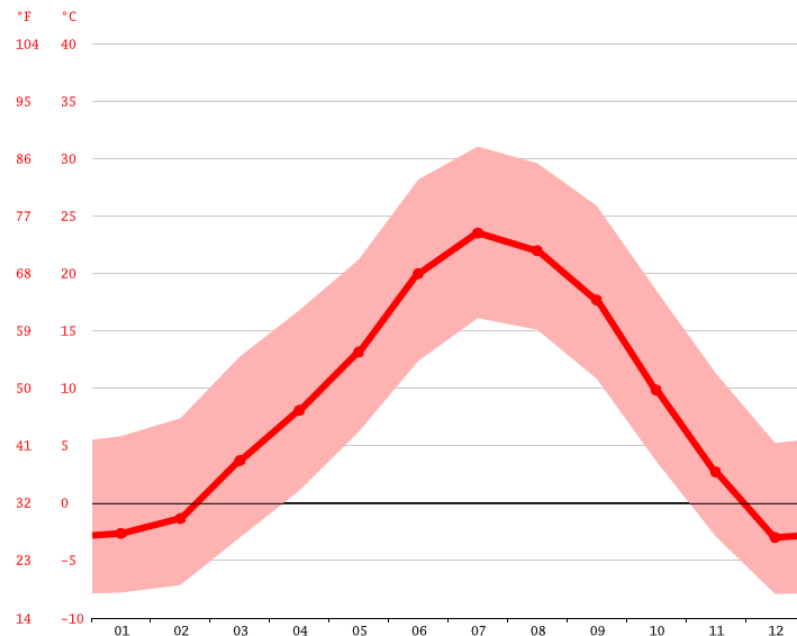
- **Resource links provided-**

- **Town & Country, Missouri (Traffic Calming/Traffic Mitigation Program 2022)**
- **Aurora, Colorado (Neighborhood Traffic Calming Program)**
- **City of Bellingham, Washington (Neighborhood Traffic Safety Program) – Apparently discontinued after lack of funding 2022 news story: Bellingham neighbors wanted quick action to stop speeding, so they went rogue**
- **City of Auburn, Washington (Neighborhood Traffic Calming Program) – established in 2007, updated in 2022**
- **City of Encinitas, California (Neighborhood Traffic Calming Program)**
- **City of Fort Lauderdale, Florida (Neighborhood Traffic Calming Program)**
- **USDOT FHA Module 7: Traffic Calming Programs and Planning Processes**

*Fort Lauderdale is a city with a population of 183,146; Encinitas is a population of 61,369; Auburn is a population of 84,858; Bellingham is a population of 93,896; Town & Country is a population of 11,583, however is a suburb of St. Louis MO with a population of 286,578; Aurora is a population of 393,537. It is difficult to compare communities of this size with a city like Homer with a population of 5,876. These larger communities have much more paved road surfaces and pavement with curb and gutter than Homer. These cities also have more capacity to afford the costs associated with construction and maintenance related to some of the traffic calming measures proposed.*

*With the exception of Aurora Colorado, these example cities are not in a winter climate, so many of their proposed measures are difficult or impractical in a winter climate. Aurora is an eastern suburb of Denver*

Colorado. The Denver area is subject to several large snow events per winter, however the climate in Denver is such that the snow does not persist on the ground for very long. This means that the snowfall accumulation is less likely to interfere with traffic calming measures, and therefore not very applicable example either. Aurora averages 60-inches of snow per year. Below is a graph indicating the average temperatures and temperature range for Aurora. Based on this information, it is demonstrated that Aurora only has 3 months with average temperatures below 32 degrees. This region may receive a 24-inch snow fall on a given Saturday, then warm up to the 70's Sunday and the snow is all gone by Tuesday.



All of all of these communities in the examples provided are made up of primarily paved streets with curb and gutter, whereas the City of Homer is composed of approximately 27 miles of paved roads (of which approximately 4 miles are City owned roads with curb and gutter), and 31 miles of gravel roads. Therefore, a majority of the proposed solutions in these examples are less applicable within the City of Homer. To clarify that statement, only 4-miles of road are applicable to a majority of the traffic calming measures presented, and some measures are applicable to the paved roads without curb and gutter. There are only a few alternatives for traffic calming that are applicable to gravel roadways.

- **Full list with pros/cons of possible options for traffic calming (doesn't have to be perfect)**

#### **FROM HOMER'S 2024 TRANSPORTATION PLAN**

##### **Speed Humps and Tables**

###### Advantages

- Compatible with bike lanes.
- Large vehicles can traverse speed humps and tables at low speeds

###### Disadvantages

- *Can be damaged by snowplows and graders*
- *May require additional maintenance (costs and labor)*
- *Require supplemental signage and markers*
- *Emergency Response times are affected*
- *Injury to emergency personnel has been documented*

Considerations/Limitations

- *Primarily a solution for paved surfaces. Generally, not applicable to gravel surfaces due to drainage issues; safety (because the hump is harder to visibly define); and maintenance of road surface*

**On Street Parking**

Advantages

- *Provides much needed parking in commercial areas*
- *First Responders generally prefer this form of traffic calming*

Disadvantages

- *Can reduce road visibility and intersection sight distance*
- *Road needs to be cleared of parked vehicles for snow plowing*

Considerations/Limitations

- *The City has chosen to not allow street parking due to winter and summer road maintenance. This would be a significant change that would have cascading impacts to maintenance and costs*
- *Applicable to both Gravel and Paved surfaces*

**Bulb-Out (at intersections)**

Advantages

- *Provide improvements for pedestrian crossings*
- *Increase pedestrian sight distance*
- *Reduce pedestrian crossing distance*
- *Decreases mid-block pedestrian crossings*

Disadvantages

- *Damage to curbs by snow removal*
- *May require additional ROW acquisition to fit them into Homer's narrow ROW's (expensive)*

Considerations/Limitations

- *Used alone, it is not effective at slowing traffic speeds. Needs to be in combinations with other measures to be effective (such as street parking)*

**Chicanes (bulb outs mid-block creating an "S" pattern)**

Advantages

- *Reduce speed by forcing drivers to shift horizontally thereby slowing down*
- *Large Emergency vehicles can negotiate*
- *Can be used for green-scaping*

Disadvantages

- *Require additional maintenance (cost and labor)*

- Increase emergency response time

Considerations/Limitations

- Require curbs, and therefore only applicable to paved roads with curb
- Most ROW's in Homer cannot accommodate the additional space required to install these elements without ROW acquisition. (expensive)

**Traffic Circles**

Advantages

- Landscaping on traffic circles may reduce speeds by eliminating long sight lines

Disadvantages

- Will require significant additional maintenance effort (cost and labor)
- May be difficult to negotiate with larger vehicles and maintenance equipment
- Difficult to conduct winter maintenance
- Trucks and emergency vehicles may require special accommodations to negotiate (such as aprons) and landscaping may inhibit ability for certain vehicles to get through.
- Very costly to construct and acquire required ROW

Considerations/Limitations

- This is primarily used on paved streets with curb and gutter, and may not be applicable on streets with ditches due to ROW limitations
- These devices typically require significant ROW acquisitions and have limitations for cross slopes. A cross slope of greater than 3 to 5% makes this solution impractical. (expensive)

**Speed Feedback Signs**

Advantages

- Compatible with large vehicles
- This traffic calming treatment may address the public perception of speeding better than any other treatment.
- Cost effective.

Disadvantages

- Ongoing maintenance and operation costs (electrical, and labor for maintaining, repairing, replacing, and downloading data).
- Job of evaluating data is a whole new job task that isn't accounted for in already over-booked labor force.

Considerations/Limitations

- This can be deployed at both paved and unpaved roads
- This is relatively cost effective compared to other methods.

**Sidewalks and Crosswalks**

Considerations/Limitations

- Sidewalks connected to roadways actually have opposite effect and give illusion of a wider drivable surface. Case in Point – Eric Lane/Fairview Avenue. As a gravel surface, there is no practical way to separate road from sidewalk without causing other issues. Similarly, if the roads were paved and a white line painted, during the winter months the line would disappear giving the appearance of a wide road again.

**Landscaping**

**Education and Enforcement**

**FROM FORT LAUDERDALE – NEIGHBORHOOD TRAFFIC CALMING**

- Enforcement
- Radar Speed Signs / Radar Speed Trailers
- Radar Speed Trailers
- Variable Message Boards
- Chicane
- Choker/Pinch Point – Mid-block narrowing of Roadway
  - Advantage – Potential for mid-block crosswalk, opportunity for landscaping
  - Disadvantage – Costly, create more accidents, create maintenance challenges
- Colored Pavement
  - Advantage – Esthetics and defined crossings
  - Disadvantage – Availability of materials, will disappear seasonally, Costly, Maintenance
- Median Islands –
  - Advantage – Reduce cut through traffic. Opportunity for landscaping
  - Disadvantage - Impacts stormwater drainage, potential to limit access to streets, costly, increase maintenance costs, Homer ROWs may not accommodate this technique
- Pavement Markings and Signage – Needs pavement, only seasonally available, and additional cost and maintenance
- Raised Crosswalk
- Raised Intersection
- Roundabout – Significant costs, ROWs not large enough (will require ROW acquisitions), only work on less than 5% cross slope, drainage is another issue of concern
- Rumble Strips
  - Advantage – Inexpensive
  - Disadvantage – only applicable to pavement, traps water and causes premature road surface failure, noise complaints
- Bulb-Out
- Crosswalk
- Mid-Block Crosswalk – Same as crosswalk
- Mid-Block Crosswalk with Rectangular Rapid Flashing Beacon – Same as crosswalk
- Pedestrian Refuge – Basically the same as a Median Island
- Advisory Bike Lane – All Bike ones are basically the same thing, and not really traffic calming
- Bicycle Boulevard
- Bicycle Lane
- Bike Boxes

- *Buffered Bike Lane*
- *Contraflow Bike Lane*
- *Separated Bike Lane*
- *Sharrows (shared lane markings)*
- *Sidewalk – Is a sidewalk... and not really traffic calming*
- *Trail – Similar to sidewalk/sidewalk... and not really traffic calming*

**FROM ENCINITAS CALIFORNIA – NEIGHBORHOOD TRAFFIC MANAGEMENT PROGRAM**

*Nothing significant to add*

**FROM BELLINGHAM WASHINGTON – NEIGHBORHOOD TRAFFIC SAFETY PROGRAM**

*Nothing significant to add other than the report calls out these points:*

- *“Stop signs are NOT used for traffic calming or speed control.”*
- *“Traffic studies have shown that installation of these type of signs (“Slow Children” or “Children at Play”) on public streets does not cause drivers to slow down and that the presence of these type signs does not reduce the number of pedestrian accidents. In fact, the installation of these type signs on public streets may increase the potential for accidents by giving children and parents a false sense of security”*

**AUBURN WASHINGTON – NEIGHBORHOOD TRAFFIC CALMING PROGRAM**

*Nothing significant to add*

**TOWN & COUNTRY MISSOURI – TRAFFIC CALMING/TRAFFIC MITIGATION PROGRAM**

*Nothing significant to add*

**AURORA COLORADO – NEIGHBORHOOD TRAFFIC CALMING**

*Nothing significant to add*

- **Start working with Council, Community Development to think through awareness campaigns/local improvement safety district ideas/etc.**
  - **Schedule a work session in the fall to engage in further discussions/direction from Council**
  - **Following collection of speed data from new monitoring devices, work together to figure out actionable threshold/criteria**

*One of the Cities presented in the examples has an “application process” for the potential deployment of “Traffic Calming” measures (Aurora, Colorado), while some others seem to trigger evaluation based upon the number of complaints triggering an evaluation of traffic. In both of these cases, there appears to be a threshold bar that has to be met before traffic calming measures are taken, and the bar does not appear to be low due to the cost impacts and maintenance impacts. This may be something to consider in our discussions.*

- **Need an overall timeline/understanding of priority to help guide staff efforts with finite capacity**
  - **PWD let Council know through City Manager if there’s need for additional project-based support**

*Depending upon the outcome of conversations, there may be cost impacts of fulfilling the requested traffic calming measures. It costs money to construct and maintain these features. It takes time to gather data and evaluate data. Current staffing is fully utilized, so depending upon what level of effort is desired, the effort may need to be supplemented with either a position, or a consultant to supplement existing staffing.*

**RECOMMENDATION:**

Informational Only.