



# MODEL ORDINANCE REGULATING BICYCLES AND PERSONAL TRANSPORTATION DEVICES

Prepared by the Central Iowa Bicycle and Pedestrian Roundtable

August 2022

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420 Watson Powell Jr. Parkway, Suite 200  
Des Moines, Iowa 50309  
Phone: 515.334.0075  
Email: [info@dmampo.org](mailto:info@dmampo.org)  
[www.dmampo.org](http://www.dmampo.org)

## MODEL ORDINANCE REGULATING BICYCLES AND PERSONAL TRANSPORTATION DEVICES EXECUTIVE SUMMARY

The Central Iowa Bicycle and Pedestrian Roundtable (Bike-Ped RT) facilitates the development, maintenance, and promotion of a world-class commuter and recreational trail system in Central Iowa. The Roundtable recognizes that clear regulations are crucial in establishing a safe and comfortable multimodal transportation network for all. However, there is limited legislation regarding non-vehicular travel modes in our region. Thus, the Roundtable drafted a model ordinance in collaboration with professionals, practitioners, policymakers, and law enforcement as a solution. The model ordinance goals include the following:

- Match State Code where applicable, with modifications to accommodate other personal transportation devices.
- Comply with the U.S. Department of Justice's 2010 ruling on Other Power-Driven Mobility Devices.
- Create regulations that make it safer for people riding bicycles, scooters, and personal transportation devices while also improving safety for pedestrians that may share space with these devices.
- Establish local regulations for issues which State Code does not address.
- Eliminate regulations that are not enforceable or may be too subjective for equitable enforcement.

The model ordinance is consistent with the *Code of Iowa* and furthers three goals from our long-range transportation plan, *Mobilizing Tomorrow*:

- Enhance Multimodal Transportation Options.
- Improve the Region's Environmental Health.
- Further the Health, Safety, and Well-Being of All Residents in the Region.

The ordinance must be adopted at the local level, but the Roundtable recommends that it be reviewed and approved by the MPO's Technical, Executive, and Policy Committees. Additional information about the model ordinance is found in the letter of support from the Chair of the Roundtable, a report preceding the ordinance that includes definitions, background research, *Code of Iowa* references, and recommendations from the Iowa Bicycle Coalition, an Iowa bicycling laws FAQ, and an inventory of inductive loop traffic signals in the region.

The timeline of drafting and reviewing the model ordinance occurred as follows:

- **November 2021:** Model ordinance discussed at Bike-Ped RT
- **January 2022:** Bike-Ped RT agreed to draft a model ordinance and discuss it with MPO member communities
- **February 2022:** Two working meetings held to start model ordinance draft
- **March 2022:** Model ordinance draft discussed at the Traffic Management Advisory Committee (TMAC) meeting
- **April 2022:** Local law enforcement offices contacted to review draft model ordinance
- **May 2022:** Suggestions from MPO member communities incorporated into model ordinance draft by Bike-Ped RT
- **June 2022:** Inductive loop inquiry sent to all MPO member community engineering/public works departments
- **July 2022:** Model ordinance draft reviewed by MPO legal counsel
- **August 2022:** Model ordinance draft approved by Bike-Ped RT and recommended to MPO Boards

Please direct questions about the model ordinance to Aspen Pflanz, [apflanz@dmampo.org](mailto:apflanz@dmampo.org), 515-334-0075.

August 22, 2022

Board Members  
Technical, Executive and Policy Committees  
Des Moines Area Metropolitan Planning Organization

RE: Report Regarding the Model Ordinance Regulating Bicycles and Personal Transportation Devices

Dear Board Members:

On behalf of the Central Iowa Bicycle and Pedestrian Roundtable, the lead agency for [The CONNECT Plan](#) (Central Iowa's Bicycle and Pedestrian Transportation Action Plan, completed in 2009), and upcoming [InterConnect Plan](#) (Central Iowa's new active transportation plan, scheduled for completion in Spring 2023), I write to express full support for the Model Ordinance Regulating Bicycles and Personal Transportation Devices. This ordinance is a multipurpose document that is the result of forward-thinking transportation professionals and city staff who believe in local leadership's ability to promote the support and safety of non-vehicular travel in our region with local legislation. In short, this ordinance regulates bicycles, electric bicycles, electric scooters, and other personal transportation devices at the local level, educates riders and drivers about the rules of the road, and coordinates regional implementation of the following [Mobilizing Tomorrow's](#) goals:

- Goal 2: Enhance Multimodal Transportation Options.
- Goal 3: Improve the Region's Environmental Health.
- Goal 4: Further the Health, Safety, and Well-Being of All Residents in the Region.

The model ordinance is preceded by a report that includes background information about the process, definitions, references, research, and reviews that informed the ordinance language. Several supplemental documents were prepared to provide additional context about the region's bicycle and other personal transportation device laws and infrastructure, or lack thereof, to further justify the need for regional adoption of an ordinance. Although the individual municipalities in our region have different infrastructure, procedures, needs, and capabilities, it is evident that clearly defined regulations for bicycles and personal transportation devices are lacking. The persistent confusion that exists between vehicular and non-vehicular drivers is stressful for them to resolve and challenging for law enforcement to investigate and enforce in the event of an accident or violation. With various transportation devices sharing our streets and roads, the need for unambiguous rules and permissions is even more apparent. This ordinance presents a solution to better regulate, educate, and coordinate all travelers in our region.

I encourage you to support the formal recommendation of the Model Ordinance Regulating Bicycles and Personal Transportation Devices. This ordinance is a thoroughly researched, reviewed, and revised document that is consistent with the transportation needs and goals of our region and the [Code of Iowa](#). It formally acknowledges bicycles and other personal transportation devices as modes of transportation that deserve the same clarity in regulation and safety in enforcement as vehicles. We should all be proud to endorse that.

Sincerely,



Vern Willey, City of Altoona, Councilmember  
Central Iowa Bicycle and Pedestrian Roundtable, Chair

# Report Regarding the Model Ordinance Regulating Bicycles and Personal Transportation Devices

**Prepared For:** Des Moines Area MPO  
Central Iowa Municipalities

**Prepared By:** Central Iowa Bicycle and Pedestrian Roundtable Ordinance Committee:  
Aspen Pflanz, Active Transportation Planner, Des Moines Area MPO  
Jeff Wiggins, AICP, Transportation Planner, City of Des Moines  
Mindy Moore, AICP, Senior Bicycle and Pedestrian Planner, HDR, Inc.

**Date:** August 17, 2022

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## Purpose

This report presents a model ordinance for the regulation of bicycles, electric bicycles, electric scooters, and other personal transportation devices for operation on roadways, streets, sidewalks, and trails. This report details the process, goals, and justification of the language in the attached model ordinance. Please note hyperlinks have been placed in this report to various resources.

## Process

This draft has been crafted and revised during special Ordinance Committee meetings held on February 4, 2022, and February 23, 2022, with members of the Roundtable and also at every monthly Roundtable meeting held since January 2022. The Central Iowa Bicycle and Pedestrian Roundtable formally recommended this ordinance for approval on August 16, 2022.

The City of Des Moines Engineering Department reviewed a draft version and those recommendations have also been addressed herein. The revised draft was also reviewed by local law enforcement and legal counsel.

The final draft will go before the Roundtable for recommendation to the MPO's Technical, Executive, and Policy Committees as a model ordinance for the Des Moines metro area.

## Goals

The goals of the model ordinance are to:

1. Match State Code where applicable, with modifications to accommodate other personal transportation devices.
2. Comply with the U.S. Department of Justice's 2010 ruling on Other Power-Driven
3. Mobility Devices. (Refer to the [U.S. Department of Justice's ADA Requirements.](#))
4. Create regulations that make it safer for people riding bicycles, scooters, and personal transportation devices while also improving safety for pedestrians that may share space with these devices.
5. Establish local regulations for issues which State Code does not address.
6. Eliminate regulations that are not enforceable or may be too subjective for equitable enforcement.

### **Micromobility Definitions**

There are various definitions of the word “micromobility.” Generally, it consists of any small, lightweight device that moves people, both motorized and human-powered. The varying definitions may include devices up to 500 pounds and 3 feet wide, meaning that the size of devices may range from skateboards to a small golf cart. In some contexts, “micromobility” is used to describe *shared* systems of devices. The model ordinance intends to regulate only very small micromobility devices, those under 150 pounds, and does not address shared systems. Therefore, due to its broad and varied meaning, the term “micromobility” is not used in this ordinance. Further, this ordinance differentiates bicycles from other types of micromobility devices due to the potential need to regulate them differently. To achieve the desired

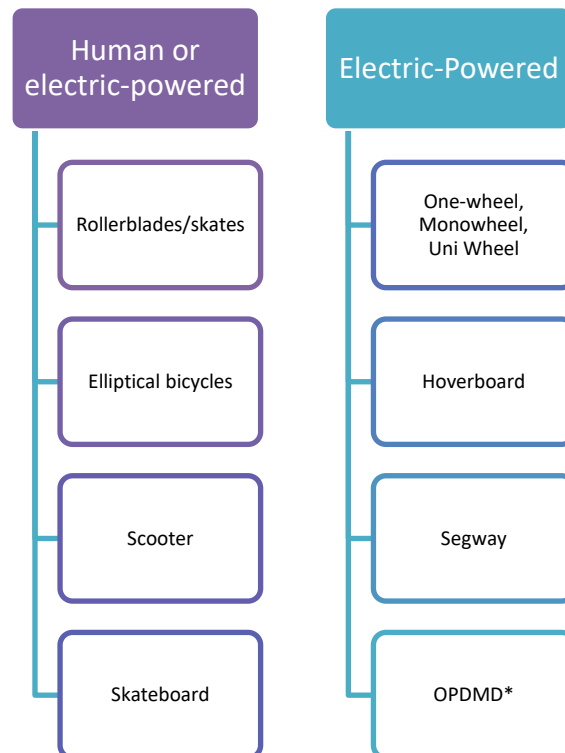
meaning, the model ordinance uses the term “personal transportation device” defined as follows:

a mobility device under one hundred fifty pounds, which may be equipped with an electric motor for assistance or sole propulsion, designed for conveying the operator, with speeds of less than twenty miles per hour, but excluding a bicycle or low-speed electric bicycle.

Two commonly witnessed devices in the Des Moines metro area over the last few years include electric scooters, electric hoverboards, and One-Wheels. Similar non-motorized devices that do not meet the definition of a bicycle, such as elliptical bikes and stand-up bikes, would also fall under the personal transportation device definition. At the discussion on February 4<sup>th</sup>, the Roundtable members generally agreed to this definition for the purpose of regulating these types of devices on streets, sidewalks, and trails.

For additional examples of personal transportation devices, please refer to the following diagram:

### **Examples of Personal Transportation Devices**



*\*Only some Other Power-Driven Mobility Devices would also fall under the Personal Transportation Device definition, depending upon size and speed.*

## **References and Research**

The powers of local authorities to create local ordinances and regulations is found in *Code of Iowa*, [321.236](#); regulations regarding bicycles are specifically addressed under 321.236[10], which allows for “Regulating the operation of bicycles and requiring the registration and licensing of the same, including the requirement of a registration fee. However, the regulations shall not conflict with the provisions of section [321.234](#).” Further, Section [321.235](#) provides that provisions of the state code shall be uniform within all political subdivisions and municipalities and no local authority shall enact any rule in conflict with this chapter unless expressly authorized. Local authorities may adopt additional regulations which are not in conflict with the chapter.

This model ordinance intends to comply with state regulations and references various sections of the *Code of Iowa*, [Chapter 321](#). Sections of the *Code of Iowa* that address bicycles and electric personal assistive mobility devices include:

- 321.178 Driver education — restricted license — reciprocity. [321.178.pdf \(iowa.gov\)](#)
- 321.231 Authorized emergency vehicles and police bicycles [321.231.pdf \(iowa.gov\)](#)
- 321.234 Bicycles, animals, or animal drawn vehicles [321.234.pdf \(iowa.gov\)](#)
- 321.235A A electric personal assistive mobility devices [321.235A.pdf \(iowa.gov\)](#)
- 321.235B Low-speed electric bicycles – labels – operation [321.235B.pdf \(iowa.gov\)](#)
- 321.236 Powers of local authorities. [321.236.pdf \(iowa.gov\)](#)
- 321.281 Actions against bicycles [321.281.pdf \(iowa.gov\)](#)
- 321.297 Driving on the right-hand side of the roadway – exceptions [321.297.pdf \(iowa.gov\)](#)
- 321.318 Method of giving hand and arm signals [321.318.pdf \(iowa.gov\)](#)
- 321.358 Stopping, standing or parking [321.358.pdf \(iowa.gov\)](#)
- 321.366 Acts prohibited on fully controlled-access facilities [321.366.pdf \(iowa.gov\)](#)
- 321.397 Lamps on bicycles [321.397.pdf \(iowa.gov\)](#)
- 321.434 Bicycle sirens or whistles [321.434.pdf \(iowa.gov\)](#)

The Ordinance Committee has reviewed model ordinances relating to these issues from the Iowa Bicycle Coalition, the Des Moines Street Collective, People for Bikes, and Bird Scooters. The Committee has also referred to the City of Cedar Rapids ordinance in place regulating electric scooters. Publications from the American League of Bicyclists and Mineta Transportation Institute were also consulted. In 2021, the City of Indianola adopted a similar bicycle and micromobility ordinance [Indianola Bicycle and Micromobility Regulations](#), to the one proposed herein.

The model ordinance includes the state’s fines for violations as per *Code of Iowa*, [805.8A](#) for reference. The Ordinance Committee encourages localities to consider alternatives to fines for minor offenses, such as community service activities.

## **Iowa Bicycle Coalition Recommendations**

As the state’s leader in bicycle-related legislation and policy, the Iowa Bicycle Coalition’s recommendations were considered. [Model bike ordinance recommendations from the Iowa Bicycle Coalition](#) include:

1. Change lanes to pass bikes – This provision is included in this model ordinance CH#.05[2]. The Iowa Bicycle Coalition provided additional information on this issue. In 2012, the Iowa Attorney General’s office wrote a [letter](#) stating their interpretation of State Code such that bicyclists should be passed in the same fashion as motor vehicles. To make this clear, the Iowa Bicycle Coalition has pursued a change in State Code language addressing this issue,

which is included in this model ordinance. The ordinance change will make it easier for peace officers to enforce safe-passing laws and will more clearly communicate proper behavior to road users. Change lanes to pass bikes is also included in the [Iowa Driver's Manual](#) Section 3 "Safe Driving Tips" pp. 31 and 36. Please refer to the Iowa Bicycle Coalition's website for a detailed analysis of this issue, including a link to the Attorney General's letter: <https://iowabicyclecoalition.org/iowas-safe-passing-laws/>.

2. Lateral Passing Distance – This provision is included in this model ordinance under CH#.05[3]. In the past, some communities have considered removing the Change Lanes to Pass language and expanding the lateral passing distance/three-foot passing rule (which applies to bicycles and others in bike lanes or on paved shoulders) to also apply to bicycles and other personal transportation devices in the travel lane of roadways. The Iowa Bicycle Coalition advised that due to the Attorney General's interpretation described above, that a three-foot passing rule for bicycles in travel lanes may conflict with the current interpretation, and actually reduce the level of protection for bicyclists that is currently in place. Further, the Cato Institute did a study on three-foot passing laws which suggests that three feet may reduce the lateral passing distance in practice for vehicles and bicycles. <https://www.cato.org/research-briefs-economic-policy/give-me-3-do-minimum-distance-passing-laws-reduce-bicyclist>
3. Right arm right turn signal – State Code section [321.318.pdf](#) provides an option for motorists to use left hand signals rather than the vehicle's signals to indicate turning, slowing or stopping. For people biking, both hands are visible to other road users, not only the left hand as with motorists. Further, riders may need to keep their hands on the handlebars to maintain control of the bicycle or to brake; therefore, they cannot be required to use hand signals for turning or slowing. [National Highway Traffic Safety Administration](#) and [League of American Bicyclists](#) teach the right hand for a right turn signal as a standard, as it is a valid way to signal a right turn and is more intuitive. Additionally, the right side of the bicyclist is often on the same side that a right turning motorist may see before cutting off a right turning bicyclist, and children learn the right arm signal more easily than the left signal. To accommodate these different circumstances, hand signals for people biking and using personal transportation devices has been included in this model ordinance with permissive language under CH.07[8].
4. Door zone protection – This clearly assigns the responsibility to motorists to check for oncoming traffic, including people biking or using other personal transportation devices, before opening their door into a vehicular travel way or bike lane. This provision is included in this model ordinance under CH#.05[4].
5. Far to the right exemptions – This addresses instances in which a bicyclist or person using a personal transportation device does not have to operate as far right as practicable or on the right half of the roadway, as specified in the Iowa Code under Section [321.297](#). This provision has been simplified from the language provided by the Iowa Bicycle Coalition to specify that a bicyclist or a person using a personal transportation device may use the roadway in the same manner as a motor vehicle, with exceptions to also operate in a bicycle facility, on a sidewalk, or on a multi-use trail. This provision is included in this model ordinance under CH#.08[4].
6. Dead red-light allowance – "Dead Red" regulations allow people riding bicycles and other personal transportation devices to proceed through a signalized intersection if the signal fails to detect their presence after waiting for a reasonable amount of time for the light to change



(one full cycle or 90 seconds) ordinance so that they are not stranded. This provision is included in this model under CH#.04[6]. Per the [League of American Bicyclists](#) research in July 2021, 11 states allow this: Arizona, Illinois, Kansas, Minnesota, Missouri, Nevada, Ohio, Oregon, Tennessee, Washington, and Wisconsin. Illinois, Indiana and South Carolina permit this after at least 120 seconds; Nevada and Virginia permit this after two complete cycles of the lights or lighted arrows; Oregon permits this after one complete full cycle; Utah permits this after at least 90 seconds; Wisconsin permits this after at least 45 seconds.

6. Fixed brake definition – Some local ordinances have required brakes or required users to brake in order to stop. This issue relates to direct drive bikes (“fixies”), which often do not have brakes at all, but the bike does not have a freewheel allowing it to coast. This model ordinance addresses this issue under CH#.07[3] by requiring users to maintain control of speed and stopping without mention of brakes.
7. Light fix-it ticket – This addresses the option for a person caught without a light or reflector to provide a light within a 72-hour period rather than be fined. This provision is included in this model ordinance under CH#.12[3].
8. Yield to bikes in crosswalks – State Code currently only requires motorists yield to pedestrians in crosswalks or at multi-use trail crossings per *Code of Iowa* [321.327](#) and [321.328](#). This model ordinance also requires motorists to yield to cyclists or persons using other personal transportation devices in crosswalks under CH#.05[5].
9. Improved bicycle lane operations – This issue relates to the operation of bicycles in bike lanes and motor vehicles encroaching into bike lanes. This draft model ordinance proposes different language than the Iowa Bicycle Coalition’s model language to address the same issues. This language is included in CH#.05[1] and CH#.08[4].
10. E-bike definition – The Iowa Bicycle Coalition’s model definition for a bicycle includes up to four wheels. The State’s definition of bicycles and low-speed bicycles states that bicycles have “two or three wheels.” This model ordinance modifies the State’s definition by stating that bicycles may have “up to four wheels.” The State’s definition excludes unicycles and bicycles with four wheels sometimes referred to as “quads.” Also, it is not clear if wheels on a trailer would count as part of the bicycle’s total number of wheels.

### **Items Not Addressed**

Additional items that have been previously discussed at the Central Iowa Bicycle and Pedestrian Roundtable, but currently are not recommended for the model ordinance include Stop as Yield (aka Idaho Stop) and Red Signal as Stop. This is a common practice that allows bicyclists to spend less time in intersections where most crashes involving bicycles and automobiles occur. The Iowa Bicycle and Pedestrian Long Range Plan notes that over 60 percent of all bicycle-related crashes occurred at intersections and driveways, as did more than 55 percent of combined fatalities and major injuries. Studies in [Delaware](#) and [Idaho](#) have shown significant decreases in crashes at stop-controlled intersections.

This language has been omitted from the model ordinance but is provided here to ensure common understanding of how it would be written if it were included or reconsidered at a future time. [League of American Bicyclists](#) research from July 2021 indicates that eight states allow Stop as Yield (Arkansas, Delaware, Idaho, North Dakota, Oklahoma, Oregon, Utah, Washington) and eight states allow use of a signal as a stop sign (Arkansas, Idaho, Indiana, Oklahoma, South Carolina, Utah, Virginia, Wisconsin). As of April 2022, [Colorado has also adopted state legislation](#) to allow both provisions.

1. **Stop Sign as Yield.** A person operating a bicycle or personal transportation device on a roadway approaching a stop sign shall slow down and, if required for safety, stop before entering the intersection. After slowing to a reasonable speed or stopping, the person shall yield the right-of-way to any vehicle in the intersection or approaching on another roadway so closely as to constitute an immediate hazard during the time the person is moving across or within the intersection or junction of roadways. After slowing to a reasonable speed and yielding the right-of-way if required, the person may cautiously make a turn or proceed through the intersection without stopping.
2. **Red Signal as Stop Sign.** A person operating a bicycle or personal transportation device on a roadway approaching a steady red traffic control signal in which no bicycle or device detection is functioning shall stop before entering the intersection and shall yield to all other traffic. Once the person has stopped and yielded, they may proceed through the steady red signal with caution. After slowing to a reasonable speed and yielding the right-of-way if required, a person may cautiously make a right-hand turn. A left-hand turn onto a one-way roadway may be made on a red signal after stopping and yielding to other traffic.

Pedicabs are not addressed in this model ordinance. These types of devices are often operated as a business with passengers. Depending upon their design, some may fall under the definition of a bicycle. However, larger ones with multiple passengers likely would not fall under any definition contained herein.

Bike share or scooter share programs are not addressed in this ordinance. Local jurisdictions may wish to regulate the number of programs allowed to be in operation at one time, the location of operation, or specific items related to management of the program. The National Association of City Transportation Officials has published [\*Guidelines for Regulating Shared Micromobility\*](#).

Autonomous delivery vehicles are not addressed in this ordinance. These are covered in *Code of Iowa Chapter 321O* and referred to as a “personal delivery device.” This chapter allows for local jurisdictions to develop regulations if they are not inconsistent with this chapter.

Finally, this draft model ordinance only addresses changes to bicycle ordinances. There may be additional sections of city codes, such as those related to motor vehicle operations, parking, or trails, that will need to be modified for consistency with the changes in this ordinance.

## MODEL ORDINANCE FOR BICYCLES AND PERSONAL TRANSPORTATION DEVICES

Notes in red are included as commentary, not as proposed model ordinance language.

CH#.01 PURPOSE	CH#.06 ACTIONS AGAINST BICYCLES AND PERSONAL TRANSPORTATION DEVICES
CH#.02 DEFINITIONS	CH#.07 RESPONSIBLE RIDING
CH#.03 SCOPE OF REGULATIONS	CH#.08 PLACE OF RIDING
CH#.04 TRAFFIC CODE APPLIES	CH#.09 PARKING
CH#.05 MOTOR VEHICLE OPERATIONS	CH#.10 EQUIPMENT REQUIREMENTS

### CH#.01 PURPOSE.

The purpose of this Chapter is to set forth regulations for operating bicycles, electric scooters and personal transportation devices on the city's roadways, streets, sidewalks, and multi-use trails as enabled by *Code of Iowa*, Section 321.235 and 321.236[10].

### CH#.02 DEFINITIONS.

1. "Bicycle" means either of the following: (1) A device having up to four wheels and having at least one saddle or seat for the use of a rider which is propelled by human power. (2) A low- speed electric bicycle.  
(*Code of Iowa*, Sec. 321.1[40.c.]
2. "Bicycle facility" means any type of accommodation designed primarily for the use of people riding bicycles as per current engineering design standards.
3. "Bicycle lane" means a portion of a street designed for exclusive or preferential use by persons using bicycles, electric scooters or personal transportation devices. Bicycle lanes are to be distinguished from the portion of the street used for motor vehicle traffic by physical barrier, striping, marking, or other similar device.
4. "Electric scooter" means a device weighing less than one hundred pounds that is equipped with two or three wheels, handlebars, and an electric motor, and which is solely powered by the rider or by an electric motor capable of propelling the device without additional propulsion supplied by the rider, at a maximum speed on a paved level surface of no more than twenty miles per hour, or both.
5. "Low-speed electric bicycle" means a device having a saddle or seat for the use of a rider, up to four wheels, equipped with fully operable pedals, and an electric motor of less than seven hundred fifty watts that meets the requirements of one of the following classes:
  - a. "Class 1 low-speed electric bicycle" means a low-speed electric bicycle equipped with a motor that may be used to provide assistance only when the rider is pedaling and that ceases to provide assistance when the bicycle reaches a speed of twenty miles per hour or more.
  - b. "Class 2 low-speed electric bicycle" means a low-speed electric bicycle equipped with a

motor that may be used exclusively to propel the bicycle and that is not capable of providing assistance when the bicycle reaches a speed of twenty miles per hour or more.

c. “Class 3 low-speed electric bicycle” means a low-speed electric bicycle equipped with a motor that may be used to provide assistance only when the rider is pedaling and that ceases to provide assistance when the bicycle reaches a speed of twenty-eight miles per hour or more.

*(Code of Iowa, Sec. 321.1[36A.]*

6. “Multi-use trail” means a way or place for the shared use and travel of bicycles, pedestrians, and other authorized devices, which is designated is and controlled by the local jurisdiction. No multi-use trail shall be considered as a street or highway.
7. “Other Power-Driven Mobility Device (OPDMD)” means any mobility device powered by batteries, fuel, or other engines that is used by individuals with mobility disabilities for the purpose of locomotion, including golf carts, electronic personal assistance mobility devices, or any mobility device designed to operate in areas without defined pedestrian routes, but that is not a wheelchair.
8. “Personal Transportation Device” means a mobility device under one hundred fifty pounds, which may be equipped with an electric motor for assistance or sole propulsion, designed for conveying the operator, with speeds of less than twenty miles per hour, but excluding a bicycle or low-speed electric bicycle.
9. “Roadway” means that portion of a highway improved, designed, or ordinarily used for vehicular travel.
10. “Street” means the entire width between property lines of every way or place of whatever nature when any part thereof is open to the use of the public, as a matter of right, for purposes of vehicular traffic.

#### CH#.03 SCOPE OF REGULATIONS.

These regulations shall apply whenever a bicycle, electric scooter, or personal transportation device is operated upon any public street, roadway, park road, any multi-use trail, sidewalk, or in any bicycle lane or other bicycle facility, subject to those exceptions and regulations stated herein.

#### CH#.04 TRAFFIC CODE APPLIES.

1. Every person, including a peace officer, riding a bicycle, electric scooter, or personal transportation device upon a roadway or in a bicycle lane shall be granted all of the rights and shall be subject to all of the duties applicable to the driver of a vehicle by the laws of the State declaring rules of the road applicable to vehicles or by the Traffic Code of the City applicable to the driver of a vehicle, except as to those provisions that by their nature can have no application or those for which specific exceptions have been set forth regarding police bicycles. This does not apply to the use of a bicycle in a parade authorized by proper permit from local authorities.

*(Code of Iowa, Sec. 321.234[2, 5])*

2. Bicycles, electric scooters, or personal transportation devices are not subject to registration,

licensure, titling, inspection, and proof of financial liability coverage provisions of *Code of Iowa*, Chapter 321.

3. Riders of bicycles, electric scooters, or personal transportation devices are not required to have possession of a driver's license or permit.
4. Whenever such person dismounts from a bicycle, electric scooter, or personal transportation device, the person shall be subject to all regulations applicable to pedestrians.
5. A peace officer riding a police bicycle in the line of duty may do any of the following:
  - a. Proceed past a red or stop signal or stop sign, but only after slowing down as may be necessary for safe operation.
  - b. Exceed the maximum speed limits as long as the rider does not endanger life or property.(*Code of Iowa*, Sec. 321.231)
6. If a person riding a bicycle, electric scooter, or personal transportation device has stopped pursuant to the directions of a traffic control device and has a reasonable belief that the traffic control device or signal is unresponsive or not detecting their presence, thus rendering the person stranded, the person may proceed through the intersection, provided that:
  - a. There is no other vehicle approaching or entering the same intersection from a different roadway, or from the same roadway approaching or entering the intersection from the opposite direction;
  - b. The person proceeds exercising due care through the intersection with consideration for all other applicable rules of the road; and
  - c. One complete cycle of the traffic-control device or signal, or 90 seconds, has passed.

#### CH#.05 MOTOR VEHICLE OPERATIONS.

1. Bicycle lane right-of-way. Operators of all motor vehicles shall yield the right-of-way to bicycles, electric scooters, and personal transportation devices in a designated bicycle lane and shall not operate a motor vehicle within a bicycle lane, unless provisions of law establish other requirements and regulations at intersections and other places affecting such bicycle lanes, then such other provision of law shall control. No person shall drive a motor vehicle in a bicycle lane established on a roadway or street except as follows:
  - a. To park where parking is permitted.
  - b. To enter or leave the roadway or street.
  - c. To prepare for a turn within a distance of 200 feet from the intersection.
2. Change Lane to Pass. The driver of a motor vehicle overtaking a person riding a bicycle, electric scooter, or personal transportation device, proceeding in the same direction in the same lane on a roadway or street shall pass to the left of the rider of the device in an adjacent travel lane or on the opposite side of the roadway or street and shall not again drive to the right side of the roadway or street until safely clear of the overtaken rider and device.
3. Lateral Passing Distance. The driver of a motor vehicle overtaking a bicycle, electric scooter, or personal transportation device that is traveling on a paved shoulder or in a bicycle lane, shall give at least three feet of lateral passing distance between the outside of the vehicle and the rider and device.

4. **Opening Doors.** No person shall open any door of a motor vehicle located on a roadway or street without first taking precaution to ensure that this action does not interfere with the movement of traffic or endanger any other person or vehicle. In addition, no person shall leave open any door of a motor vehicle located on a roadway for a period of time longer than necessary to load or unload passengers or cargo.
5. **Yield to persons in crosswalks.** The driver of a motor vehicle shall yield right-of-way, slowing down or stopping if need be to so yield, to a pedestrian or person riding a bicycle, electric scooter, or personal transportation device within any marked crosswalk or unmarked crosswalk at an intersection or any multi-use trail crossing a roadway, street, or driveway. (*Code of Iowa*, Sec. 321.327)
6. **Parking.** Drivers of motor vehicles shall not park in bicycle lanes or other bicycle facilities or multi-use trails.

#### CH#.06 ACTIONS AGAINST BICYCLES AND PERSONAL TRANSPORTATION DEVICES.

1. A person operating a motor vehicle shall not steer the motor vehicle unreasonably close to or toward a person riding a bicycle, an electric scooter, or personal transportation device on a roadway or street, including the adjacent shoulder.
2. A person shall not knowingly project any object or substance at or against a person riding a bicycle, an electric scooter, or personal transportation device on a roadway or street, adjacent shoulder, sidewalk, multi-use trail, or any other location.

(*Code of Iowa*, Sec. 321.281)

**Note:** The fine for a violation of 321.281 is \$325 per [805.8A](#).

#### CH#.07 RESPONSIBLE RIDING

1. **Double Riding Restricted.** A person propelling a bicycle shall not ride other than astride a permanent and regular seat attached thereto. No bicycle, electric scooter, or personal transportation device shall be used to carry more persons at one time than the number for which it is designed and equipped. This does not apply to the use of a bicycle, electric scooter, or personal transportation device in a parade authorized by proper permit from local authorities.

(*Code of Iowa*, Sec. 321.234[3, 4, 5])

**Note:** The fine for a violation of 321.234 Subsections 3 and 4 is \$35 per [805.8A](#).

2. **Speed.** A person shall not operate a bicycle, electric scooter, personal transportation device, or OPDMD at a speed greater than is careful and prudent at a rate of speed no greater than is reasonable and proper under the conditions existing at the point of operation, taking into account the surroundings and environment, such as inclement weather, infrastructure conditions, and grade. A person shall not operate a class 3 low-speed electric bicycle on a bicycle lane or multi-use trail in excess of the posted or applicable speed limit, or if there is no posted or applicable speed limit, twenty miles per hour. (*Code of Iowa*, Sec. 321.235B[9.b.]

**Note:** The fine for a violation of 321.235B is \$25 per [805.8A](#).

3. Control of bicycle, electric scooter, personal transportation device, or OPDMD. The operator shall keep the device under directional, speed, and stopping control at all times.
4. Improper riding. No person shall operate a bicycle, electric scooter, personal transportation device, or OPDMD in an irregular or reckless manner so as to disregard the safety of the operator, others, or property.
5. Right of way. Riders of electric scooters, low speed electric bicycles, and other electric personal transportation devices shall yield right of way to pedestrians, human-powered bicycles, and other human-powered conveyances. Riders of bicycles and other human-powered devices shall yield right of way to pedestrians.
6. Emerging from an Alley or Driveway. The operator of a bicycle, electric scooter, or personal transportation device emerging from an alley, driveway or building shall, upon approaching a sidewalk or the sidewalk area extending across any alleyway, yield the right-of-way to all pedestrians approaching on said sidewalk or sidewalk area, and upon entering the roadway shall yield the right-of-way to all vehicles approaching on said roadway.  
(Code of Iowa, Sec. 321.353)
7. Class 3 Low-Speed Electric Bicycles. A person under the age of sixteen shall not operate a class 3 low-speed electric bicycle. A person under the age of sixteen may ride as a passenger on a class 3 low-speed electric bicycle.  
(Code of Iowa, Sec. 321.235B[6])  
**Note: The fine for a violation of 321.235B is \$25 per [805.8A](#).**
8. Hand Signals. Riders of bicycles, electric scooters, or personal transportation devices may, but shall not be required to, signal their turning movements and stopping with their hands and arms as follows:
  - a. Left Turn – left hand and arm extended horizontally to the left
  - b. Right turn – left hand and arm extended upward to the left or right hand and arm extended horizontally to the right
  - c. Stopping or slowing – left hand and arm extended downward.
9. Following Emergency Vehicles. No person riding a bicycle, electric scooter, or personal transportation device shall follow closer than 500 feet of an emergency vehicle as defined by Iowa Code section 321.1 which has emergency lights and/or siren activated, and shall not stop, park, or leave a bicycle within 500 feet of an emergency vehicle stopped in response to an emergency.
10. Towing. It is unlawful for any person riding upon any bicycle, electric scooter, or personal transportation device to attach the device or themselves to any moving motor vehicle by tow rope, hand grip or otherwise.

#### CH#.08 PLACE OF RIDING

1. Paved Multi-use Trails. Bicycles, electric scooters, personal transportation devices, and OPDMD may be operated on paved multi-use trails, subject to the limitations of this Chapter.
2. Unpaved Trails. Bicycles, electric scooters, personal transportation devices, and OPDMD may be operated on unpaved trails, provided that they do not risk damage to the trail,

surrounding environment, or pose a risk to the safety of other trail users.

**Note: This would allow all devices to use unpaved trails. Local jurisdictions may wish to modify this provision to better fit their unpaved trail network conditions.**

3. Public Sidewalks.

- a. Bicycles, electric scooters and personal transportation devices, may be operated upon the public sidewalks in a careful and prudent manner except where signs or pavement markings explicitly prohibit riding on the sidewalk or in specified dismount zones. Careful and prudent manner shall be consistent with CH#.07 Responsible Riding.

**Note: This would allow riding all devices on downtown sidewalks. Local jurisdictions may wish to modify this provision to better fit their sidewalk conditions.**

- b. OPDMD may be operated by persons with mobility disabilities on all sidewalks provided that they do not risk damage to the sidewalks, surrounding environment, or pose a risk to the safety of other sidewalk users.

4. Roadways and Streets. When riding on the roadway or street, riders of bicycles, electric scooters and personal transportation devices shall ride in the same location and manner as motorized vehicles unless a bicycle facility, a sidewalk, or multi-use trail is provided along the same corridor, in which case riders may choose to ride in the aforementioned location.

This section does not apply to the use of a bicycle, electric scooter or personal transportation device in a parade or special event authorized by the city.

#### CH#.09 PARKING.

1. Parking locations for bicycles, electric scooters, or personal transportation devices shall retain access to:
- an ADA-compliant pedestrian pathway
  - a fire hydrant
  - a US Postal Service mailbox
  - a crosswalk or curb ramp
  - loading zones
  - transit zones, including bus stops, shelters, or other passenger waiting areas
  - accessible parking spaces
  - street furniture or amenities that require pedestrian access
  - entryways
  - driveways.

#### CH#.10 EQUIPMENT REQUIREMENTS.

Every person riding a bicycle, electric scooter, or personal transportation device shall be responsible for providing and using equipment as provided herein:

1. Every device when in use between sunset to sunrise and when weather conditions provide insufficient lighting to render clearly discernable persons and vehicles on the road at a distance of 300 feet ahead, shall be equipped with a lamp on the front emitting a white light visible from a distance of at least 300 feet to the front and with a lamp on the rear exhibiting a red light visible from a distance of 300 feet to the rear, except that a red reflector on the rear, may be used in lieu of a rear light. The lamps or reflector may be attached to the rider of the device rather than the device itself provided the visibility requirements are met. A peace



officer riding a police bicycle is not required to use either front or rear lamps if duty so requires.

(*Code of Iowa*, Sec. 321.384 and Sec. 321.397)

**Note: The fine for a violation of 321.384 is \$45 and the fine for a violation of 321.397 is \$35 per [805.8A](#).**

2. Equivalent equipment such as headlamps and red-light attachments to the head, back, arm, or leg may be used in lieu of a lamp on the front and a red light on the rear of the device.
3. A citation issued for failure to have a front or rear lamp or red reflector on a bicycle, electric scooter, or personal transportation device or on a rider of any of these devices as required shall first provide for a seventy-two hour period within which the person charged with the violation shall replace or repair the lamp. If the person complies with the directive to replace or repair the headlamp or rear lamp within the allotted time period, the citation shall be expunged. If the person fails to comply within the allotted time period, the citation shall be processed in the same manner as other citations.
4. A device shall not be equipped with and a person shall not use upon such device any siren or whistle. This shall not apply to bicycles ridden by peace officer in the line of duty.

(*Code of Iowa*, Sec 321.434)

**Note: The fine for a violation of 321.434 is \$35 per [805.8A](#).**

## Iowa Code Bicycling FAQ

### 1. CAN LOCAL AUTHORITIES CREATE BICYCLE REGULATIONS NOT SPECIFIED IN IOWA CODE?

- a. **Yes.** If they are consistent with current Iowa Code and are not in conflict or contrary, additional bicycle regulations may be adopted and enforced at the local level.

#### **321.235. Provisions uniform.**

The provisions of this chapter shall be applicable and uniform throughout this state and in all political subdivisions and municipalities therein and no local authority shall enact or enforce any rule or regulation in conflict with the provisions of this chapter unless expressly authorized herein. Local authorities may, however, adopt additional traffic regulations which are not in conflict with the provisions of this chapter.

#### **321.236. Powers of local authorities.**

Local authorities shall have no power to enact, enforce, or maintain any ordinance, rule, or regulation in any way in conflict with, contrary to, or inconsistent with the provisions of this chapter, and no such ordinance, rule, or regulation of said local authorities heretofore or hereafter enacted shall have any force or effect.

### 2. IS A BICYCLE A “VEHICLE” UNDER IOWA CODE?

- a. **It depends.** Current Iowa Code omits bicycles from the definition of “Vehicle” but indicates that bicycles are subject to the same rules as a person driving a vehicle, with exceptions for provisions that cannot have application.

#### **321.1. Definitions of words and phrases.**

90. “*Vehicle*” means every device in, upon, or by which any person or property is or may be transported or drawn upon a highway. “*Vehicle*” does not include:

- a. Any device moved by human power, including a low-speed electric bicycle.
- b. Any device used exclusively upon stationary rails or tracks.
- c. Any personal delivery device operated pursuant to chapter 321O.
- d. Any integral part of a truck tractor or road tractor which is mounted on the frame of the truck tractor or road tractor immediately behind the cab and which may be used to transport persons and property but which cannot be drawn upon the highway by the truck tractor or another motor vehicle.
- e. Any steering axle, dolly, auxiliary axle, or other integral part of another vehicle which in and of itself is incapable of commercially transporting any person or property but is used primarily to support another vehicle.

#### **321.234 Bicycles, animals, or animal-drawn vehicles.**

1. A person riding an animal or driving an animal drawing a vehicle upon a roadway is subject to the provisions of this chapter applicable to the driver of a vehicle, except those provisions of this chapter which by their nature can have no application.
2. A person, including a peace officer, riding a bicycle on the highway is subject to the provisions of this chapter and has all the rights and duties under this

chapter applicable to the driver of a vehicle, except those provisions of this chapter which by their nature can have no application or those provisions for which specific exceptions have been set forth regarding police bicycles.

3. A person propelling a bicycle on the highway shall not ride other than upon or astride a permanent and regular seat attached to the bicycle.

4. A person shall not use a bicycle on the highway to carry more persons at one time than the number of persons for which the bicycle is designed and equipped.

5. This section does not apply to the use of a bicycle in a parade authorized by proper permit from local authorities.

### 3. DOES IOWA HAVE A LAW ABOUT OPENING DOORS INTO TRAFFIC?

- a. **No, Iowa does not have a dooring law.** A bill ([S.F. 164](#)) was introduced in the Senate in 2013 that was referred to the Transportation Committee, but no further action was taken. However, the [Iowa Driver's License Manual](#) advises drivers to check traffic prior to opening their vehicle door.

#### **S.F. 164**

##### **Section 1. NEW SECTION. 321.362A Opening and closing vehicle doors.**

1. A person shall not open a door on a vehicle on the side available to moving traffic unless it is reasonably safe to do so and can be done without interfering with the movement of such traffic. A person shall not leave a door open on the side of a vehicle available to moving traffic for a period of time longer than necessary to load or unload passengers.

2. This section does not apply to a member of a public safety agency, as defined in section 34.1, performing official duties.

3. A person convicted of a violation of this section is guilty of a simple misdemeanor punishable as a scheduled violation under section 805.8A, subsection 14, paragraph "m".

**Sec. 2.** Section 805.8A, subsection 14, Code 2013, is amended by adding the following new paragraph:

NEW PARAGRAPH. m. Open vehicle door violations. For violations under section 321.362A, the scheduled fine is one hundred dollars.

#### **Iowa Driver's Manual**

##### **2.24. Parking.**

Check traffic before you open the door. Get out of the vehicle on the curb side if necessary.

- b. "Forty states have a dooring law. The ten states without a dooring law are: Connecticut, Indiana, **Iowa**, Kentucky, Michigan, New Jersey, North Carolina, Tennessee, Virginia, and West Virginia. In thirty-eight states the dooring law applies to people leaving their door open longer than necessary to load or unload a passenger or cargo, as well as when a door is opened without caution." – [American League of Bicyclists](#)

**4. DOES IOWA HAVE A LAW REQUIRING VEHICLES TO CHANGE LANES TO PASS CYCLISTS OR PERSONS RIDING PERSONAL TRANSPORTATION DEVICES?**

- a. **No, Iowa does not have a change lanes to pass law.** A bill ([H.F. 411](#)) was introduced in the House in 2021 that was referred to the Transportation Committee, but no further action was taken. However, the [Iowa Driver's License Manual](#) advises drivers to change lanes to pass bicyclists. Furthermore, a [2016 poll](#) showed that most Iowans support this proposed law.

**H.F. 411**

**Section 1. Section 321.299, subsection 1, Code 2021, is amended to read as follows:**

**Section 1. 321.299 Overtaking a vehicle or bicycle.**

The following rules shall govern the overtaking and passing of vehicles and bicycles proceeding in the same direction, subject to those limitations, exceptions, and special rules herein after stated:

1. The driver of a vehicle overtaking another vehicle proceeding in the same direction shall pass to the left of the other vehicle at a safe distance and shall not again drive to the right side of the roadway until safely clear of the overtaken vehicle.
2. Except when overtaking and passing on the right is permitted, the driver of an overtaken vehicle shall give way to the right in favor of the overtaking vehicle and shall not increase the speed of the overtaken vehicle until completely passed by the overtaking vehicle.
3. The driver of a vehicle overtaking a person riding a bicycle proceeding in the same direction on a roadway shall pass to the left of the bicycle in an adjacent travel lane or on the opposite side of the roadway and shall not again drive to the right side of the roadway until safely clear of the overtaken bicycle in accordance with section 321.281. This subsection does not apply to a vehicle overtaking a bicycle which is traveling on a paved shoulder or in a lane designated for the travel of bicycles.

**Iowa Driver's Manual**

**5.10. Sharing the Road with Bicyclists and Pedestrians.**

**Passing safely**

When passing bicyclists, you must completely change lanes, giving the bicyclist the entire lane like you would with any other vehicle. Do not return to the right until you can see the bicyclist(s) in your rearview mirror.

**5. DOES IOWA LAW REQUIRE BICYCLISTS TO USE HAND SIGNALS WHILE RIDING?**

- a. **It is a gray area.** Since Iowa Code indicates that bicycles are subject to the same rules as a person driving a vehicle, it may be understood that bicyclists are required to use hand signals. Moreover, a bill ([H.S.B. 210](#)) was introduced in the House in 2015 that permitted bicyclists to use their right arm to indicate a right, but no further action was taken.

**321.317. Signals by hand and arm or signal device.**

1. The signals required under the provisions of this chapter may be given either by means of the hand and arm as provided in section 321.318, or by a

mechanical or electrical directional signal device or light conforming to the provisions of this chapter.

**321.318. Method of giving hand and arm signals.**

All signals herein required which may be given by hand and arm shall when so given be given from the left side of the vehicle and the following manner and interpretation thereof is suggested:

- a. Left turn — Hand and arm extended horizontally.
- b. Right turn — Hand and arm extended upward.
- c. Stop or decrease of speed — Hand and arm extended downward.

**Section 1. Section 321.318, Code 2015, is amended to read as follows:**

**321.318. Method of giving hand and arm signals.**

1. All signals herein required which may be given by hand and arm shall when so given be given from the left side of the vehicle and the following manner and interpretation thereof is suggested:

- a. Left turn — Hand and arm extended horizontally.
- b. Right turn — Hand and arm extended upward.
- c. Stop or decrease of speed — Hand and arm extended downward.

2. Notwithstanding subsection 1, a person operating a bicycle may give a right-turn signal by extending the right hand and arm horizontally and to the right side of the bicycle.

**6. DOES IOWA LAW AUTHORIZE BICYCLES TO PROCEED THROUGH TRAFFIC LIGHTS THAT FAIL TO DETECT THEIR PRESENCE?**

- a. **No, Iowa law does not authorize bicyclists to proceed through traffic lights that do not detect them.** However, this exception for bicyclists to stop, evaluate, and proceed cautiously through a signaled intersection reduces the prospect of a bicyclist being stranded and the danger of a bicyclist being injured while “leading” vehicles through the intersection that lined up while waiting for the light to turn. Currently, there are [11 states](#) that allow bicyclists to proceed through an inoperative traffic signal.

**7. DOES IOWA HAVE A LAW GIVING BICYCLISTS/PERSONS RIDING PERSONAL TRANSPORTATION DEVICES THE RIGHT-OF-WAY IN CROSSWALKS?**

- a. **No, Iowa does not have a bicyclist right-of-way in crosswalk law.** A bicyclist right-of-way bill ([H.F. 2333](#)) was introduced in the House in 2022 that was referred to the Transportation Committee, but no further action was taken. Additionally, the [Iowa Driver’s License Manual](#) advises drivers to be prepared to yield to bicyclists due to their vulnerability, and states that the leading cause of traffic-related fatalities in Iowa is failure to yield the right-of way.

**H.F. 2333**

**Section 1. Section 321.327, subsection 1, Code 2022, is amended to read as follows:**

1. Where traffic control signals are not in place or in operation, the driver of a vehicle shall yield the right-of way, slowing down or stopping if need be to so yield, to a pedestrian or a person riding a bicycle crossing the roadway within

any marked crosswalk or within any unmarked crosswalk at an intersection, except as otherwise provided in this chapter.

## **Iowa Driver's Manual**

### **2.21. Intersections.**

#### **WHEN TO YIELD THE RIGHT-OF-WAY**

Where vehicles or pedestrians are likely to meet one another and there are no signs or signals to regulate traffic, there are rules that say who must yield the right-of-way. These rules tell drivers who goes first and who must wait in different traffic situations. The law says who must **yield** the right-of-way; it does not **give** anyone the right-of-way. Regardless of who has the right-of-way, you should do everything you can to prevent striking a pedestrian or another vehicle.

Be especially alert for bicyclists. While bicyclists and motorists must share the rights and responsibilities of using the road, motorists should realize bicycle riders are very vulnerable in crashes. Therefore, motor vehicle drivers should use good defensive driving skills to avoid collisions with bicyclists. Be ready to yield the right-of-way, even at times the bicyclists should yield to you. They have no defense against a vehicle, so it is your responsibility as a driver to watch out for them.

## Inductive Loop and Demand-Actuated Traffic Signals in the Des Moines Metro

### Altoona

“We no longer have loops in Altoona as everything is video detection. We have 26 signalized intersections all with video detection. We currently have (2) hawk pedestrian signals. The pedestrian signals are located on 1st Avenue s & 1st street east. And 1st Avenue s & 6th st sw” – Justin Phillips ([JPhillips@altoona-iowa.com](mailto:JPhillips@altoona-iowa.com))

**Ankeny** – No response.

### Bondurant

“Bondurant has 6 signalized intersections. None of these are controlled by inductive loop anymore. Everything we have is controlled by Camera. Only 2 of the 6 intersections have pedestrian crossing signals.” – John Horton ([jhorton@cityofbondurant.com](mailto:jhorton@cityofbondurant.com))

**Carlisle** – No response.

**Clive** – No response.

“For other communities, you can ask riders in those communities for examples or identify traffic signals that follow the characteristics outlined above. One example that comes to mind is University & 68th/Country Club in Clive/West Des Moines, where I did walk over and actuate the pedestrian phase.” – Jeff Wiggins ([JPWiggins@dmgov.org](mailto:JPWiggins@dmgov.org))

### Des Moines

“In researching the traffic signal issue, I learned that ~45% of DSM signals are in the downtown and most (except MLK) run on a 60-90 second cycle. Signals outside downtown use various types of detection and can have cycles up to 120 seconds. Loop detection, in particular, has varying ability to detect lighter vehicles such as motorcycles, mopeds and bikes. Loop detection is not based on weight, but rather on magnetic disturbance. The inability to detect bicycles results from the size of the loops and the ability of a smaller disturbance to trip the sensor. This is why separate smaller bicycle loop detection that can detect bicycles has been added at certain locations. [...]

The most common time I encounter this situation is when I am at a signalized intersection outside downtown that is not particularly busy. A few specific examples (from the NW quadrant of the City, based on personal experience) include:

- Polk & University (bicycle detection will be added with University project)
- 48th & Hickman
- 44th & Franklin
- Crossing MLK downtown (SW 16th, SW 11th, SW 6th)
- 6th & Forest
- Forest & 25th, 27<sup>th</sup> – Jeff Wiggins ([JPWiggins@dmgov.org](mailto:JPWiggins@dmgov.org))

## Grimes

“City of Grimes has a mix of these intersections. For example:

- IA 141 & SE 37th St has video vehicle detection (demand-actuated), but does not have any pedestrian push buttons to detect pedestrians
- IA 141 & SE 19th St has inductive vehicle detection (demand-actuated) and has a set of pedestrian push buttons for pedestrians and bicyclists to cross the north approach to the intersection
- IA 141 & SE 11th St has inductive vehicle detection (demand-actuated), but does not have any pedestrian push buttons to detect pedestrians
- IA 44 & James St has inductive vehicle detection (demand-actuated) and has pedestrian push buttons for pedestrians and bicyclists to cross all four approaches to the intersection
- IA 44 and W Brookside Dr has video vehicle detection (demand-actuated) and has pedestrian push buttons for pedestrians and bicyclists to cross all four approaches to the intersection

As you can see, Grimes has a mix of detection throughout. Every intersection has some form of vehicle detection (demand-actuation), but not necessarily any pedestrian or bicycle detection.

Also, the City of Grimes has recently awarded a project to remove all inductive loop detection from the remaining traffic signals under their control and replace the detection with either video detection or radar detection. That project should be completed in about a year.”

“Thinking through the intersections and detection of the traffic signals in Grimes, we would say that none of the traffic signals are able to detect bicycles on the street. A couple intersections may, but the detection hasn’t been specifically setup for detecting bikes on the street.” – Todd Knox ([tknox@snyder-associates.com](mailto:tknox@snyder-associates.com))

**Johnston** – No response.

**Mitchellville** – No response.

## Norwalk

1. “Norwalk has six intersections that have traffic signals. All of them have inductive loop sensors. We are currently working on a project that will transition them to camera sensors in the next year or so.
2. All of our intersections with traffic signals have pedestrian actuated crossings. We do not have any areas where it is a pedestrian only crossing.
3. All of our traffic signals are on Hwy 28. Wakonda Dr-Hwy 28 intersection is a newer one. Also Colonial Parkway and Hwy 28.” – Wayne Schwartz ([wschwartz@norwalk.iowa.gov](mailto:wschwartz@norwalk.iowa.gov))

## Pleasant Hill

“Below are the responses to your questions.

1. We have 10 signaled intersections that use loops for advanced detection (cameras for stop-line)
2. We have 5 demand actuated traffic signals
3. Examples: Vandalia Rd & S. Pleasant Hill Blvd, NE 56th Street & E. University Ave, NE 60th Street & E. University Ave” – Russ Paul ([rpaul@pleasanthilliowa.org](mailto:rpaul@pleasanthilliowa.org))

**Polk City** – No response.

**Urbandale** – No response.



**Wauke**

“Wauke has 25 traffic signals with pedestrian signal components (push buttons and signal heads). All of our signals use video and/or radar detection for vehicle detection. We do not use loop detectors anymore. A few examples would be Alice’s Rd and E Hickman Rd and SE Alice’s Rd/GPP and SE University Ave.” – Rudy Koester ([rkoester@wauke.org](mailto:rkoester@wauke.org))

**West Des Moines** – No response.

“For other communities, you can ask riders in those communities for examples or identify traffic signals that follow the characteristics outlined above. One example that comes to mind is University & 68th/Country Club in Clive/West Des Moines, where I did walk over and actuate the pedestrian phase.” – Jeff Wiggins ([JPWiggins@dmgov.org](mailto:JPWiggins@dmgov.org))

**Windsor Heights**

“We’ve got 3 signals with traffic loops Hickman and Westover, which is on the border of Des Moines and Windsor Heights). All the rest (11) are camera systems. There are approximately 10 intersections with pedestrian push button activation.” – Dalton Jacobus ([djacobus@windsorheights.org](mailto:djacobus@windsorheights.org))