



## Geyer Road Pedestrian Hybrid Beacon FAQs

### **Why is the signal being replaced?**

The City has received federal funding to resurface Geyer Road from W. Adams Ave to Manchester Road. The existing signalized crossing is not ADA compliant. As part of the resurfacing project the City is required by federal regulations to make the signalized crossing ADA compliant.

### **Why is the signal changing to a Pedestrian Hybrid Beacon?**

The current traffic signal is used to allow pedestrians to cross Geyer Road. A Pedestrian Hybrid Beacon is inactive or “dark” until activated by a pedestrian. This is different from a traditional traffic signal being utilized for a pedestrian crossing that is always green or flashing yellow until activated. A 2010 study released by the Federal Highway Administration, Safety Effectiveness of the HAWK Pedestrian Crossing Treatment (FHWA-HRT-10-042), the “PHB can provide greater safety than the other pedestrian crossing options for crossing busy arterials without the drawbacks of a traditional signal. Whereas [previous research shows] traditional signals may increase crashes, especially rear-end crashes, the PHB has been found to reduce the potential for pedestrian crashes by 69 percent and total crashes by 29 percent for greater overall safety.”

### **Why is the signal being moved?**

The primary function of the signal is to provide a signalized pedestrian crossing for elementary school students. The signal is not necessary to control the right-of-way for vehicles. The existing signal does not control any turning movements from the offset legs of W. Jewel Ave. This creates a potential conflict where a motorist can turn onto Geyer Road while the pedestrian signal is in use. Pedestrians being given the command to cross may not be aware to check for vehicles making a turn onto Geyer from W. Jewel.

The City is taking the opportunity to improve the safety of the signalized pedestrian crossing. Some of the benefits of the new location include.

- The Manual for Uniform Traffic Control Devices recommends locating a minimum of 100’ of side streets controlled by STOP or YIELD signs. The proposed location follows that recommendation.
- The proposed location is away from the offset intersection of W. Jewel. This eliminates potential pedestrian conflict points with uncontrolled left turn movements from W. Jewel.
- Improves safety for those traveling to or from the northeast to avoid a crossing movement at the offset intersection at Dougherty Ferry/Peake/Geyer intersection.
- Located near the crest in the vertical curve allowing better sight distance for pedestrians and motorists.
- Allows for installation of a curb “bump out” decreasing the crossing length for pedestrians and improving site obstruction from parked vehicles.
- The curb “bump out” minimizes the loss of parking.

- Vehicles exiting the south school entrance no longer stopped by the signal eliminating queueing onto the school lot.
- The planned parking lot crosswalk by the school will allow direct access to school front door
- Allows for the mast arm, pole base and equipment cabinets to be located on school property away from residential properties. The “bump out” allows for the pedestrian head post to be located beyond the existing curb line away from residential property lines.

**Was the public’s input sought concerning this project?**

Yes. The City developed preliminary plans for the project. As part of the preliminary design phase the City sought the Keysor Elementary School’s input on possible locations for the new PHB. The crossing affects the school’s operation and its students are the primary users of the crossing. Also, the design sought to place mast arms, foundations, and equipment cabinets on school property and avoid placing them on or near neighboring residential properties. This requires cooperation and coordination with the school. The proposed location was determined to be the best location for pedestrian safety and was supported by the school district.

Once the preliminary plans were developed, the City held a public meeting to gather input from the community. The City advertised the meeting in the Webster-Kirkwood Times, the city website, and on the City’s Facebook page. The city also mailed individual notices to the property owners along Geyer Road within the project’s limits. Residents were allowed to view the preliminary plans and provide written comment concerning the project. This is the normal process and timeline for this type of project. Sometimes the preliminary design is altered based on public comments received, and sometimes the design remains as is.

**Was a traffic study conducted?**

A traffic study was not conducted for the proposed crossing. A traffic study was not required and the proposed location did not cause any particular concern to the design team that would call for a study. The City has since received several traffic related concerns from nearby residents. The chief concerns being:

1. Southbound queues created by the PHB causing a decrease in level of service to the Dougherty Ferry/Peeke/Geyer intersection.
2. Southbound queues created by the PHB blocking access to the north Keysor Elementary School entrance.
3. Northbound queues from the Dougherty Ferry/Peeke/Geyer intersection extending into the proposed crosswalk.
4. Kirkwood High School students require a signalized crossing to cross N. Geyer Road near Jewel Ave.

The design team conducted a review of the location and observed pedestrian and traffic patterns in the area. The results of the observations concluded that the proposed PHB location will not have a

significant impact to traffic in the area and is the recommended location for the PHB. You can read more about the observations in the design memo handout dated December 6, 2018.

### **How will the new crossing impact the on campus operations at Keysor Elementary School?**

The new crossing will be accommodated through minimal changes to Keysor's current arrival and dismissal procedures. Keysor will have all buses load and unload on the south side of the cross walk. This change will allow the buses to leave campus when they are ready and also ensure walkers do not travel in between buses. Keysor will also add an adult crossing guard in the new crossing lane. This adult will stop vehicle traffic in coordination with the current north drive crossing guard, allowing all foot traffic to safely enter and exit the campus and maintaining the flow of traffic. Keysor will continue to utilize adult crossing guards, and student crossing guards where appropriate, at various locations at arrival and dismissal times to keep students safe.

### **Can the signal remain at its current location?**

A signal is allowed to be placed at the current location, but it is not the recommended location of the design team. Since the existing signal is in place to accommodate the crossing of pedestrians, a PHB is preferred for controlling pedestrian crossing movements. However a PHB is not ideal for locations that have side roads controlled by STOP or YIELD signs located within 100' of the crossing. The proposed placement of the PHB was evaluated in regards to safety of pedestrians, vehicular congestion and minimizing the disturbance of residential properties. The presence of utilities near this location inhibits the installation of a curb "bump out". The existing location would also require any new mast arms, foundations, and equipment cabinets be placed on or near residential property.

### **Is there a history of reported incidents at the W. Jewel Avenue and Geyer Road intersections?**

The Kirkwood Police Department traffic report database did not return any incidences within the past 10 years. Keysor Elementary School staff did report anecdotal accounts of "near misses" involving students and vehicles at the existing crosswalk.

### **Will on street parking along Geyer Road be eliminated?**

Yes. The curb "bump out" will require the removal of three on-street parking spaces. If a bump out is not provided, parking will need to be restricted within 100' in advance and 20' beyond the marked crosswalk.

The City plans to provide transverse striping to demark individual parallel spaces between W. Jewel Ave and Peeke Ave. This will help utilize the parking provided more efficiently.

### **Will there still be a crosswalk across Geyer Rd at W. Jewel Ave?**

Yes. The City is planning to maintain a marked and signed crosswalk at W. Jewel. This will be similar to the crossings provided for high school students crossing Dougherty Ferry Road and W. Essex Avenue.