

Memorandum

TO: Kevin J. Jackson, Village Manager

FROM: Rob Sproule, Public Works Director

Bill McKenna, Assistant Public Works Director/Village Engineer

FOR: Village President and Board of Trustees

DATE: June 3, 2025

SUBJECT: Update on the Ridgeland Avenue Bike Feasibility Study

Purpose

The purpose of this memo is to provide an update on the status of the Ridgeland Avenue Bike Feasibility Study.

Background

In 2024, the Engineering Division began work with Transystems Corporation on a feasibility study for adding bike lanes on Ridgeland Avenue. The intent of the study was to identify what types of bike facilities (shared lanes, dedicated bike lanes, buffered lanes, or protected lanes) could be built and what the impacts would be for adding bike facilities for the full three-mile length of Ridgeland Avenue in the Village. Similar to all north-south streets in the Village, adding bike lanes on Ridgeland Avenue requires the complete loss of on-street parking due to the existing narrow width of Ridgeland Avenue.

Ridgeland Avenue was chosen for the feasibility study because it is a continuous north-south route through the Village, it has signalized intersections for crossing busier streets, and it has minimal commercial areas relative to Oak Park Avenue where removal of onstreet parking would be more impactful. This feasibility study worked towards the goal of providing protected bike lanes as the desired treatment based on Ridgeland Avenue's relatively high traffic volumes of 8,000–15,000 annual average daily traffic.

The full details summarizing the activities of the feasibility study are described in the Ridgeland Avenue Bike Lane Feasibility Study Summary, which can be found on the

Village website here: https://engageoakpark.com/ridgeland, and the key points are summarized as follows.

Parking Impacts:

Due to the existing roadway width, the installation of bike lanes on Ridgeland Avenue would require the removal of all on-street parking. The existing roadway is typically just wide enough to accommodate two traffic lanes and either two parking lanes or two buffered bike lanes. There is no additional room on Ridgeland Avenue to allow for both parking and bike lanes.

Transystems analyzed the parking utilization along Ridgeland Avenue on one weekday and one weekend day. The results confirmed staff's expectation that parking utilization was high near Oak Park River Forest High School (OPRF), Julian Middle School and near the overnight parking zone south of Madison Street. Parking utilization was low in most other areas. The expected parking impacts near the Intercultural Montessori School on Randolph Street were not fully captured in the study because the renovations to expand the school were under construction at that time.

The study found that there is capacity on Elmwood Avenue and Cuyler Avenue (parallel to Ridgeland Avenue) and on adjacent perpendicular streets to generally accommodate parking shifted from Ridgeland Avenue. However, further analysis would be required to determine any adjustments needed for parking restrictions, specific impacts to schools, and other buildings with parking needs.

Aside from parking, there are also concerns around school pick-up and drop-off at Percy Julian Middle School and frequent deliveries to homes and buildings along the corridor. Continuous protected or buffered bike lanes would not allow for these drop-off areas.

Corridor Challenges and Stakeholder Coordination:

School Operations:

The project team met with OPRF, School District 97 (D97), and representatives from D97 schools near the project area to discuss their use of Ridgeland Avenue and adjacent streets for parking and drop-off and pick-up operations and how creating bike lanes on Ridgeland Avenue may impact their operations. In general, creating bike lanes on Ridgeland Avenue did not directly impact drop-off or pick-up operations at

the D97 grade schools, but had major impacts to Percy Julian Middle School's drop-off and pick-up operations, and bike lanes would not be feasible on Ridgeland Avenue between Madison Street and Washington Boulevard as a result.

Bike lanes on Ridgeland Avenue would also impact parking for students and staff for OPRF. Parking on Ridgeland Avenue between Lake Street and Chicago Avenue is heavily utilized by students and staff for OPRF, and the loss of parking in this area would require the Village to allow for this parking to occur on adjacent side streets of Elmwood Avenue, Cuyler Avenue, and the east–west streets, which generally all have parking restrictions in–place to prevent students and staff from parking on them.

Public Transit:

The team also met with Pace Suburban Bus (Pace) and the Chicago Transit Authority (CTA) to discuss how to integrate bus stops on Ridgeland Avenue with the possible bike lanes. Ridgeland Avenue is served by CTA bus route 86 north of the CTA Green Line station and by Pace bus route 314 south of the Green Line Station. CTA has stops at every intersection and Pace has stops at all but three intersections south of the Green Line Station. Based on the needs of CTA and Pace, the dedicated or protected bike lanes would need to be gapped at every bus stop, which is essentially every intersection except for three along Ridgeland Avenue. The use of any protected bike lanes or even the use of vertical delineator posts would also need to be further pushed back away from bus stop to allow for the bus to maneuver into the bus stop area.

Emergency Operations:

The team also met with the Illinois Department of Transportation (IDOT) since Ridgeland Avenue is an unmarked State Highway from Roosevelt Road to Augusta Boulevard under IDOT jurisdiction. Based on these discussions, IDOT would not allow for continuous protected bike lanes if those bike lanes would not allow for room for cars to pull out of a driving lane to create space for emergency vehicles to pass. These same concerns were shared by the Village's Police, Fire, and Public Works Departments. Based on these IDOT requirements, many of which are shared by Village departments, continuous protected bike lanes on Ridgeland Avenue would not be feasible. Any proposed bike facility on Ridgeland Avenue would end up being primarily a buffered bike lane with occasional delineator posts and occasional curb protection generally near the start of a block to minimize the occurrence of vehicles crossing into the bike lane.

Signalized Intersections:

Implementing a bike lane at signalized intersections would necessitate the removal of an existing traffic lane—either a left turn lane, a through lane, or a combined through/right turn lane at most locations. Given the existing roadway constraints, widening intersections to accommodate bike lanes is generally not feasible within the Village. Even in cases where expansion is technically possible, the associated costs for such modifications often exceed \$500,000 per intersection, making it a highly resourceintensive endeavor. There are twelve signalized intersections on Ridgeland Avenue within the interior of the Village with ten of these twelve signals under IDOT control. To install a bike lane up to a signalized intersection, (IDOT) mandates that the Village conduct a traffic capacity and safety analysis at any location where the reduction of turn or through lanes is proposed to accommodate bike lanes. Public Works -Engineering agrees that such an analysis should be performed for any lane reductions at signalized intersections to ensure operational efficiency and safety. The cost to complete these analyses is approximately \$10,000 per intersection and, depending on the findings, an Intersection Design Study (IDS) may need to be completed which would be up to an additional \$10,000 per intersection to complete. Completing the traffic capacity and safety analysis at a cost of approximately \$90,000 was outside of the scope of this study. This analysis is needed so traffic flow and safety issues can be evaluated to determine if removal of a left turn lane or a right/through lane is possible.

Right tun lanes or additional space at an intersection are often needed to allow for right turning cars to get out of the through lane to not block traffic. These are especially important at areas with high percentages of right tuning vehicles and/or if there are a large number of pedestrians crossing the road which would prevent a right turning car from being able to make the turn without major delay. Many of the intersections along Ridgeland Avenue have high volumes of pedestrians crossing due to nearby schools, parks, and the Green Line Station. Left turn lanes and signals are needed when there is a higher percentage of left turning cars or if there is a history of right–angle collisions at the intersection, which would require cars to have the protection of a left turn signal. Furthermore, IDOT would not allow for the removal of a left turn lanes at a signal unless left turns would be specifically prohibited at that signal. Prohibiting left turns at the vast majority of the signalized intersections on Ridgeland Avenue is not a feasible option.

For this feasibility study, staff worked with Transystems to determine which signalized intersections may accommodate having bike lanes installed up to the intersection. Based on existing space constraints, traffic data, and staff's understanding of the traffic and pedestrian levels at signals, there would be significant gaps in bike lanes at the

traffic signals along Ridgeland Avenue. Only two of the twelve signals are likely feasible to have bike lanes extend all the way up to the intersection (shown in green on attachment at end of memo), with six signals possibly being able to accommodate having bike lanes extend all the way to the intersection (shown in yellow), and four of the twelve signalized intersection not being able to accommodate bike lanes up to the intersection (shown in red). This will result in large gaps in the bike lanes at the signals, which are the areas with the most conflicts among all users.

Feasibility Results:

The challenges described above due to school operations, bus operations, deliveries, and signalized intersections resulted in a hybrid design recommendation which uses a combination of buffered and protected bike lanes, shared bike lanes, and advisory bike lanes. Raised barriers and flexible delineators are recommended to provide protection where feasible along the bike lanes, and gaps are recommended intermittently for driveways, occasional deliveries, bus stops, and to accommodate emergencies and maintenance. Several signalized intersections would also have gaps in the bike lanes to avoid major traffic impacts as described above. Below is an image of and hybrid/blended bike lane, and an attachment showing the proposed hybrid bike lane design for roughly three blocks is included at the end of this memo. Please note the green pavement markings are just for illustration purposes and green pavement markings would generally be used only at higher conflict crossings.



Example of hybrid/blended bike treatments (striped and protected with curb and delineators). Waukegan Rd & W Howard St, Niles, IL. Image courtesy of Google Earth

<u>Transportation Commission Recommendations</u>

Village Staff determined that, given the additional challenges and costs to determine if bike lanes can be accommodated at signalized intersections, it was appropriate to provide the Village of Oak Park Transportation Commission with an update on the study prior to moving forward with public engagement.

At its December 9, 2024 meeting, the Transportation Commission expressed a preference for prioritizing efforts and Village funding toward the expansion of the broader bike network as outlined in the short-term plan. Commissioners proposed incorporating bike lanes along Ridgeland Avenue into the long-term bike plan and recommended revisiting the study at a later date. In alignment with staff's recommendation, the Transportation Commission voted to suspend the study at this time.

Next Steps

Given the challenges of establishing continuous protected bike facilities on Ridgeland Avenue while maintaining parking availability, the Transportation Commission recommended revisiting the feasibility study for bike facilities on Ridgeland Avenue as part of the long-term recommendations in the Bike Plan Update. This recommendation was made with the expectation that cycling activity in Oak Park and demand for bike lanes along Ridgeland Avenue will grow over the next decade, potentially leading to greater community and resident acceptance of parking reductions and possible increased travel times required to implement these bike treatments. Staff will reassess this feasibility study and the design of bike facilities on Ridgeland Avenue as part of future updates to the Village's Bike Plan and long-term bike network improvements.

<u>Additional Considerations</u>

While the study ultimately recommends not proceeding with bike lanes at this time, the Engineering Division has identified key design challenges, potential solutions, and the necessary steps for revisiting the project in the future. Insights gained from this study will inform the evaluation of similar initiatives, including the Bike Plan recommendation for bike lanes along Oak Park Avenue from North Avenue to Chicago Avenue, which is expected to incorporate a hybrid approach featuring both buffered and protected bike lanes. The links below are provided to explain the different types of bike lanes that can be applied as well as the Ridgeland Avenue Bike Lane Feasibility Study Summary.

<u>Links</u>

- Types of Bike Facilities: https://www.chicago.gov/city/en/sites/complete-streets-chicago/home/bike-program/Types-of-Bikeways.html
- Ridgeland Avenue Bike Lane Feasibility Study Summary https://engageoakpark.com/25210/widgets/85187/documents/68673

For questions, please contact Bill McKenna, Village Engineer, via email at bmckenna@oak-park.us or by phone at 708.358.5722.

cc: Lisa Shelley, Deputy Village Manager
Ahmad Zayyad, Deputy Village Manager
Jack Malec, Assistant to the Village Manager
Christina M. Waters, Village Clerk
All Department Directors

<u>Attachments</u>

- Attachments 1–3: Hybrid/Blended bike treatments (green is shown just for clarity)
- Attachment 4: Traffic Signal Exhibit







