

WHAT IS THE REPAVING & SAFETY PROJECT?

PROJECT OBJECTIVES:

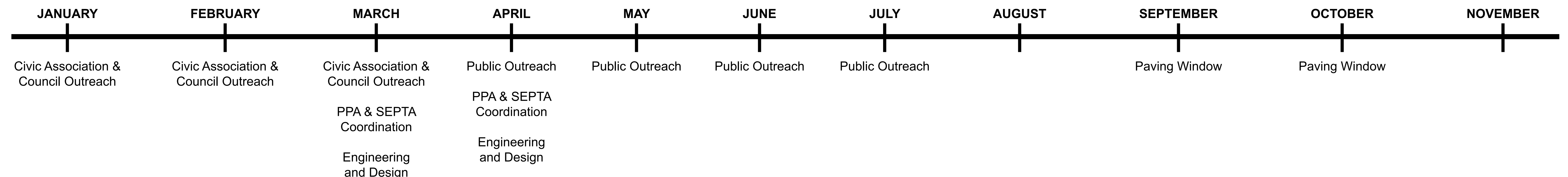
Increase safety for people walking, riding transit, bicycling, and driving along both streets by:

- 1. Reducing the likelihood of possible crashes** that occur between turning vehicles and people biking
- 2. Redesigning intersections**, where pedestrians, bicycles, and vehicles mix

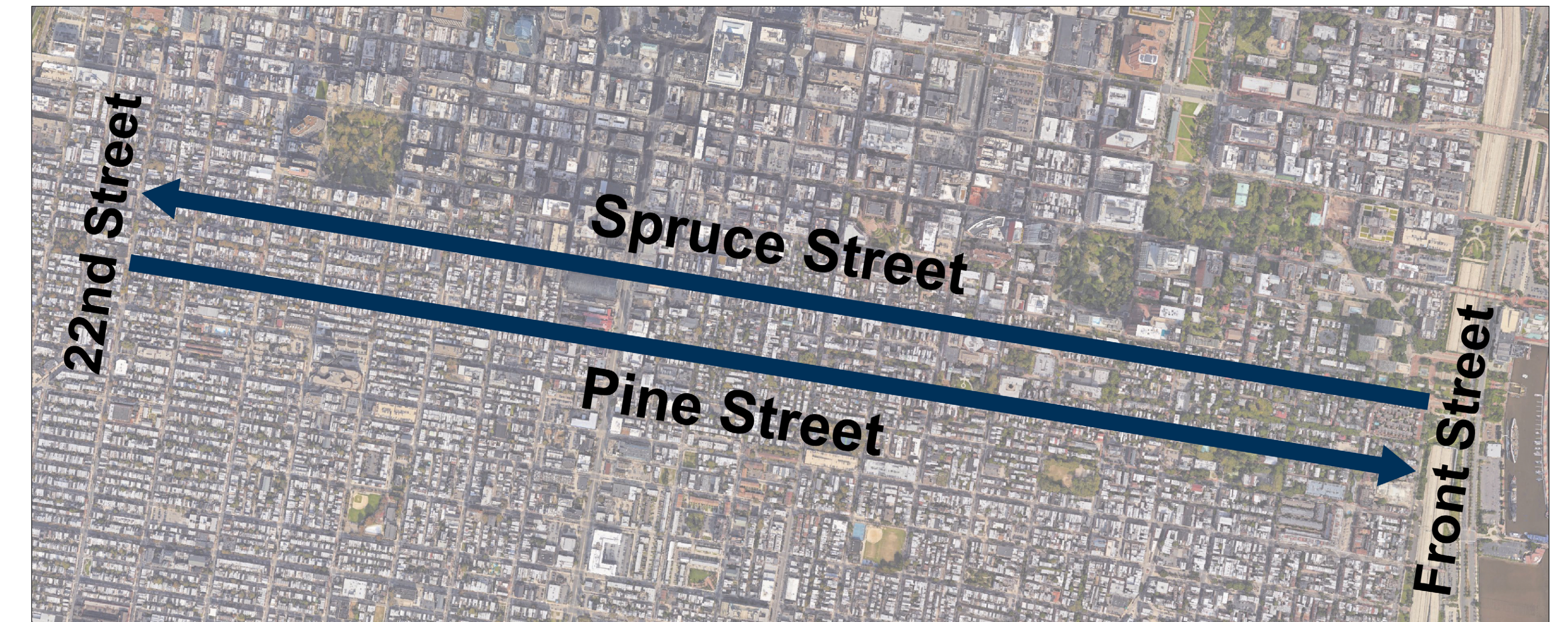
PROJECT WILL:

- Repave and restripe both streets
- Move bike lane from the right to the left
- Move parking from the left to the right
- Redesign intersections for better safety
- Update parking and loading

2018 PROJECT TIMELINE:



PROJECT EXTENTS



Every block on Spruce and Pine from Front Street to the Schuylkill River will be re-paved. Only blocks between Front Street and 22nd Street already have bike lanes. These blocks are the focus of this meeting.

WHY IS THIS PROJECT HAPPENING?

SPRUCE AND PINE WERE DUE TO BE REPAVED

Spruce Street and Pine Street were **already on the City's repaving schedule**.

LINE STRIPING HAS FADED OVER TIME

There are many places on Spruce and Pine Streets where **the striping and crosswalks are faded**. City paving crews typically repave and restripe at the same time because **roadway paint lasts longer when applied to new asphalt**.

SPRUCE AND PINE STREETS CAN BE SAFER FOR PEOPLE WALKING AND BIKING

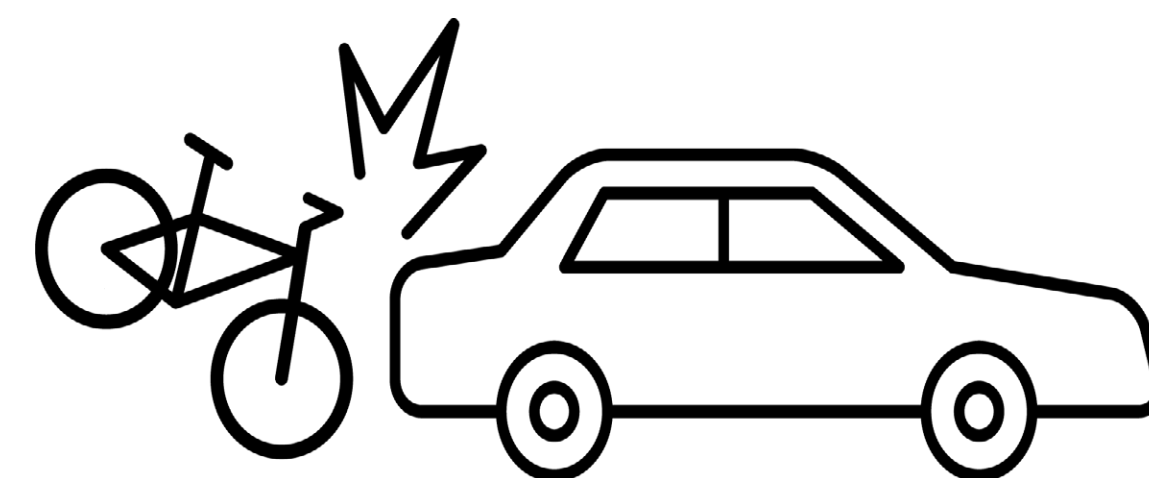
Spruce and Pine Streets are not on the Vision Zero High-Injury Network, but **they are important Center City streets**. **Many people walk, bike, ride transit, and drive here every day**. We can make changes to the streets and intersections this year to make them safer since they are being repaved and restriped.

THERE IS AN OPPORTUNITY TO ADJUST PARKING AND LOADING

The project will potentially add space for parking and loading. We are working with PPA, SEPTA, and people who live and work on Spruce and Pine to do that. To learn more, please see our Parking and Loading boards.

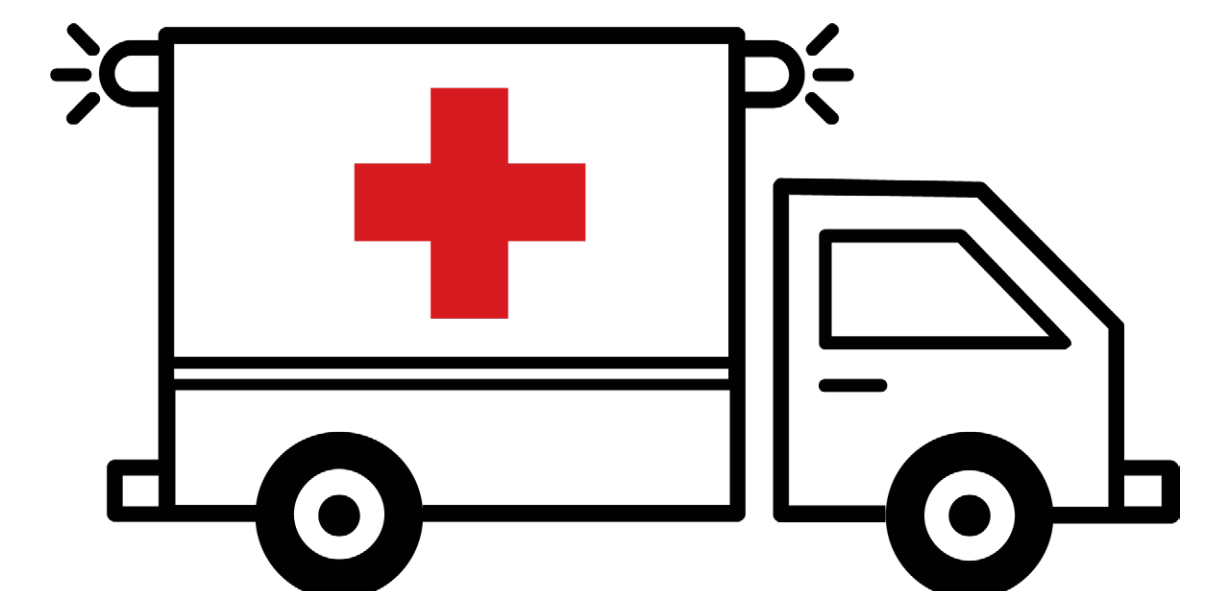
CRASHES ON SPRUCE & PINE

There were **90 crashes on Spruce Street and 95 crashes on Pine Street** (2012 to 2016). 21 crashes involved a person riding a bike and a vehicle and 18 involved a person walking and a vehicle.



FATALITIES & INJURIES

178 people were injured in crashes on Spruce Street and Pine Street (2012 to 2016). **A cyclist was killed** in November 2017.



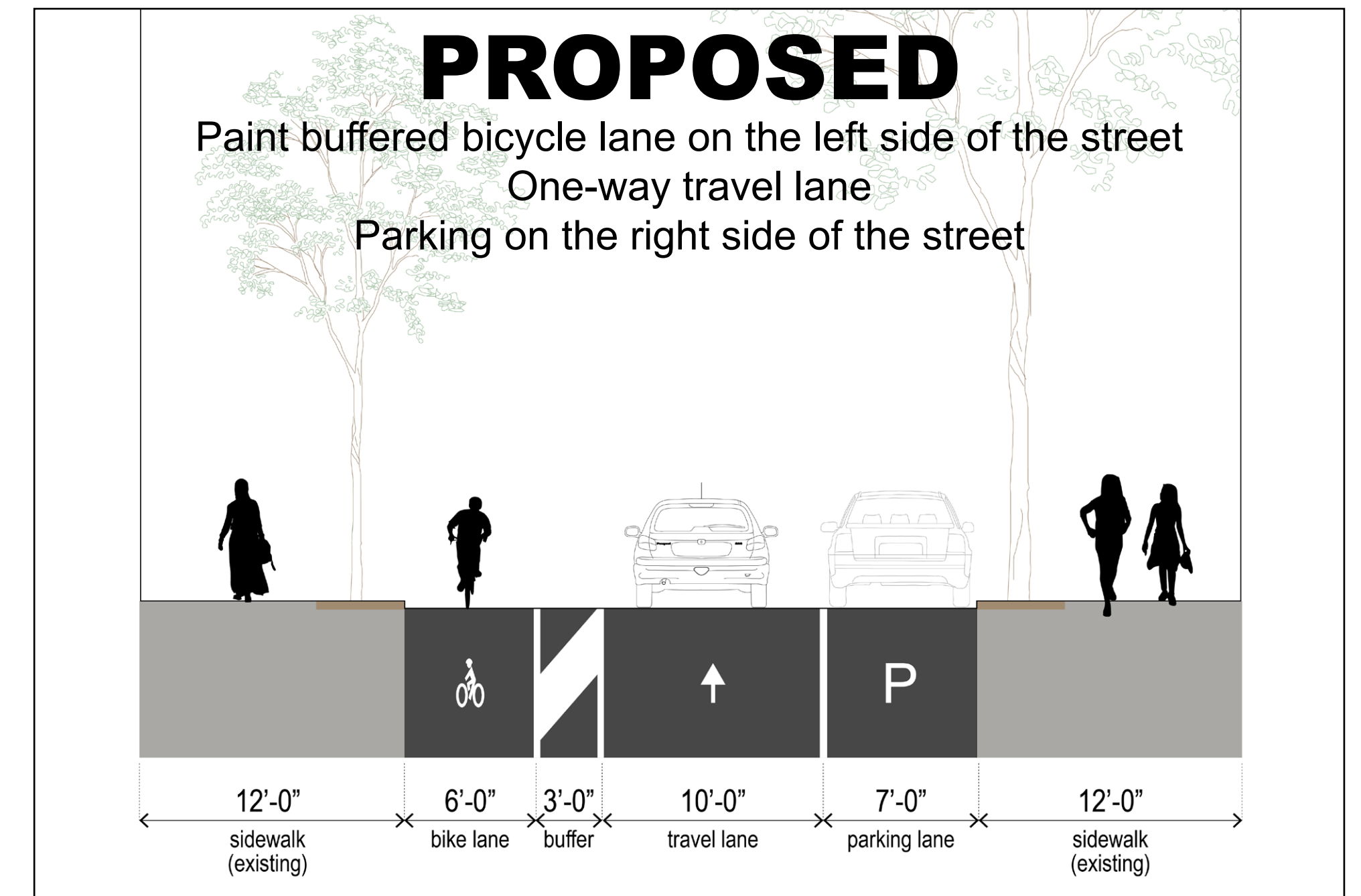
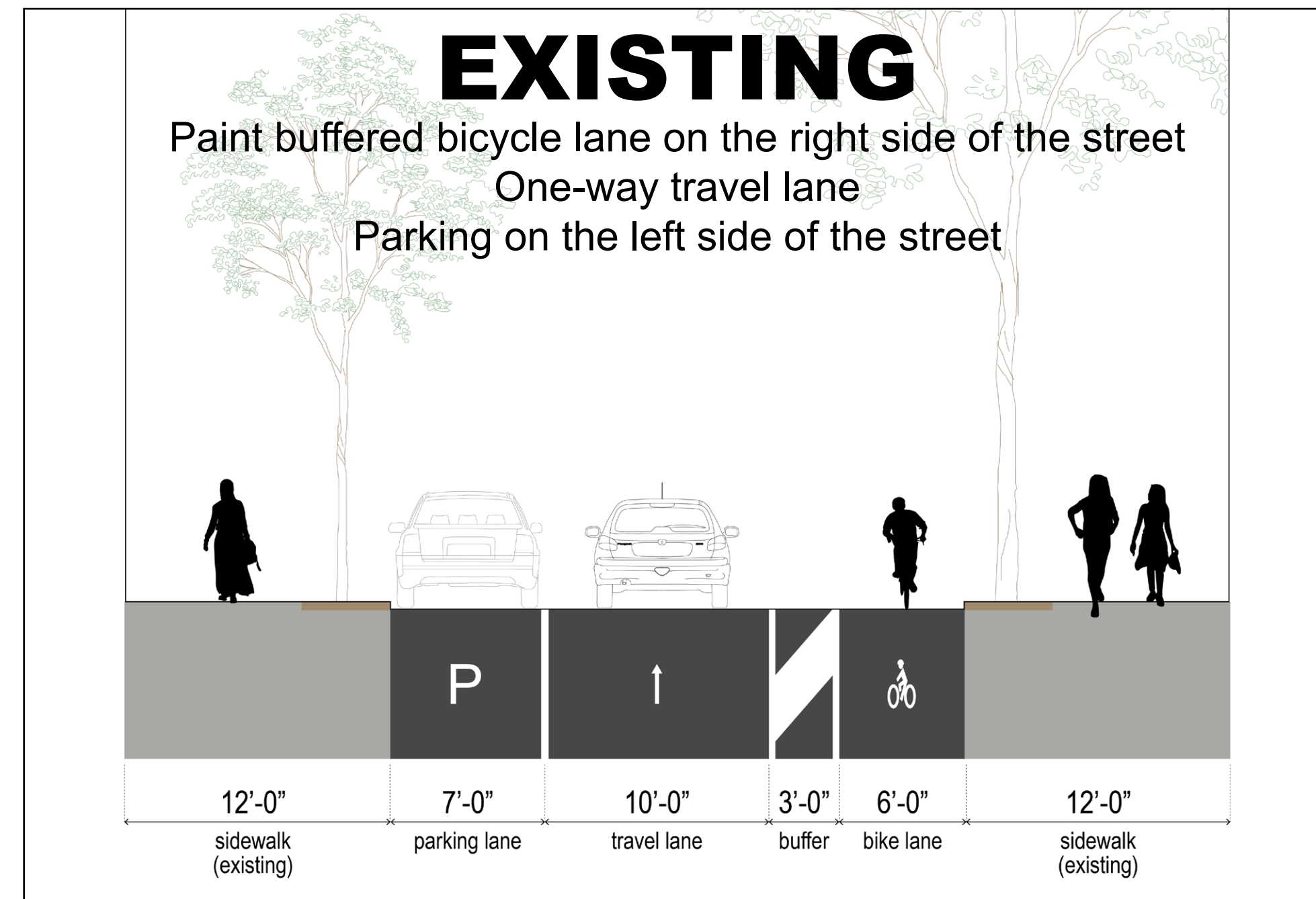
HOW WILL THIS MAKE OUR STREETS SAFER?

Switching the bike lanes on Spruce and Pine from the right side of the street to the left side will make people riding bikes more visible to drivers.

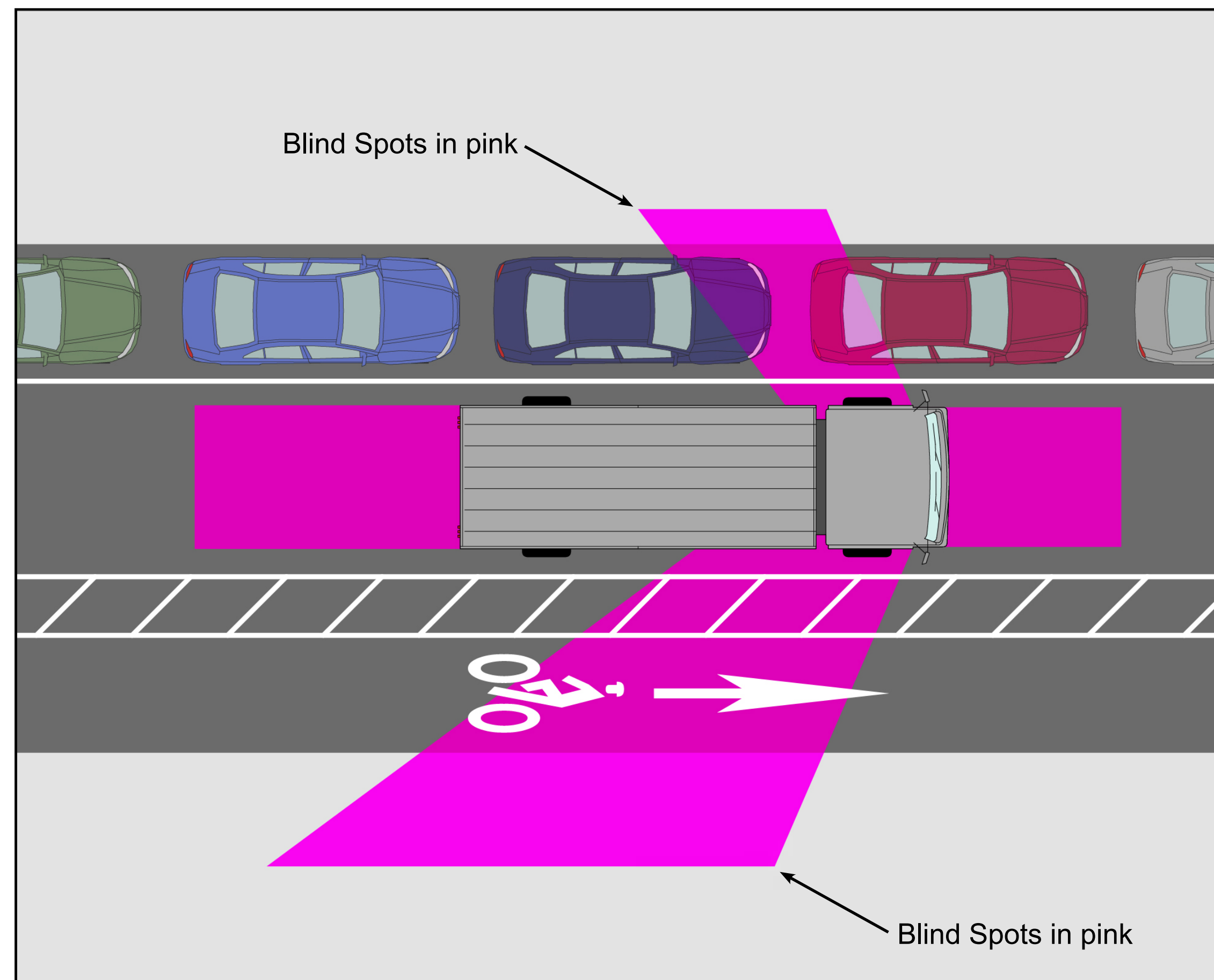
According to the Institute of Transportation Engineers,¹ **left side bike lanes can increase safety at intersections by making people on bicycles more visible to drivers.** This is especially true for trucks, which have larger blind spots on their right sides than they do on their left sides.

Moving the bike lane to the left also reduces conflicts between people on bikes and SEPTA buses.

1. "The Difference Between Right And Left Bike Lanes," *Institute of Transportation Engineers: ITE Journal*; Jul 2014; 84,7; ProQuest pg. 14

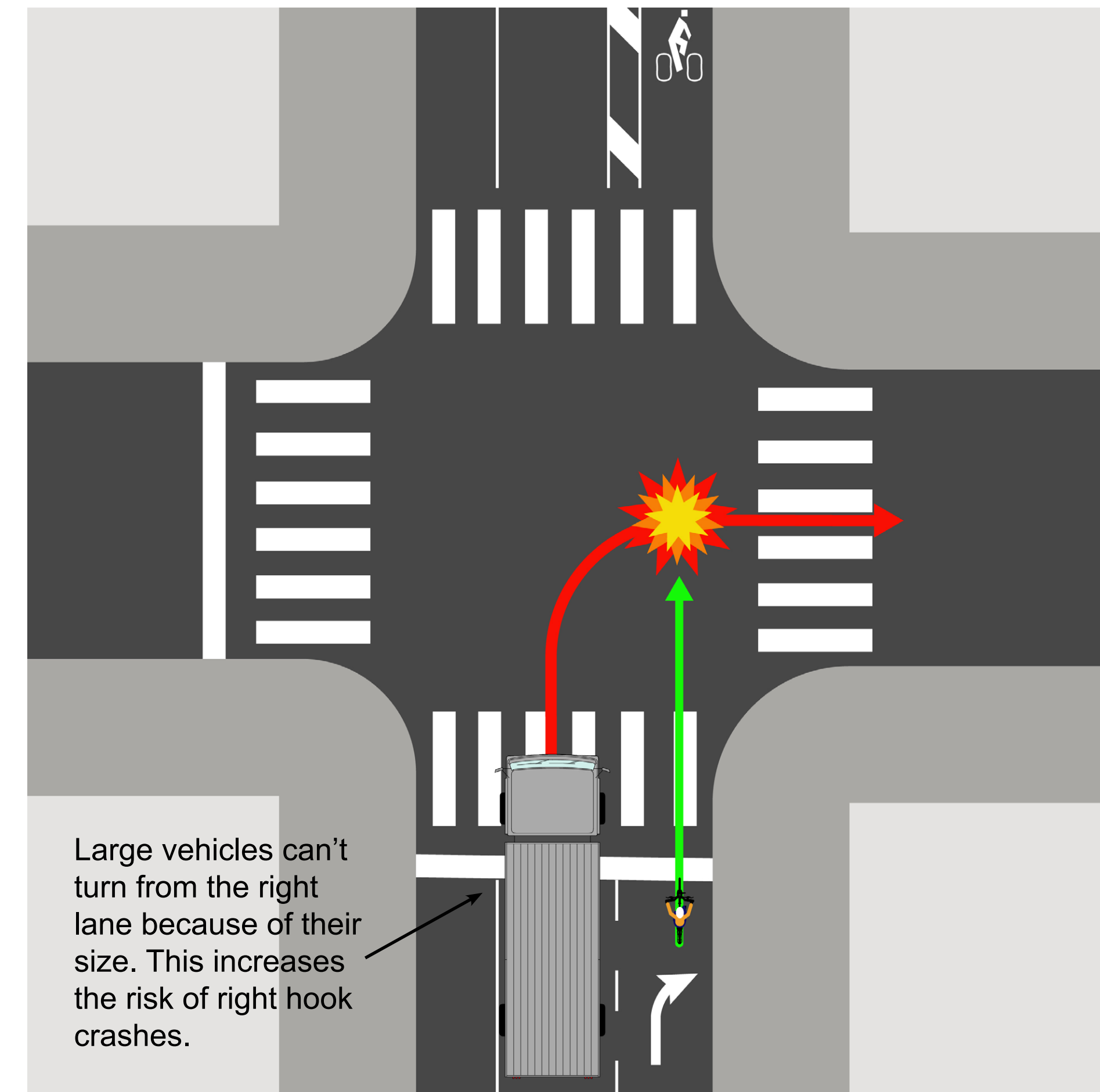


WHY IS A BIKE LANE ON THE LEFT SAFER THAN A BIKE LANE ON THE RIGHT?



Drawing not to scale

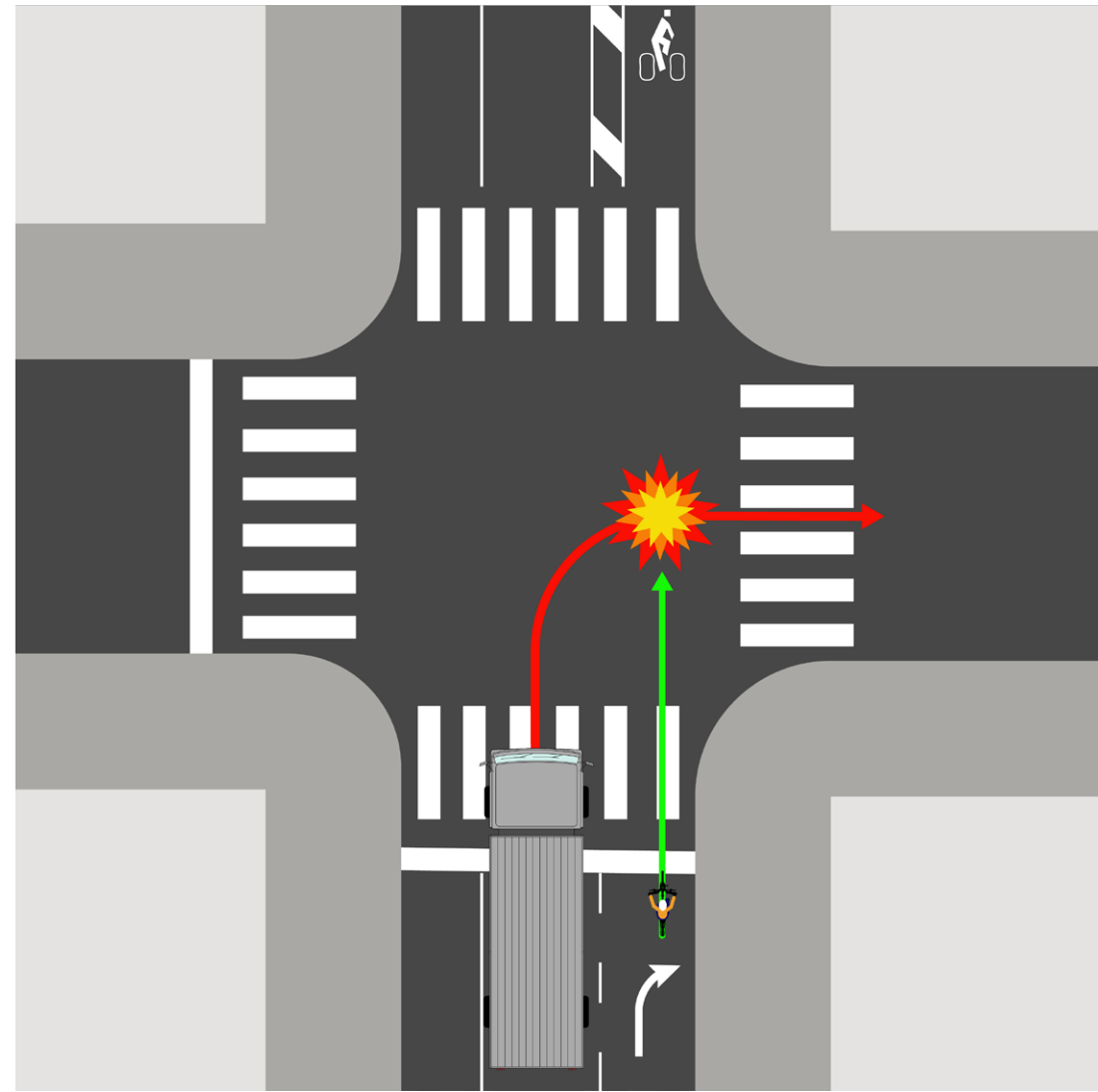
Large vehicles, like box trucks and garbage trucks, have bigger blind spots on their right sides. This is because drivers sit on the left and are higher up. Moving the bike lane will make people on bikes more visible to people driving large vehicles.



WHAT IS A RIGHT HOOK CRASH?

A **right hook crash** is when someone who is driving turns right and hits someone on a bike who is going straight. On narrow streets, trucks usually turn from the middle because of their size. This can increase the risk of right hook crashes.

THE DANGER OF RIGHT HOOK CRASHES



Moving the bike lanes to the left will help prevent right hook crashes on Spruce and Pine Streets.

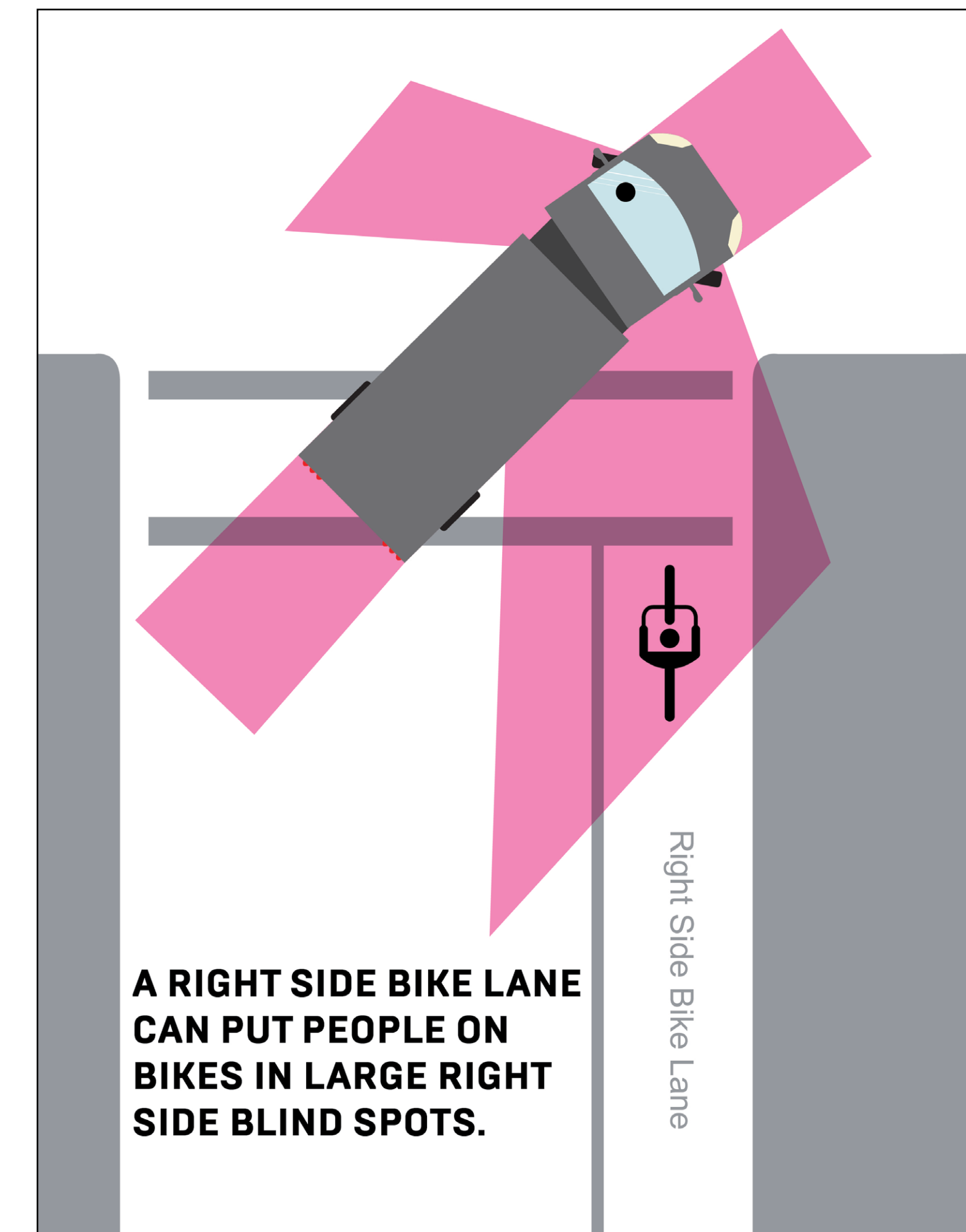
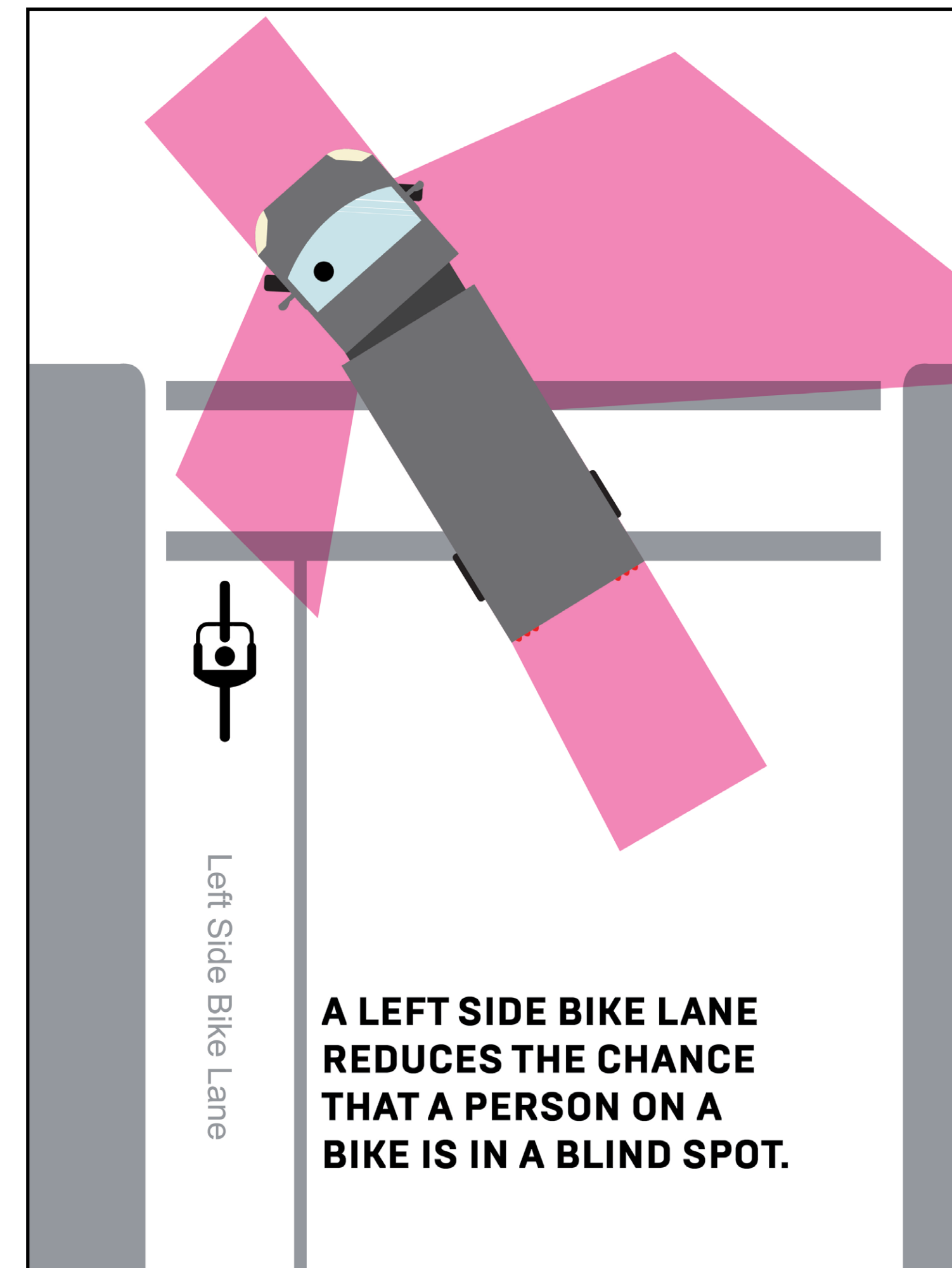
A person riding a bike was killed in a right hook crash with a trash truck on 11th and Spruce as she rode her bike to work on the morning of November 28th, 2017.

Another person riding a bike was seriously injured in a right hook crash with a box truck at 13th and Pine as she rode her bike to work on the morning of December 15th, 2017.

WHAT IS THE DIFFERENCE BETWEEN A RIGHT HOOK CRASH AND A LEFT HOOK CRASH?

Large vehicles, like box trucks and garbage trucks, have **bigger blind spots on their right sides**. This is because drivers sit on the left.

Moving the bike lane to the left will **make people on bikes more visible to people driving large vehicles**.



Spruce & Pine with right side bike lane:

- 14 right hook locations on Spruce
- 18 right hook locations on Pine

= 32 total

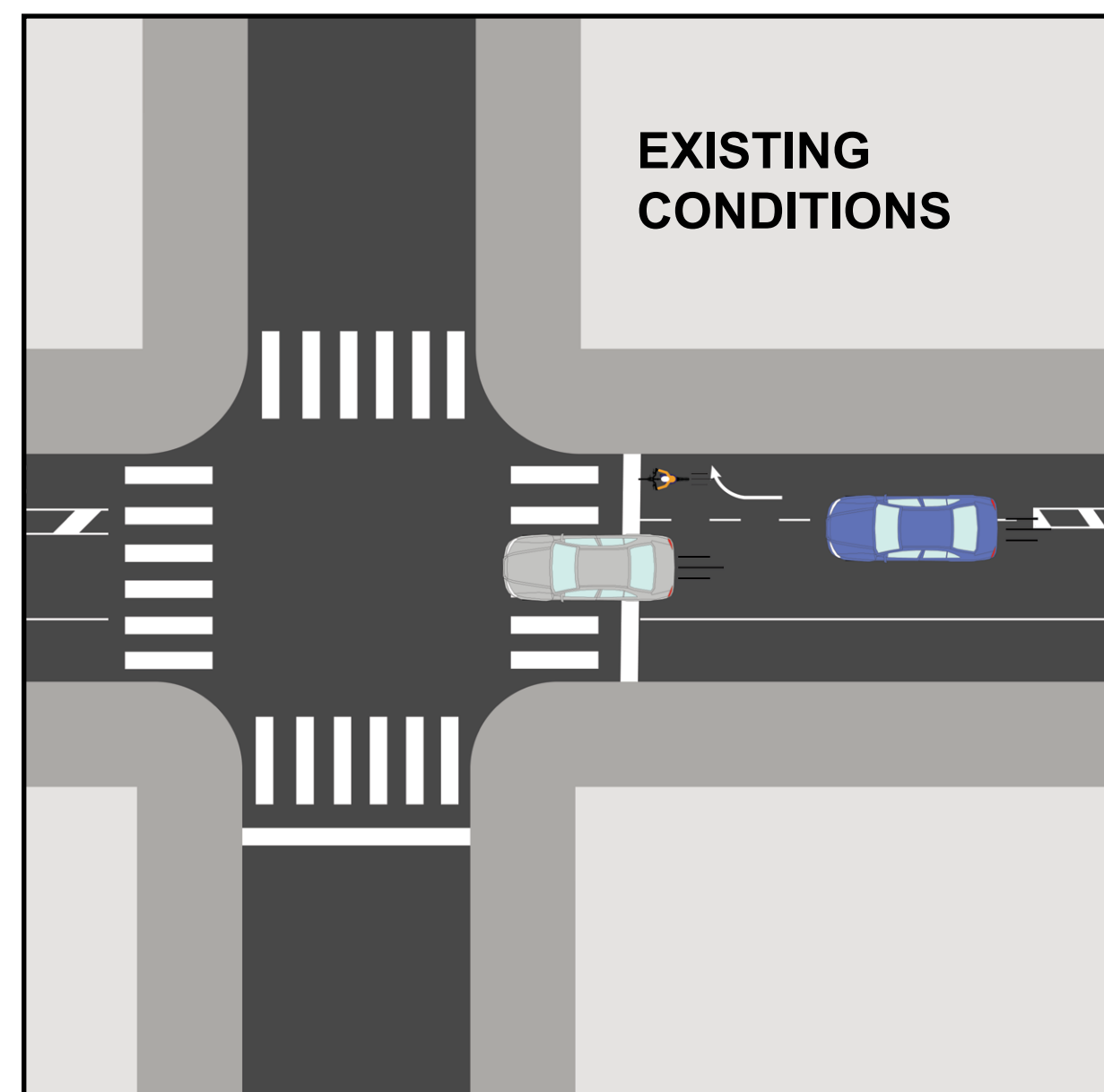
Spruce & Pine with left side bike lane

- 15 left hook locations on Spruce
- 14 left hook locations on Pine

= 29 total

POTENTIAL INTERSECTION TREATMENTS

INTERSECTION IMPROVEMENTS WILL MAKE SPRUCE AND PINE STREETS SAFER FOR PEOPLE WALKING, BIKING, AND DRIVING.

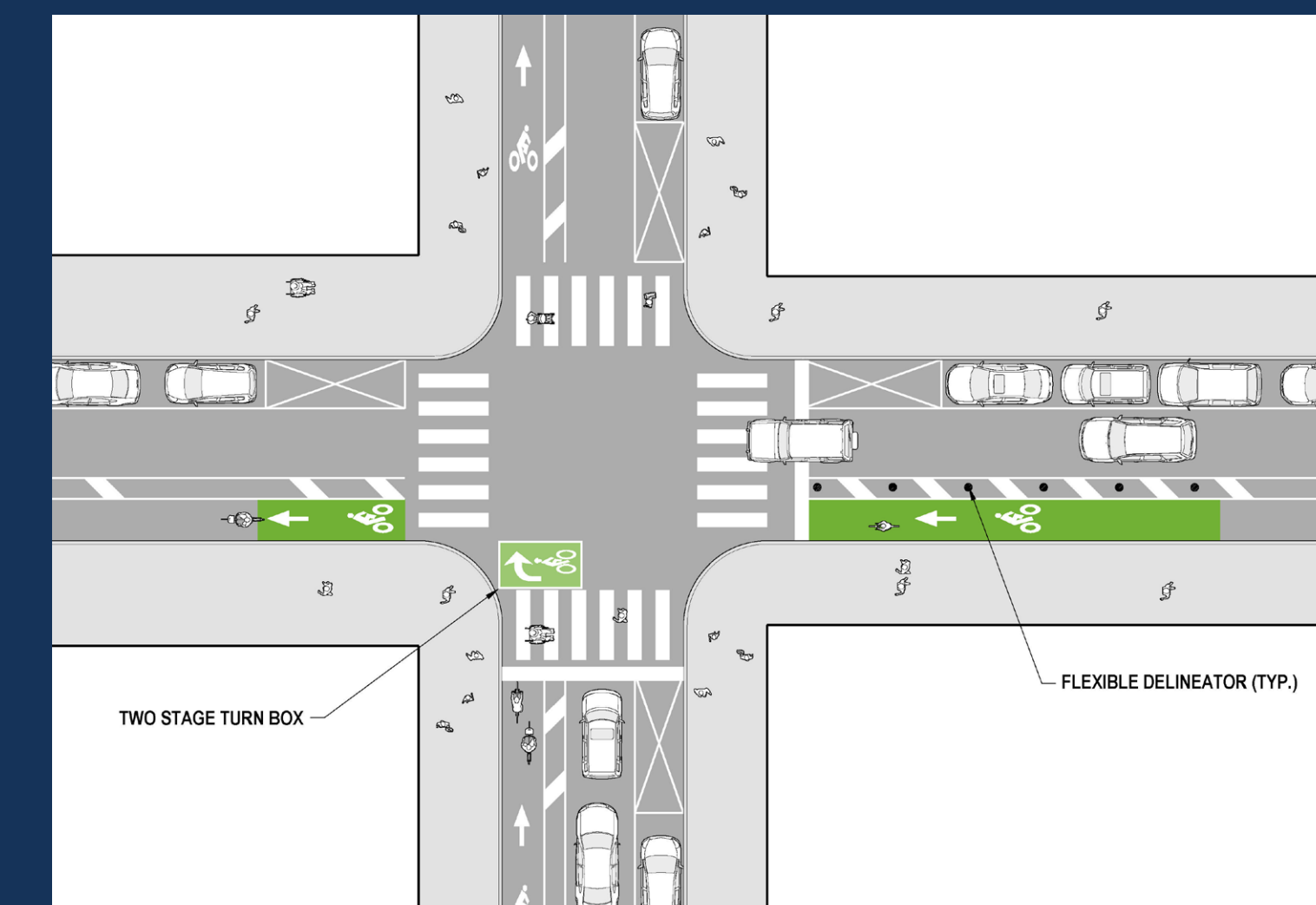


PROPOSED CHANGES

New striping in intersections **will help by letting people walking and driving know where to expect people on bikes.** It will also help people on bikes safely navigate intersections.

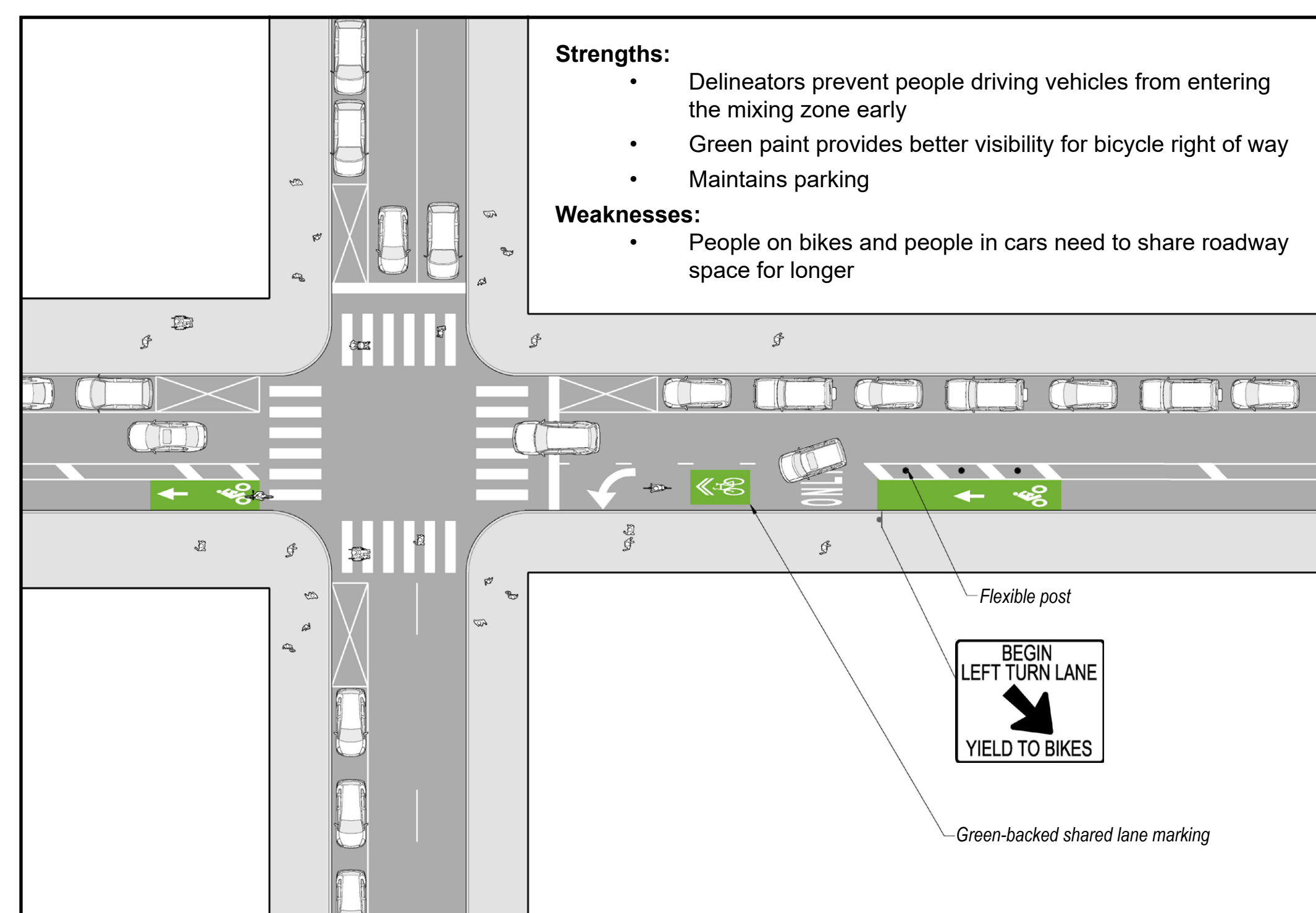
oTIS asked Toole Design Group, national experts in Complete Streets design, to develop several concepts for safer intersections on Spruce and Pine Streets. These concepts are illustrated below.

HOW WILL BICYCLES TURN?

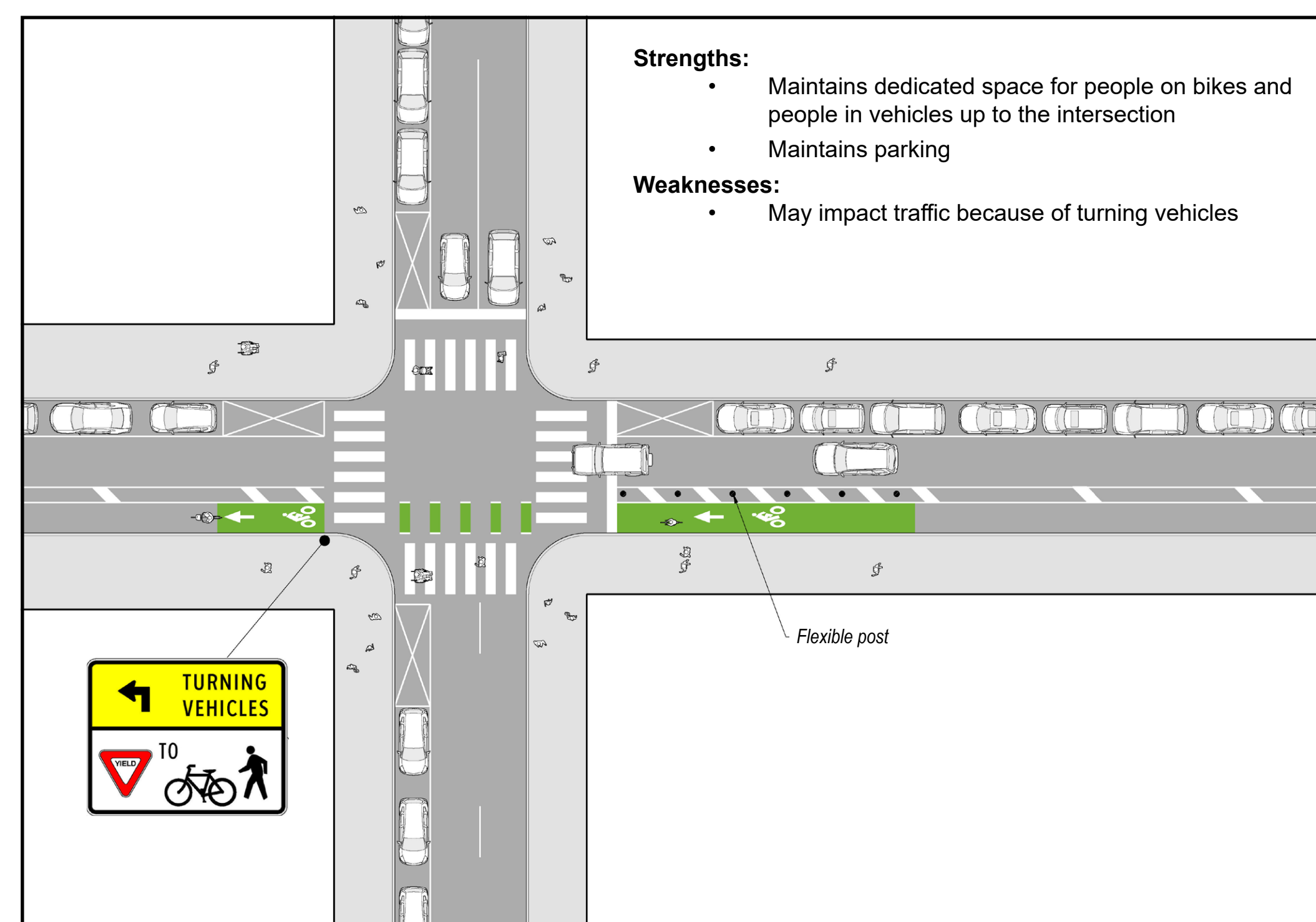


Two-stage turn boxes offer people on bikes a safe way to make turns at cross intersections. Adding these boxes at key locations on Spruce and Pine will give people on bicycles a visible path across the intersection without the need to merge with or cross vehicle traffic.

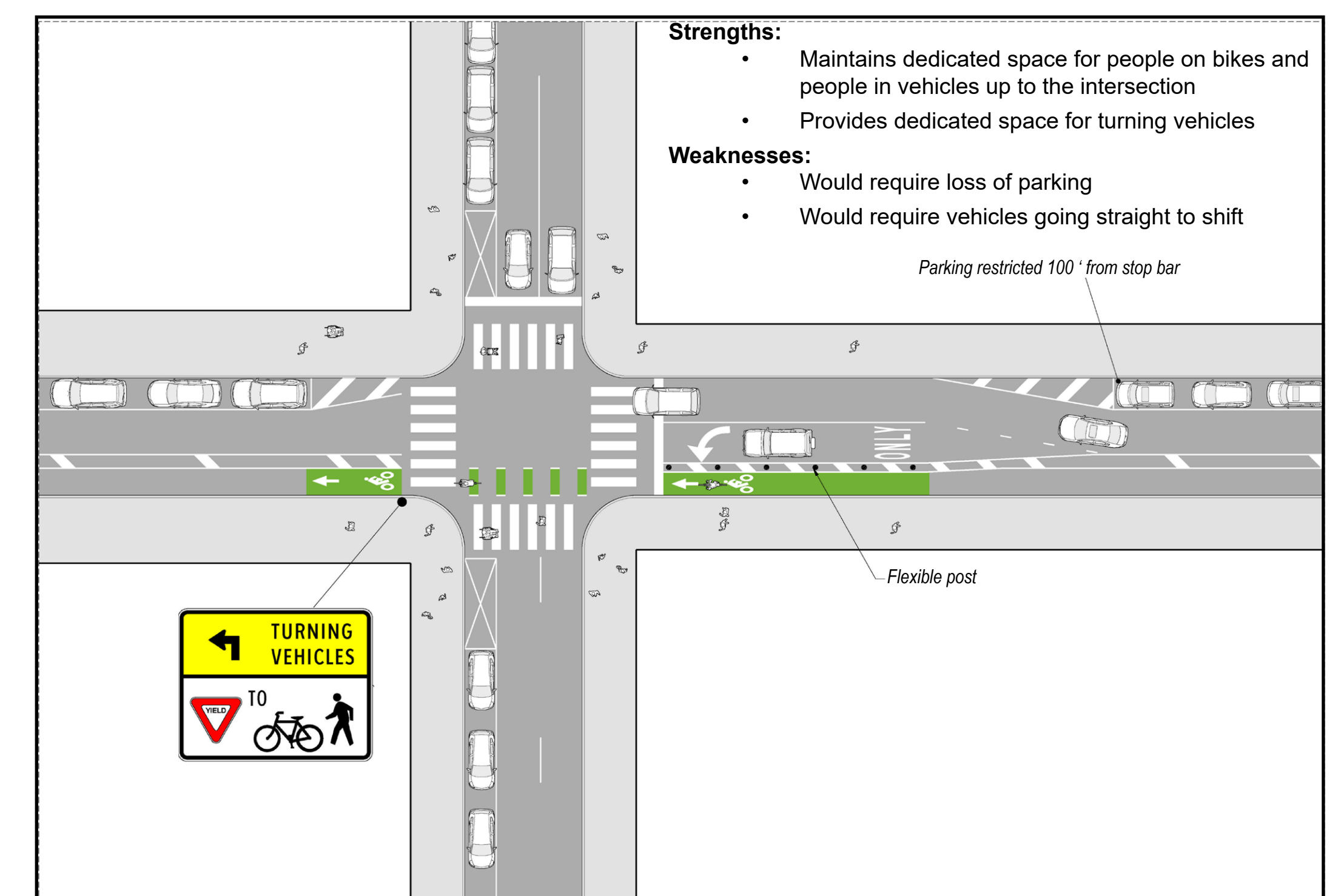
CONCEPT #1



CONCEPT #2



CONCEPT #3



PARKING/LOADING PROCESS

THERE IS AN OPPORTUNITY TO ADJUST PARKING AND LOADING

The City wants to help make parking and loading work better for everyone. We are partnering with the Philadelphia Parking Authority (PPA), SEPTA, and people who live and work on Spruce and Pine Streets.

HOW DID WE COME UP WITH THESE PARKING CONCEPTS?

- 1. We documented existing conditions in January:** oTIS staff walked the lengths of Spruce and Pine Streets in January. We measured loading zones and driveways, and we checked the locations of bus stops, fire hydrants, and loading zones. We also met with Civic Associations to make sure we didn't miss anything.
- 2. We worked with PPA and SEPTA beginning in March:** Once oTIS staff understood the existing conditions, we walked the lengths of Spruce and Pine again with SEPTA and PPA. oTIS, PPA, and SEPTA are working together to identify opportunities for improvements to parking and loading, as well as challenges posed by this project.
- 3. We are asking for community input:** This open house is the first step in asking for input from people who live and work on Spruce and Pine Streets. There will be follow up meetings for individual blocks with residents and business owners in small groups. If you are interested in joining a meeting on your block please sign up.

WHAT WE NEED FROM YOU:

- Input on parking and loading needs on your block
- Contact information **from residents and business owners** for block-by-block meetings
- Block-by-block meetings will be held on Mondays and Wednesday at 5:30pm, April through June

SAMPLE PARKING & LOADING ANALYSIS

HERE IS WHAT YOU WILL SEE AT THE PARKING & LOADING TABLES:

1

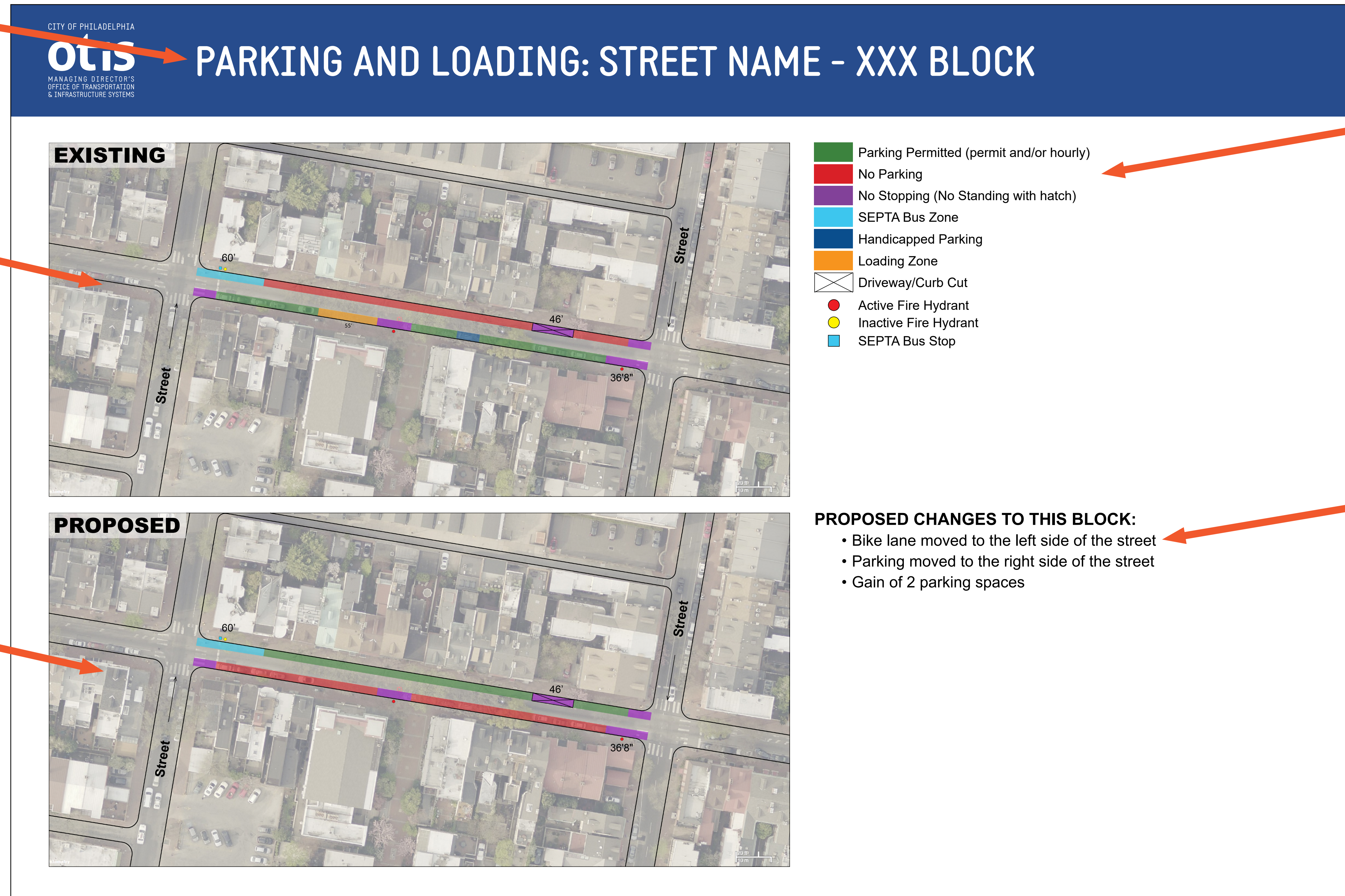
The specific block being discussed

2

A diagram of the current parking and loading on this block.

3

A diagram of what parking and loading on this block could look like. **(This is where we need your input!)**



4

A legend explaining what the different colors mean.

5

A preliminary summary of the changes between the existing parking and loading and the proposed parking and loading.

QUESTIONS/CONCERNS