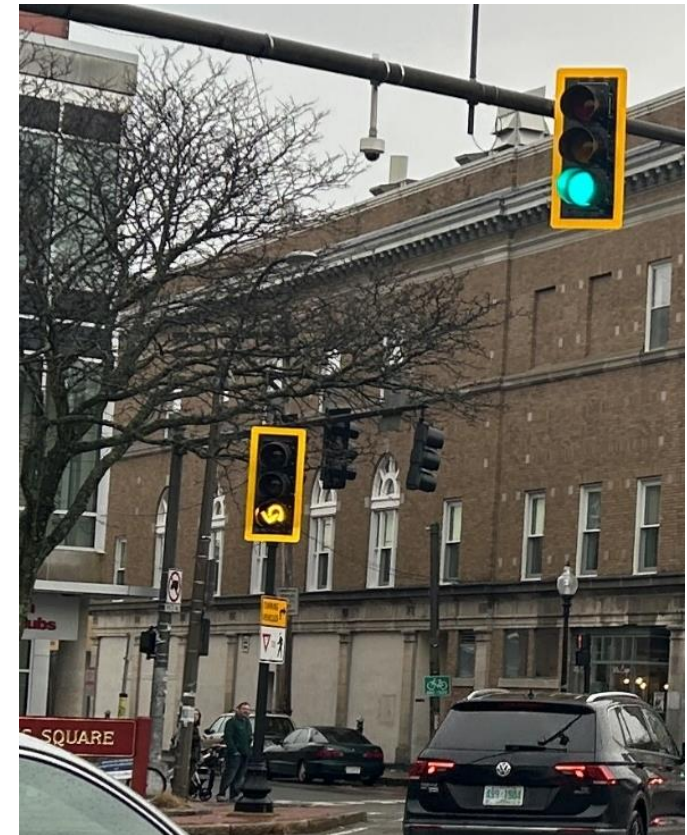


# Davis Square Signal Improvements

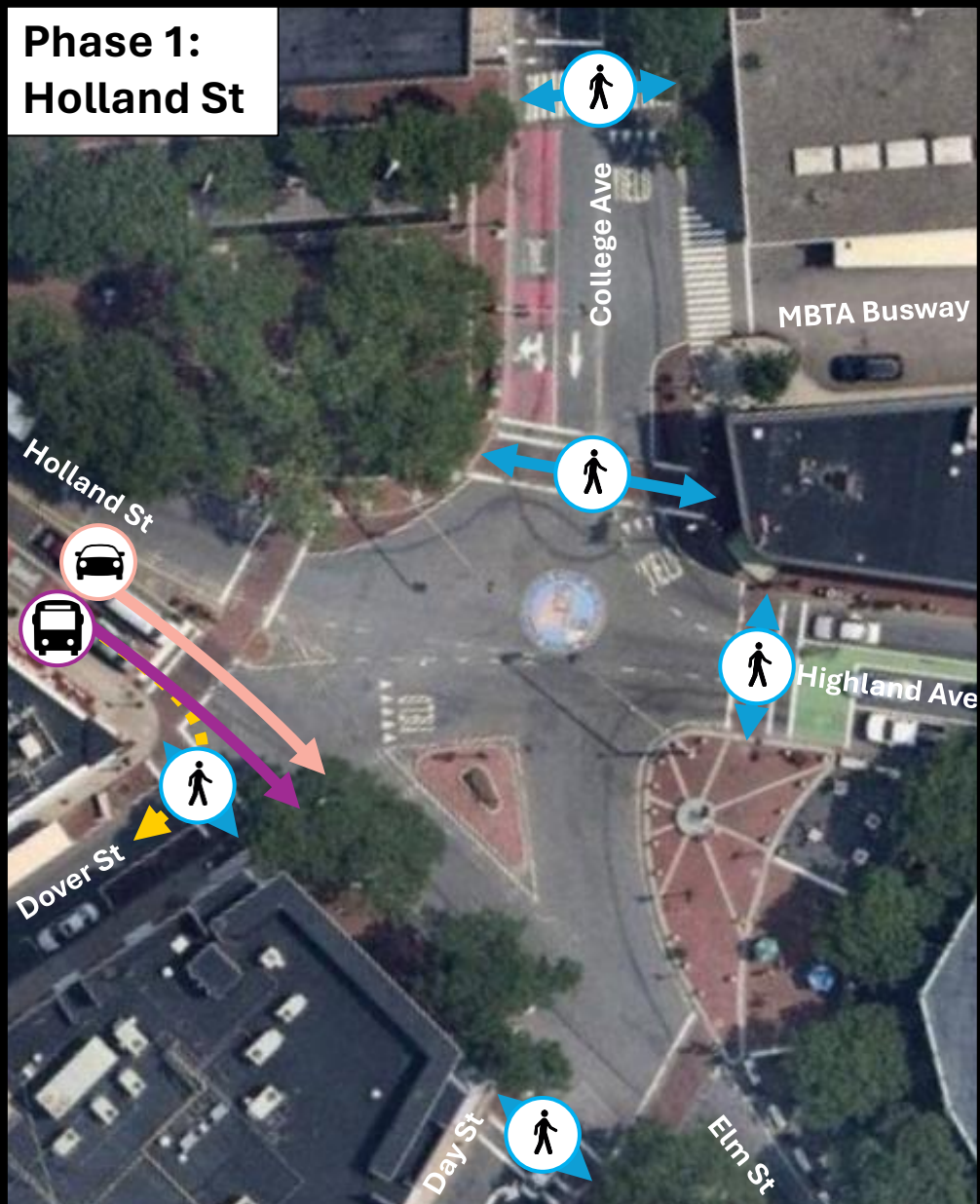
## Summary of Changes

- Traffic signal phasing (when each street gets a green light)
  - Removed the condition where the walk sign was on for pedestrians to cross Dover St at the same time that drivers had a green light to turn from Highland Ave onto Dover St
  - Removed the condition where the walk sign was on for pedestrians to cross College Ave (closest to Highland Ave) at the same time that drivers were allowed to turn right from Highland Ave onto College Ave
  - Removed the condition where the walk sign was on for pedestrians to cross College Ave (closest to the MBTA Busway) at the same time that buses got the green light to turn right from the Busway onto College Ave
- Traffic signal equipment
  - Added flashing yellow arrows for the right turns from College onto Holland and Holland onto Dover
  - Add a flashing yellow arrow for the left turn from Highland onto Elm
- Street markings
  - Reduced the Highland Ave approach from 3 to 2 lanes and created a protected bike lane on the approach to the intersection
  - Moved the crosswalk across Elm St from in front of the former Oath Pizza to in front of CVS, which allows pedestrians to use this crosswalk without having to worry about drivers turning right from Day St onto Elm St
- Still to come
  - Transit signal software that will be able to make small changes to the timing to get approaching buses through the intersection with as little delay as possible
  - Section of Highland Ave closest to the intersection will be paved and restriped in the spring
  - New crosswalk across Elm St will be striped in higher quality paint
  - Yield markings will be added in front of the crosswalks that correspond with flashing yellow arrows
  - New lane assignment signage will be installed on Highland Ave





## Phase 1: Holland St



100 second cycle

21 sec

## Cars and Buses



- Holland St traffic heading towards Elm St has the green light. Buses going straight onto Elm St from the right lane have a special transit signal.
- Holland St vehicles taking a right on to Dover St must yield to pedestrians in the crosswalk, as indicated by the flashing yellow arrow.



## Pedestrians

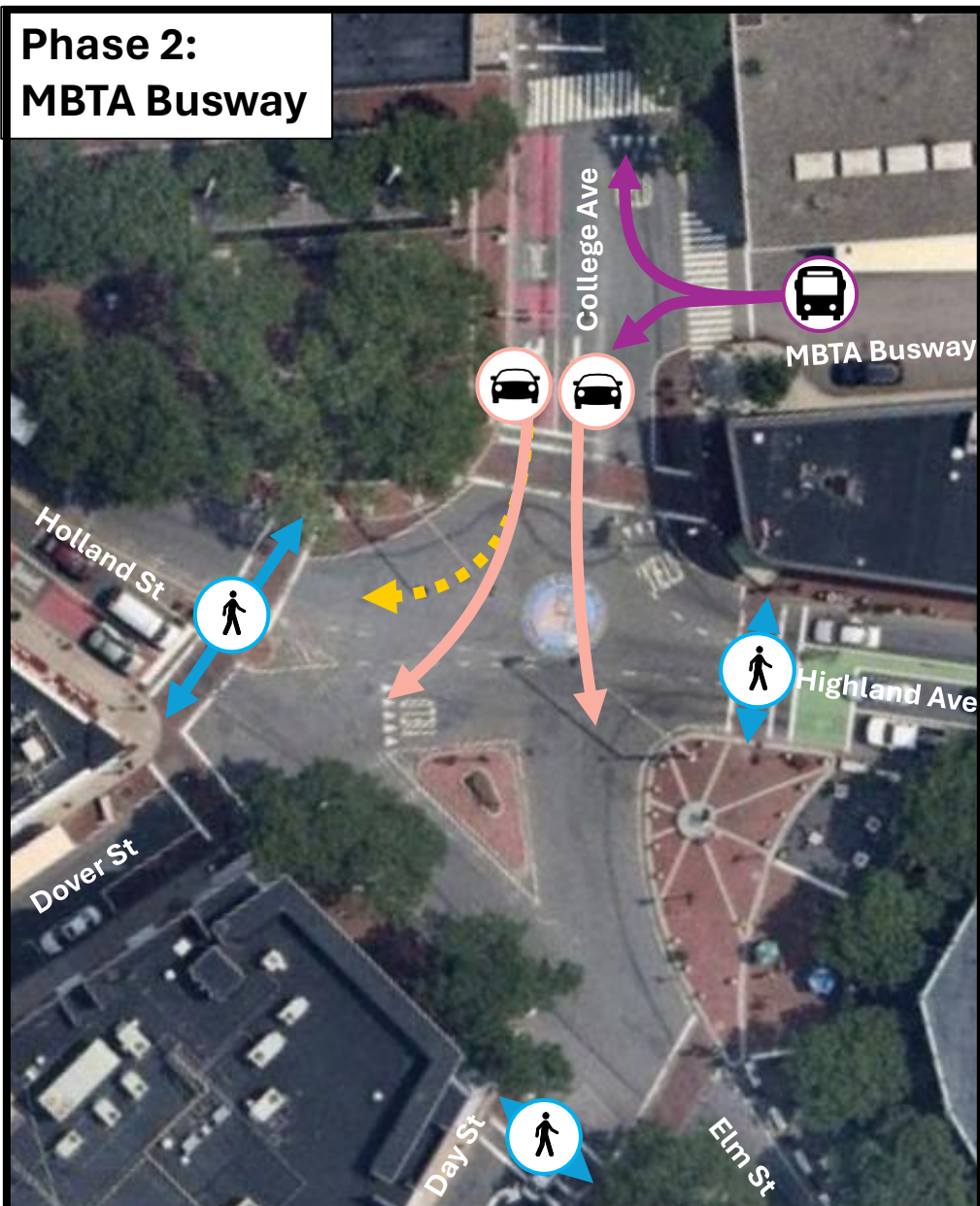


Crosswalks across Dover St, College Ave, Highland Ave, and Day St have the walk signal.





## Phase 2: MBTA Busway



100 second cycle

14 sec

## Cars and Buses



- Buses leaving the MBTA Busway have the green light to take a left or right onto College Ave, as well as a green light to then proceed right onto Holland St or Dover St.
- Any vehicles that were stopped between the two College Ave crosswalks may proceed onto Dover St or Elm St and may turn right onto Holland St after yielding to pedestrians in the crosswalk (as indicated by the flashing yellow arrow).



## Pedestrians

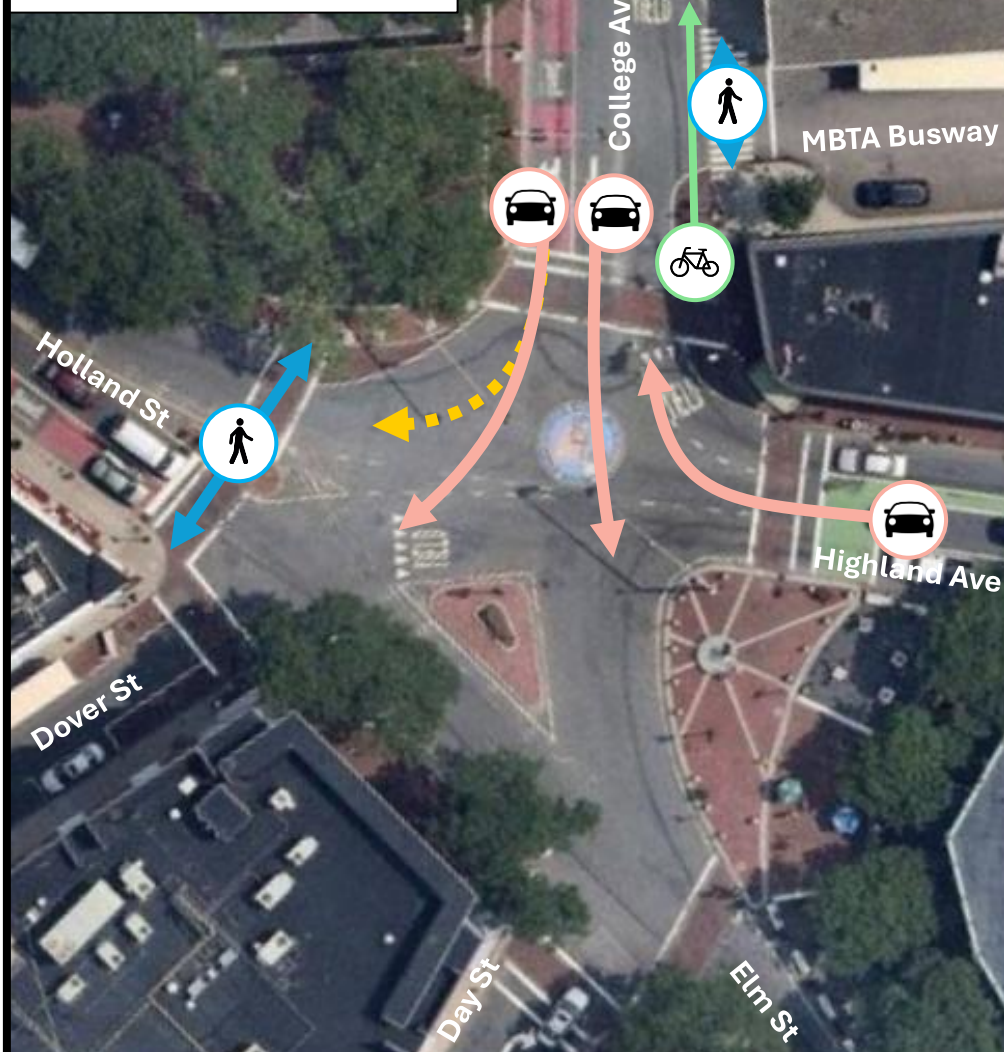


Crosswalks across Highland Ave, Day St, and Holland St have the walk signal.





### Phase 3: College Ave & Highland Ave Right



100 second cycle

18 sec

### Cars and Buses



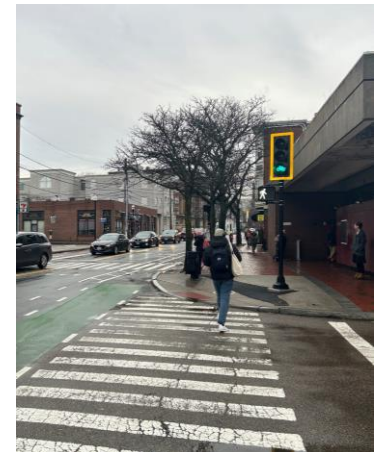
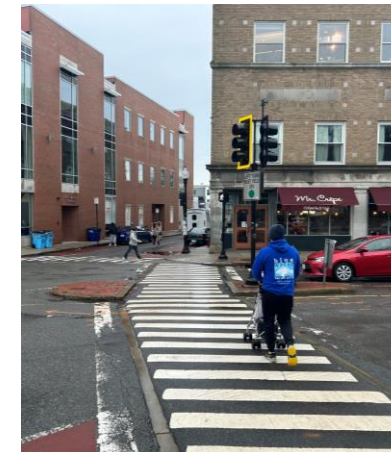
- Both sets of lights on College Ave turn green and drivers may proceed onto Dover St or Elm St. Drivers may also turn right onto Holland St after yielding to pedestrians in the crosswalk, as indicated by the flashing yellow arrow.
- Highland Ave vehicles turning right onto College Ave have a green arrow.



### Pedestrians and Bikes

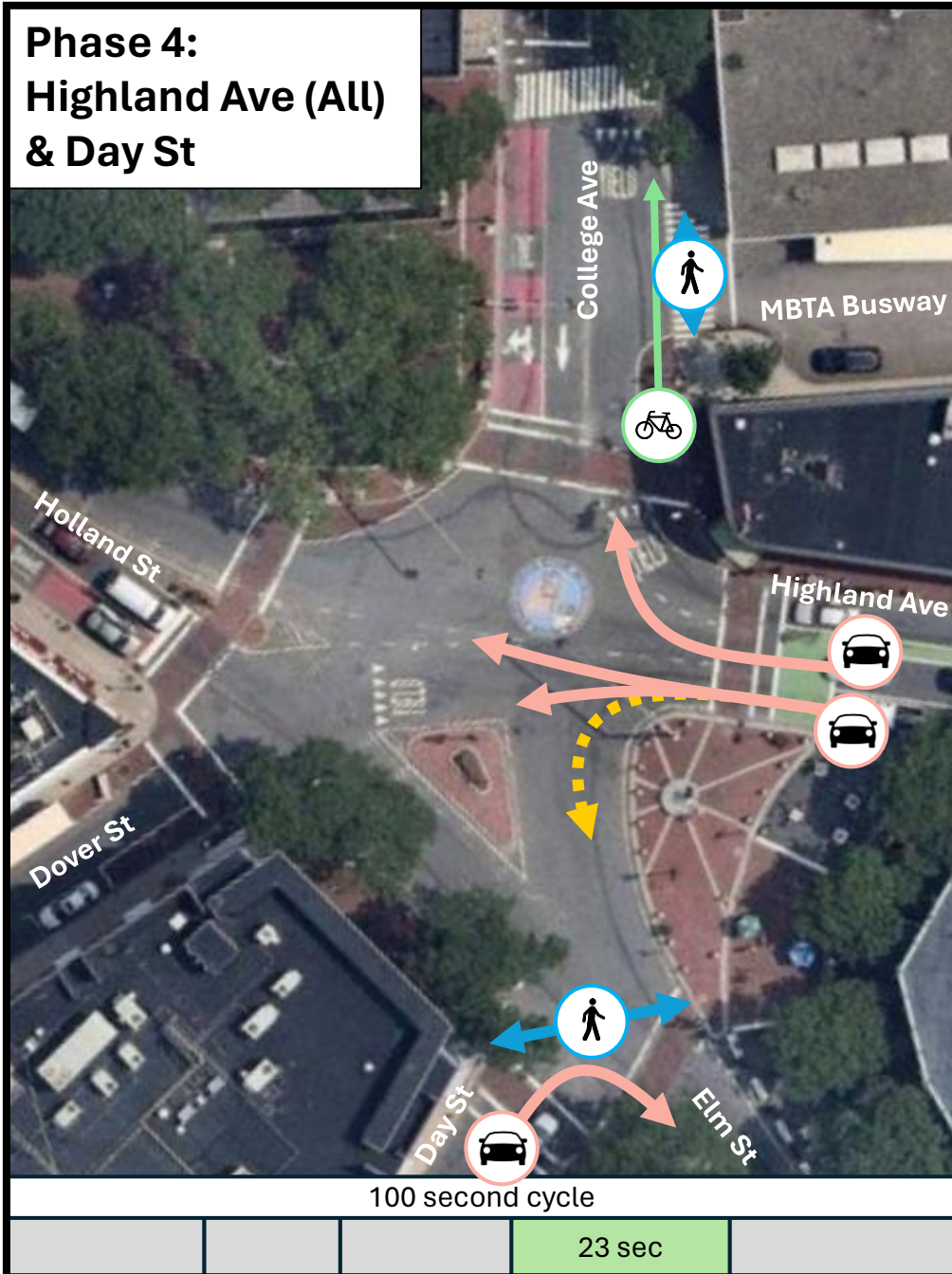


- Crosswalks across Holland St and the MBTA Busway have the walk signal.
- Bikes heading northbound on College Ave have a green light to proceed across the MBTA Busway





## Phase 4: Highland Ave (All) & Day St

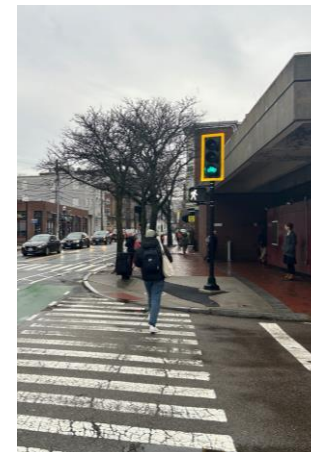


## Cars

- Highland Ave vehicles heading towards Holland St, Dover St and College Ave have the green light.
- Highland Ave vehicles taking a left onto Elm St must yield to pedestrians in the crosswalk, as indicated by flashing yellow arrow.
- Day St vehicles taking a right onto Elm St have the green light.



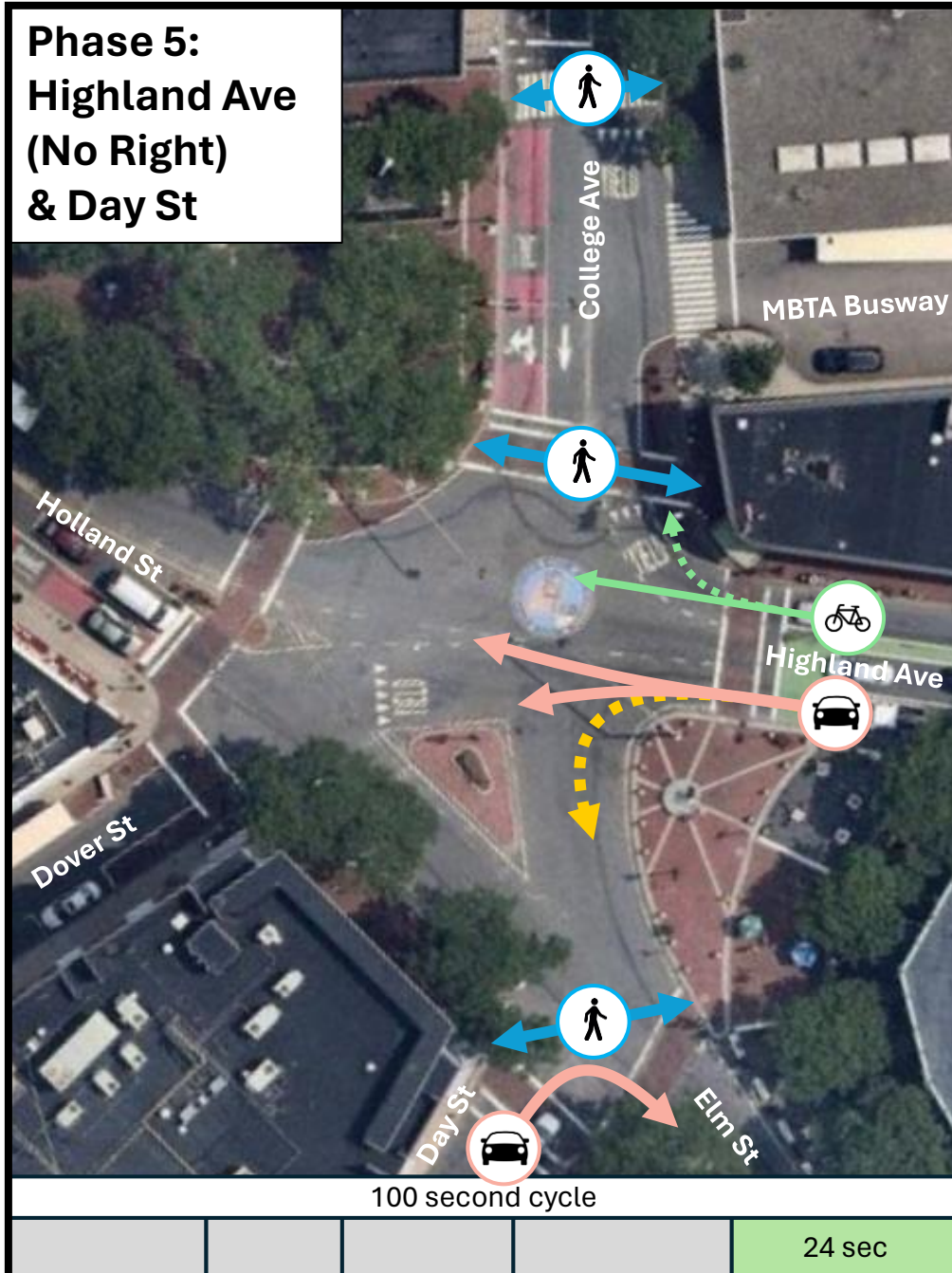
## Pedestrians and Bikes



- Crosswalks across the MBTA Busway and Elm St (relocated from in front of former Oath Pizza to in front of CVS) have the walk signal.
- Bikes heading northbound on College Ave have a green light to proceed across the MBTA Busway.



## Phase 5: Highland Ave (No Right) & Day St



## Cars and Bikes



- Highland Ave vehicles heading towards Holland Street or Dover St have the green light.
- Highland Ave vehicles taking a left onto Elm St must yield to pedestrians in the crosswalk, as indicated by flashing yellow arrow.
- Day St vehicles taking a right onto Elm St have the green light.
- Bikes traveling on Highland Ave towards Holland St have a dedicated green light
- Bikes traveling on Highland Ave taking a right onto College Ave must yield to pedestrians crossing in the crosswalk.

## Pedestrians



Crosswalks across College Ave and Elm St (relocated to in front of CVS) have the walk signal.

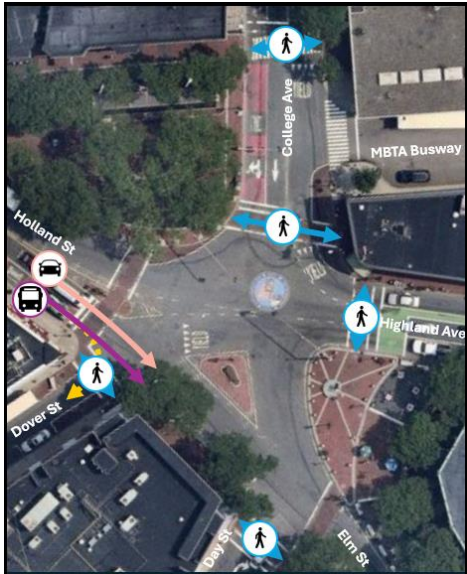




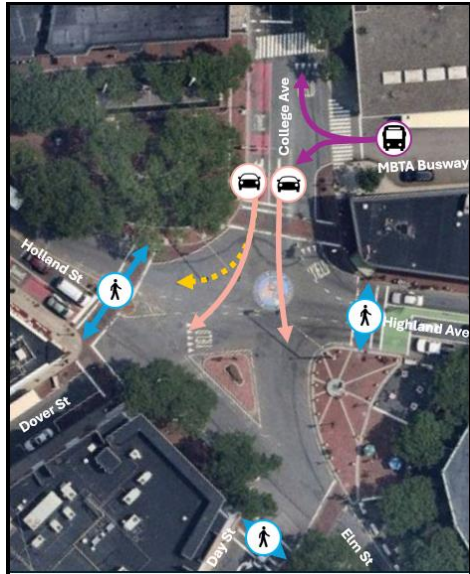
# Full Signal Timing and Phasing Plan

\*Timing shown here is in place at busiest times of day

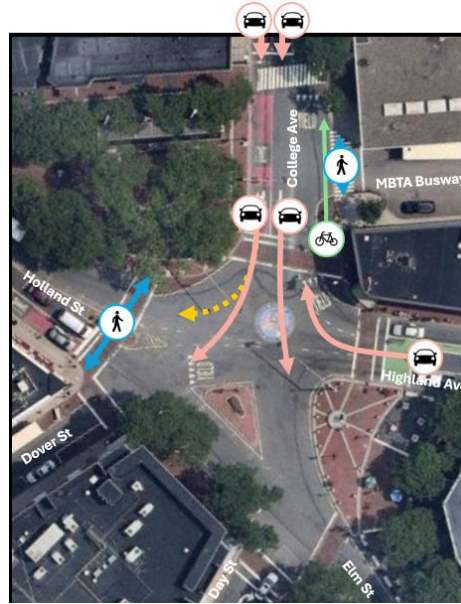
**Phase 1:  
Holland St**



**Phase 2:  
Busway**



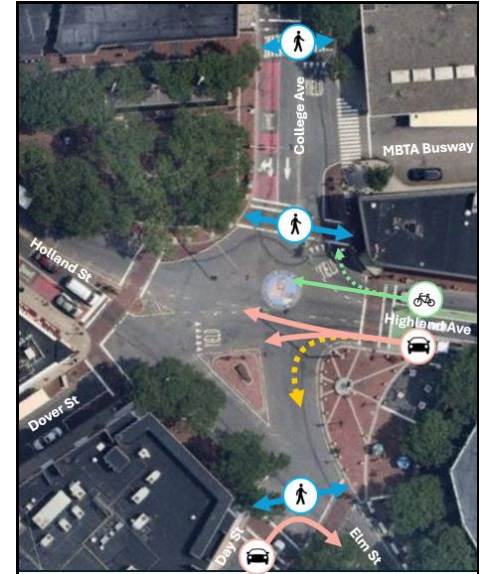
**Phase 3:  
College Ave**



**Phase 4:  
Highland (All)**



**Phase 5:  
Highland (No Right)**



21 sec

14 sec

18 sec

23 sec

24 sec

100 second cycle

# FAQs

- Why don't we make the green lights longer so that more cars can get through?
  - A shorter cycle length is preferred because it reduces the amount of time that pedestrians must wait to cross the street.
- Why are cars driving through the crosswalk when the walk sign is on?
  - There could be several reasons for this. In some cases, cars are allowed to take a right or left turn across a crosswalk after yielding to pedestrians. These situations are highlighted for drivers with flashing yellow arrows. In other cases, the light may have just turned red but a driver is still in the process of exiting the intersection when the walk sign comes on. The City is taking note of where this is happening and can make adjustments to the timing to prevent this from happening as often. It's also possible that drivers are simply running red lights.
- Why does the pedestrian signal head sometimes show a red hand when it seems like it's safe to cross?
  - Even though traffic signal technology has come a long way, there are still limitations that prevent us from having the walk sign on when we would otherwise like to. For example, the walk sign for the crosswalk across the busway could be on at all times except when the busway has a green light, but we ended up having to prioritize when we felt that it was most important to have the walk sign on for that crosswalk.