



Portland Mall Bus – LRT Operations

Winter/Spring 2008



Overall Mall Timeline

Service plan to public	Fall 2008
Final Service Plan	Jan/Feb 2009
Bus Training begins	Jan 2009
Mall MAX training	May/Jul 2009
Buses return to mall	May 24 th , 2009

Timeline – Basic SOPs

Field tests	2004
Team started	April 2007
Draft	January 2008
Present to staff	Spring 2008
Present to Operators	Summer 2008
BCRC approval	Fall 2008

Timeline – Incident SOPs

Draft	Summer 2008
Present to staff	Fall 2008
FLS committee	Fall 2008
BCRC approval	Winter 2008

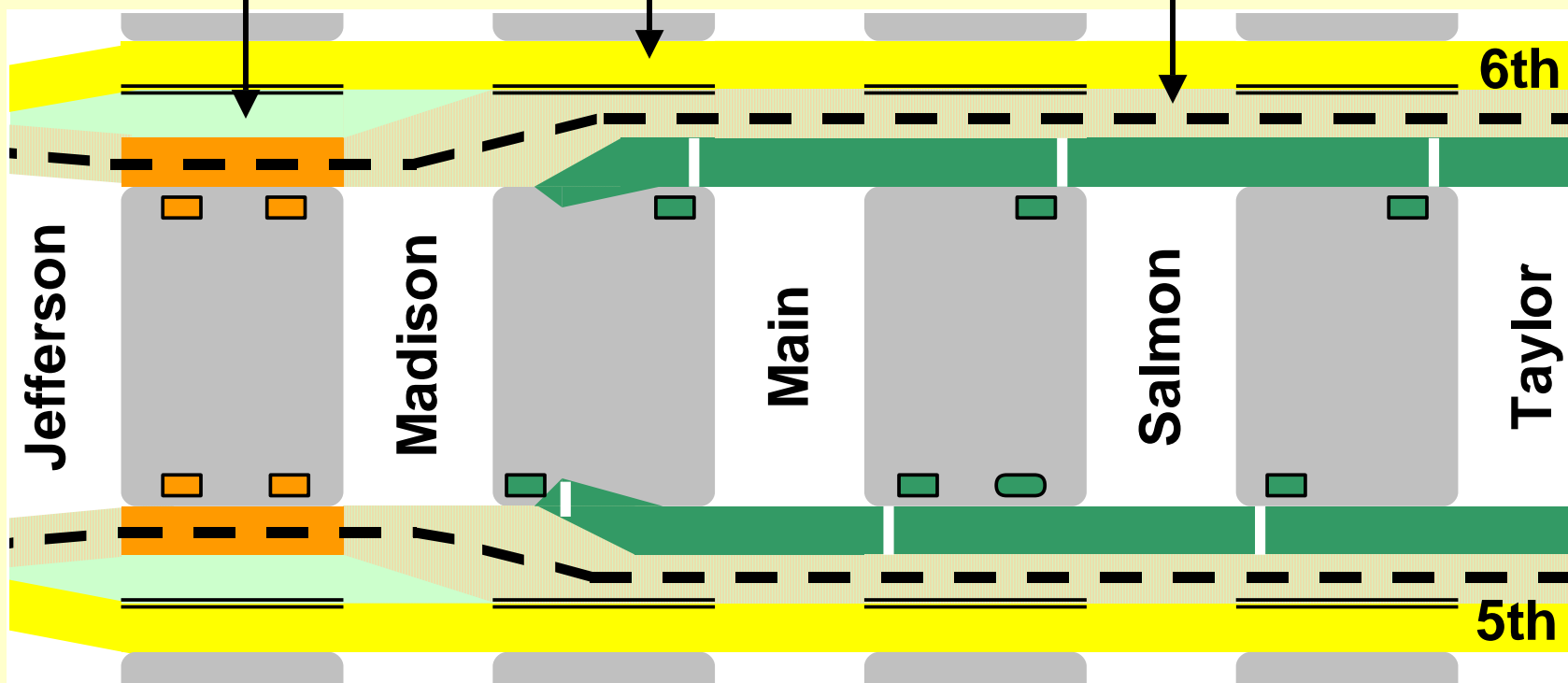
Definitions

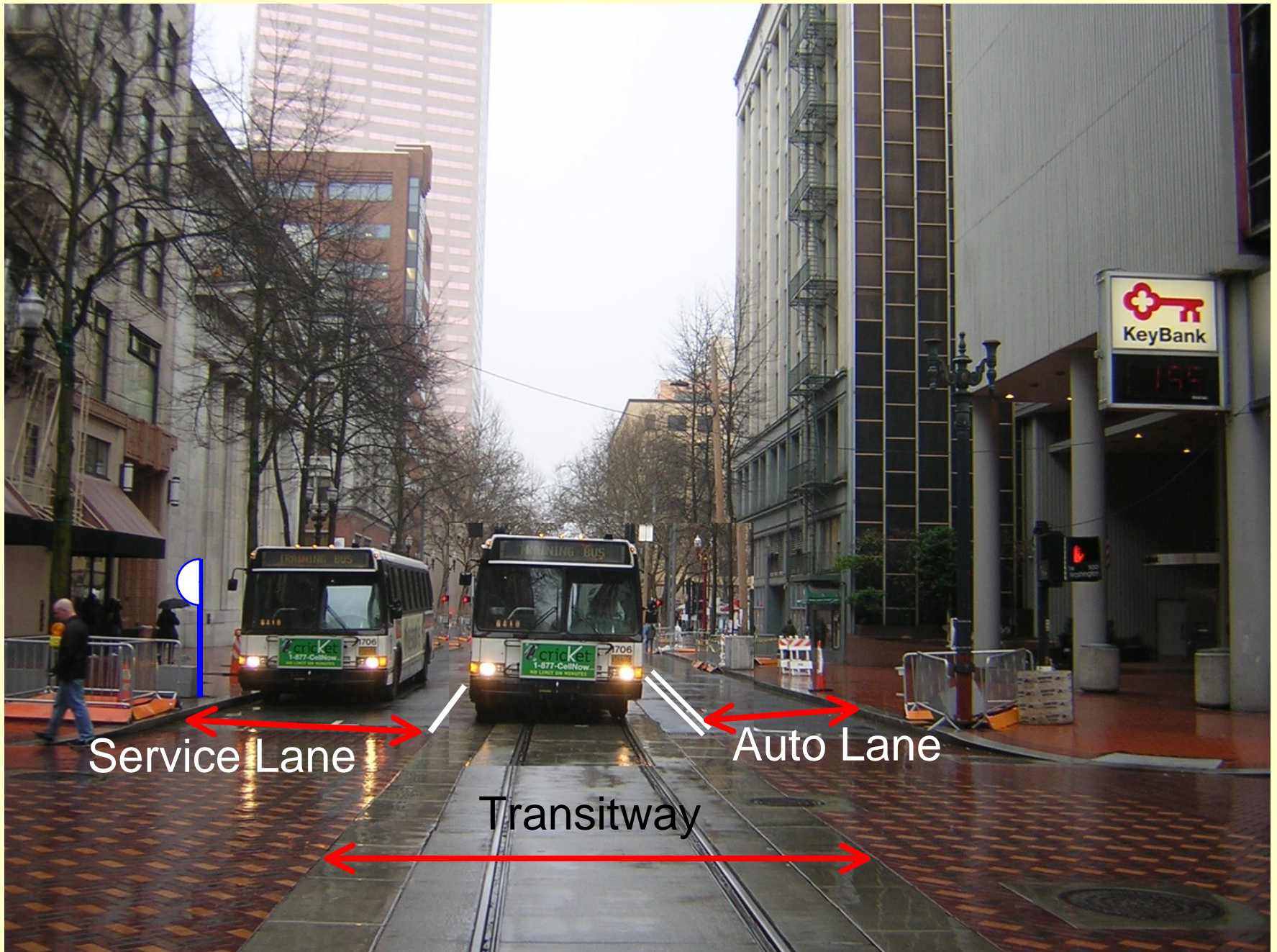
- Transitway- Travel lane for exclusive use by TriMet buses or trains
- Bus Only Lane- Travel lane that may only be used by buses
- Auto Lane- Travel lane primarily used by non-TriMet vehicles

**Bus Only
Lane**

**Auto
Lane**

Transitway





Service Lane

Auto Lane

Transitway

Pavement Markings

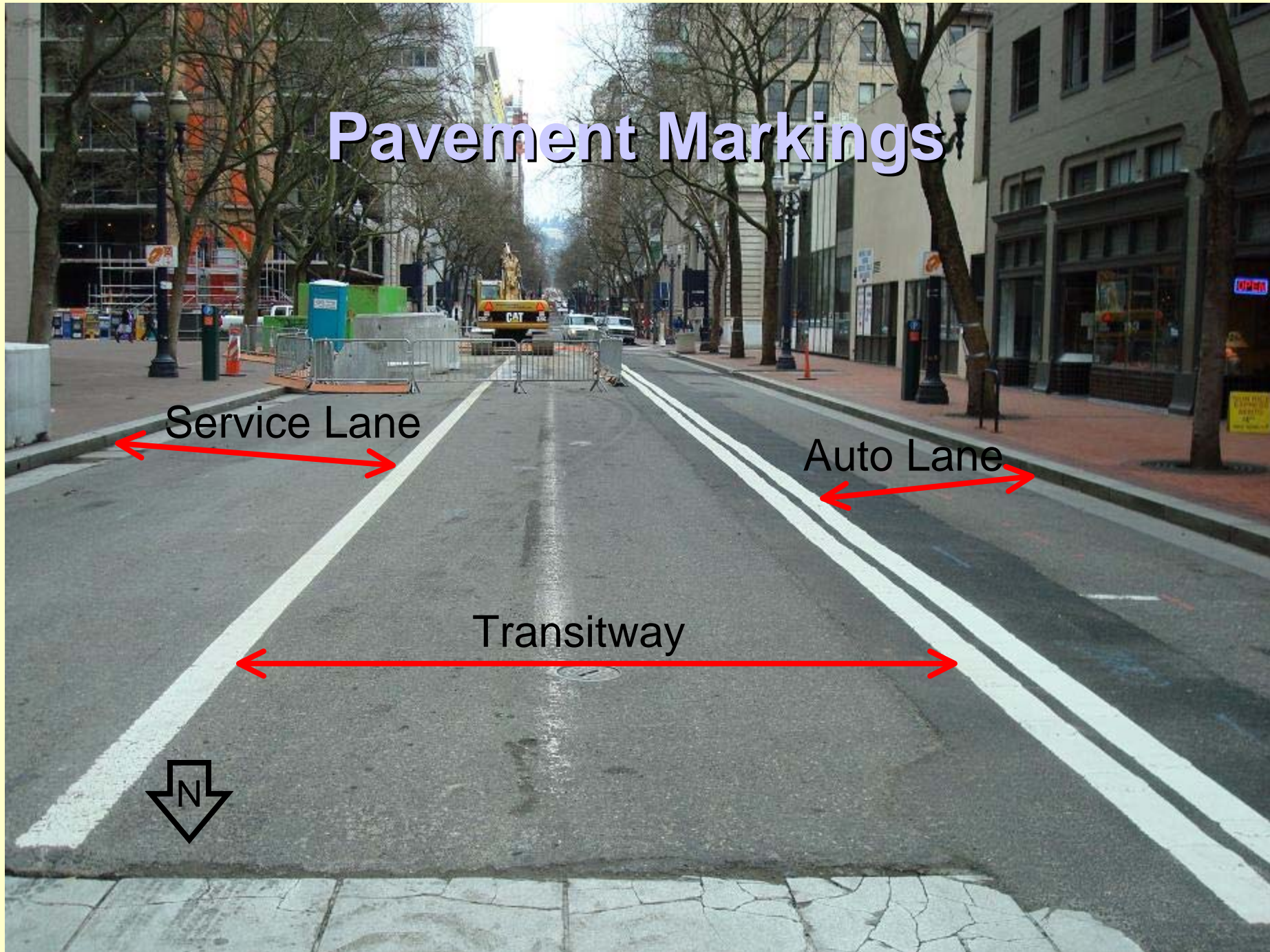
- Double white line (with rumble)- clearly separates auto lane from the transitway
- Single white line- delineates the dynamic envelope of the MAX trains
- Dynamic envelope- safety zone around any MAX train that should be kept clear whenever the train is in motion

Pavement Markings

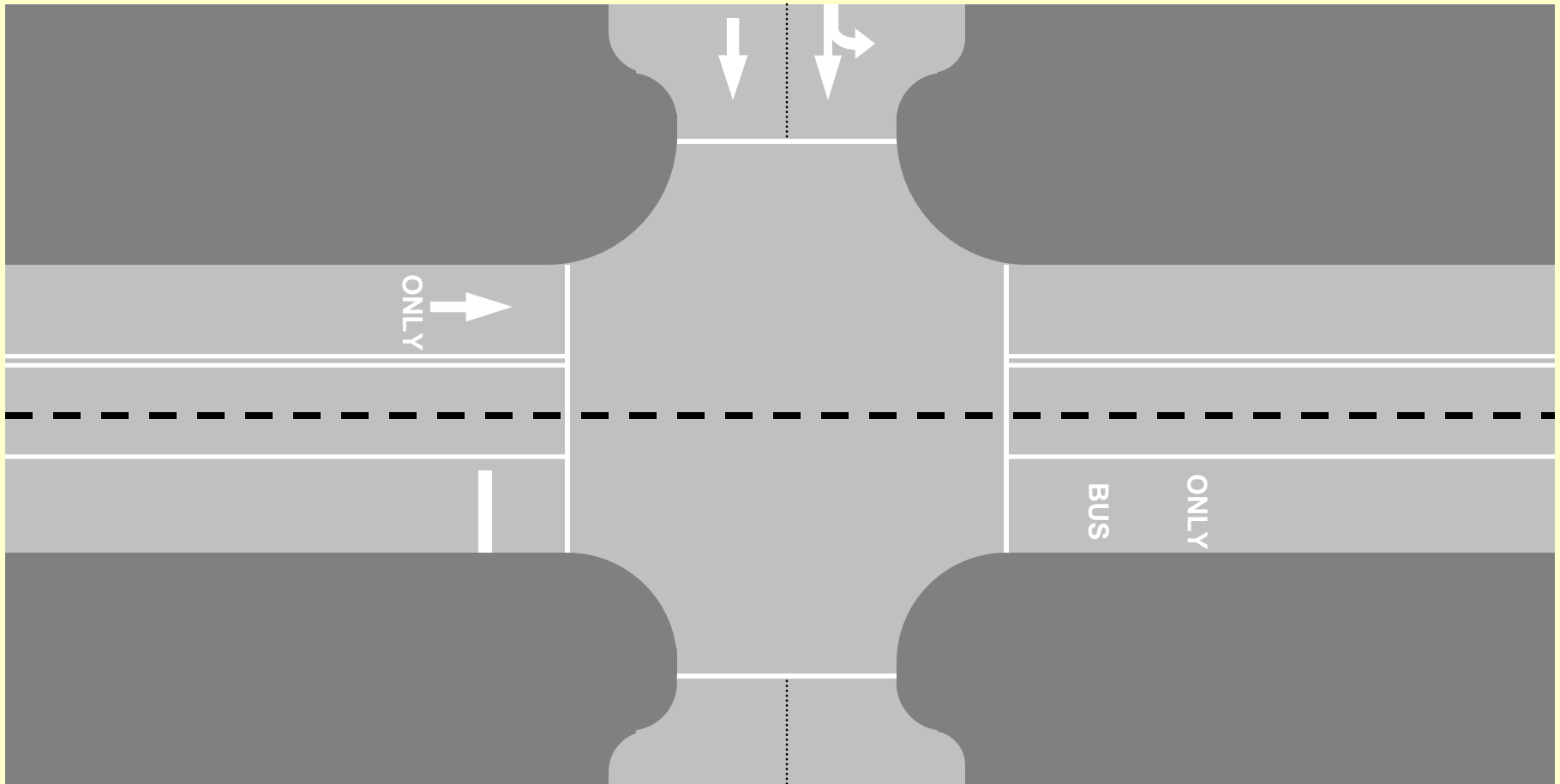
Service Lane

Auto Lane

Transitway



Pavement Markings



Definitions

- Service Lane- Travel lane used for accessing service stops
- Service Stop- The place where passengers can board and/or deboard a bus
- MAX Station- The place where passengers can board and/or deboard a MAX train

**MAX
Station**

**Service
Stops**

**Service
Lane**

6th

Jefferson

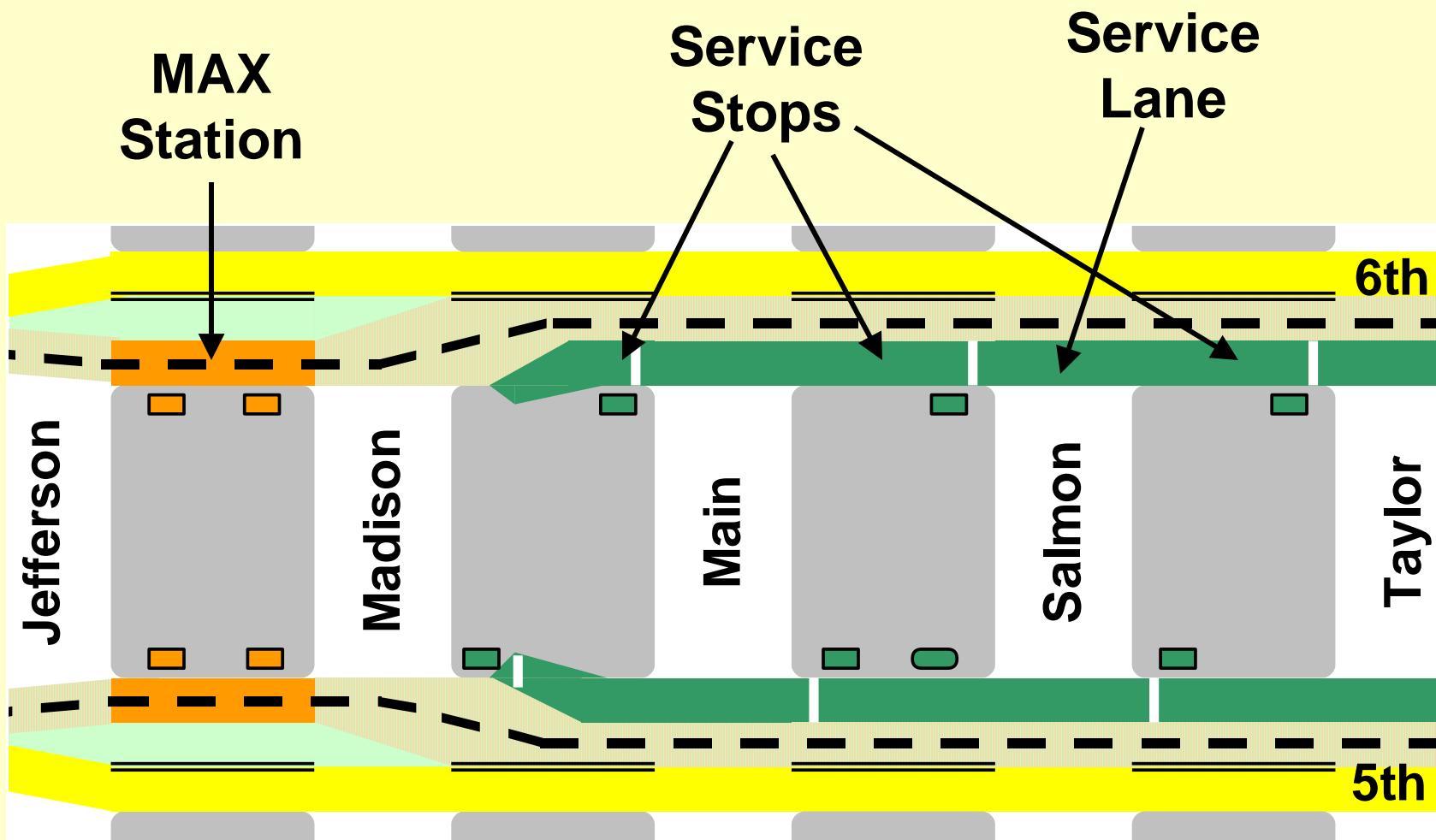
Madison

Main

Salmon

Taylor

5th



MAX Station Block

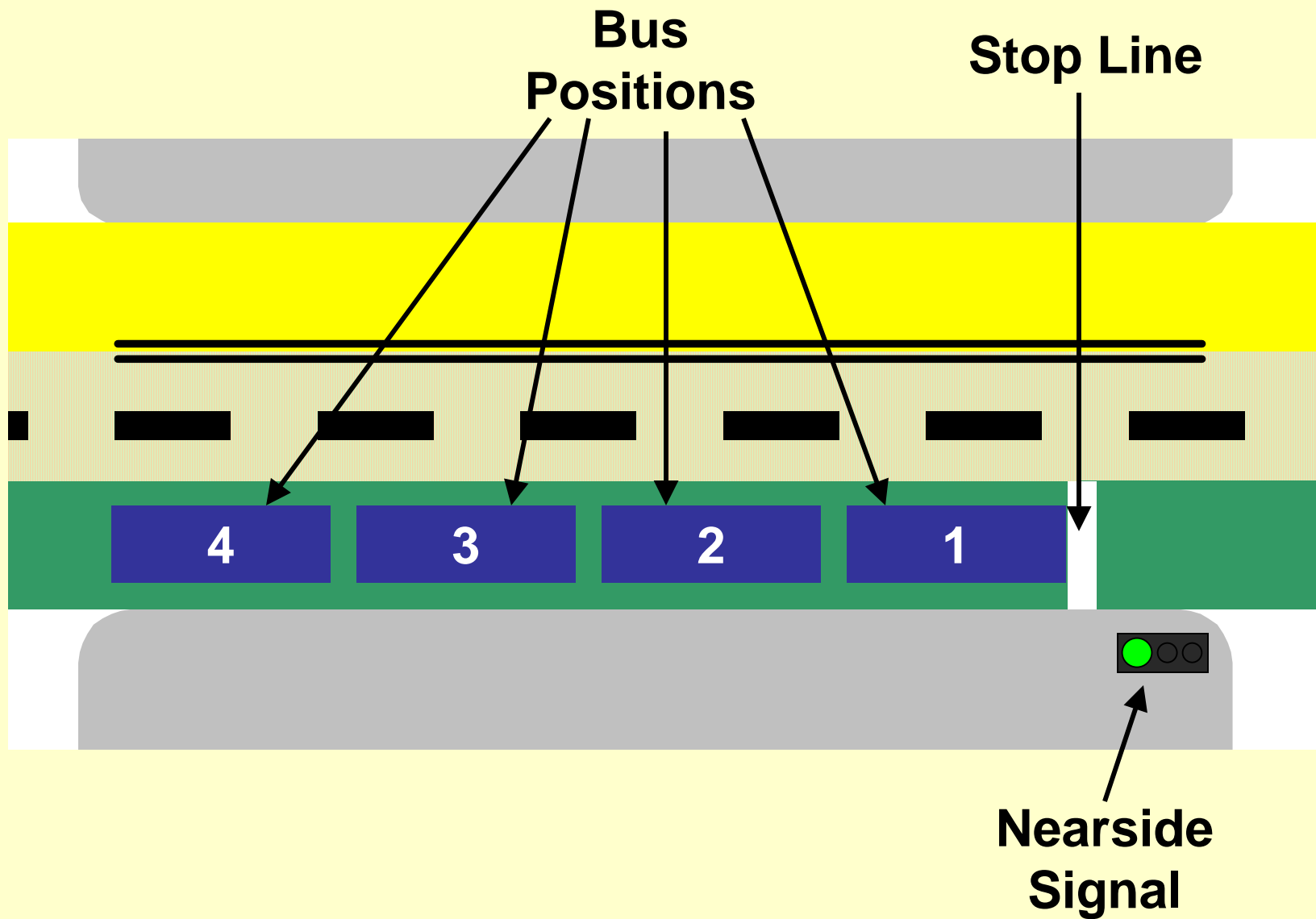


Service Stop Block

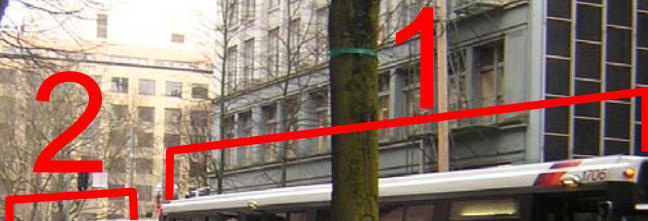


Definitions

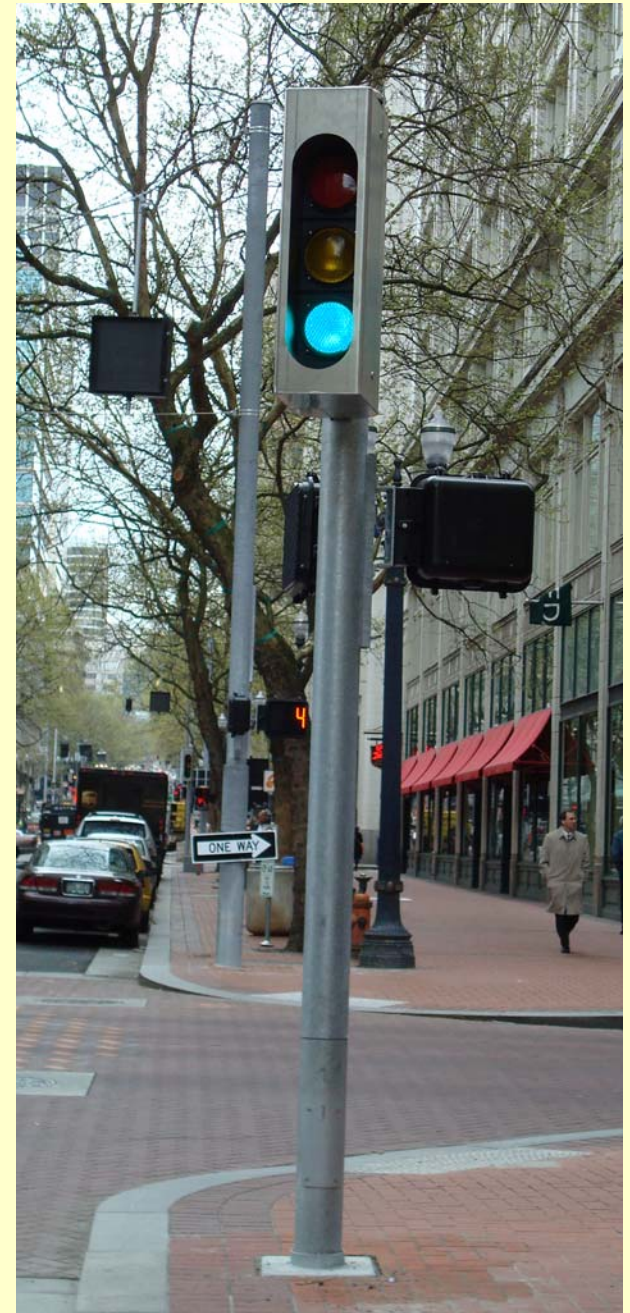
- Nearside Signal- The nearside traffic signal located at the front of every bus stop
- Bus Positions- Within a service stop there are between 2 and 5 bus positions. Positions are numbered from the front of the service stop to the rear. The position at the very front of the stop is the first position
- Stop Line- A painted line at the front of a service stop that indicates where the bus serves the first position



Bus Positions



Nearside Signal



Bus Travel Procedures

1. Travel along the Mall in the transitway.

Auto lane may be used when:

- Entering/exiting the Mall
- Directed by supervisor
- Transitway is blocked by incident
- Passing trains stopped at stations in North Mall only

Bus Travel Procedures cont.

2. Observe the following right of way rules when traveling:

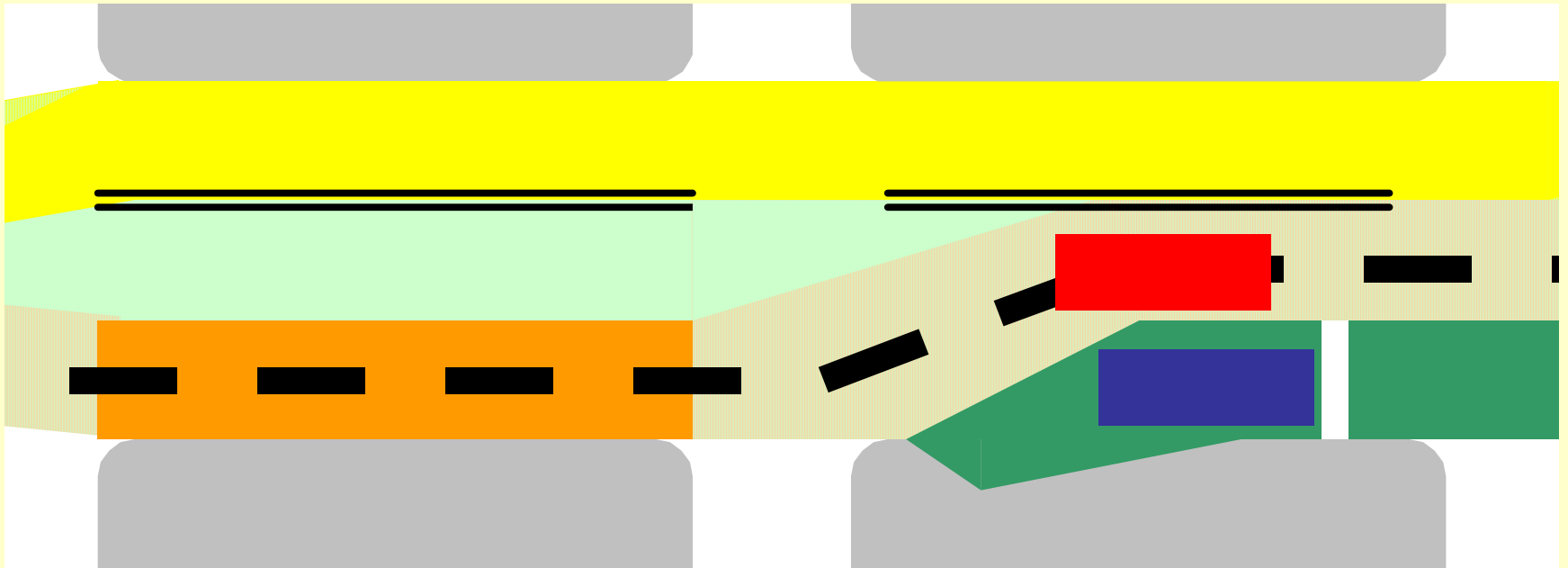
- Buses within the service stop yield to buses and trains in the transitway
- Buses in the auto lane yield to all buses and trains in all other lanes

Right of Way Rules

You =



Yield to =

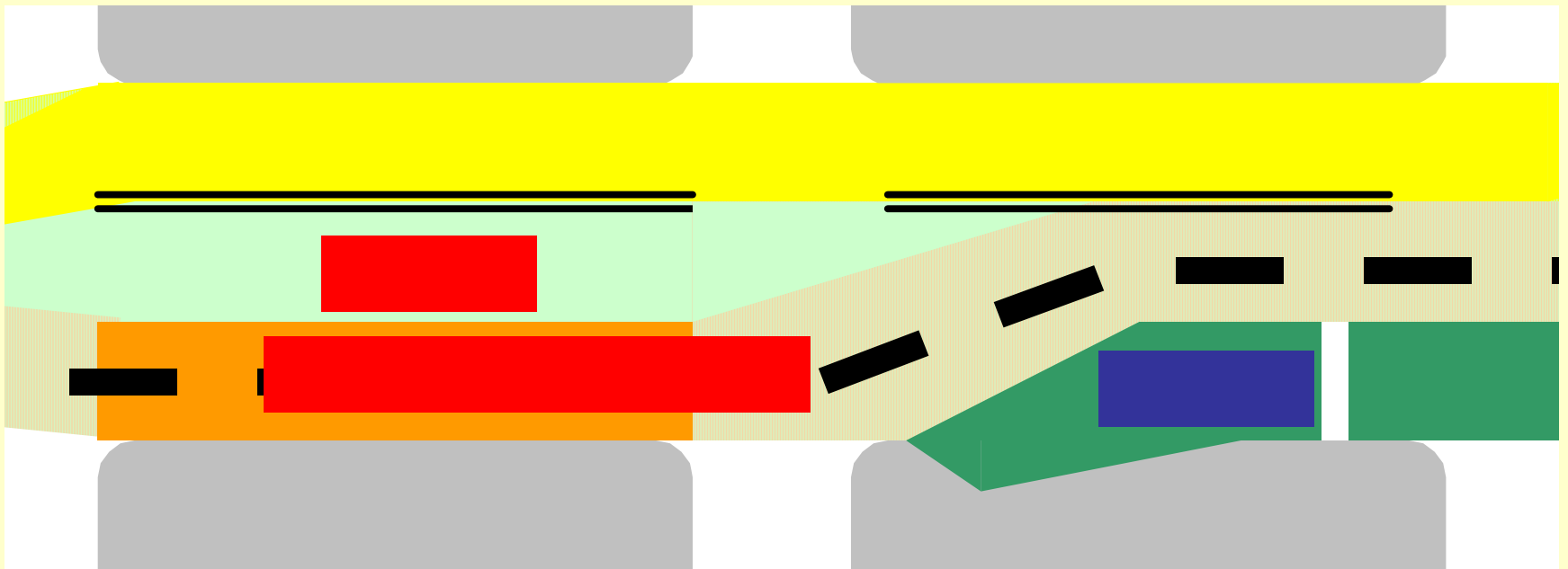


Right of Way Rules

You =



Yield to =

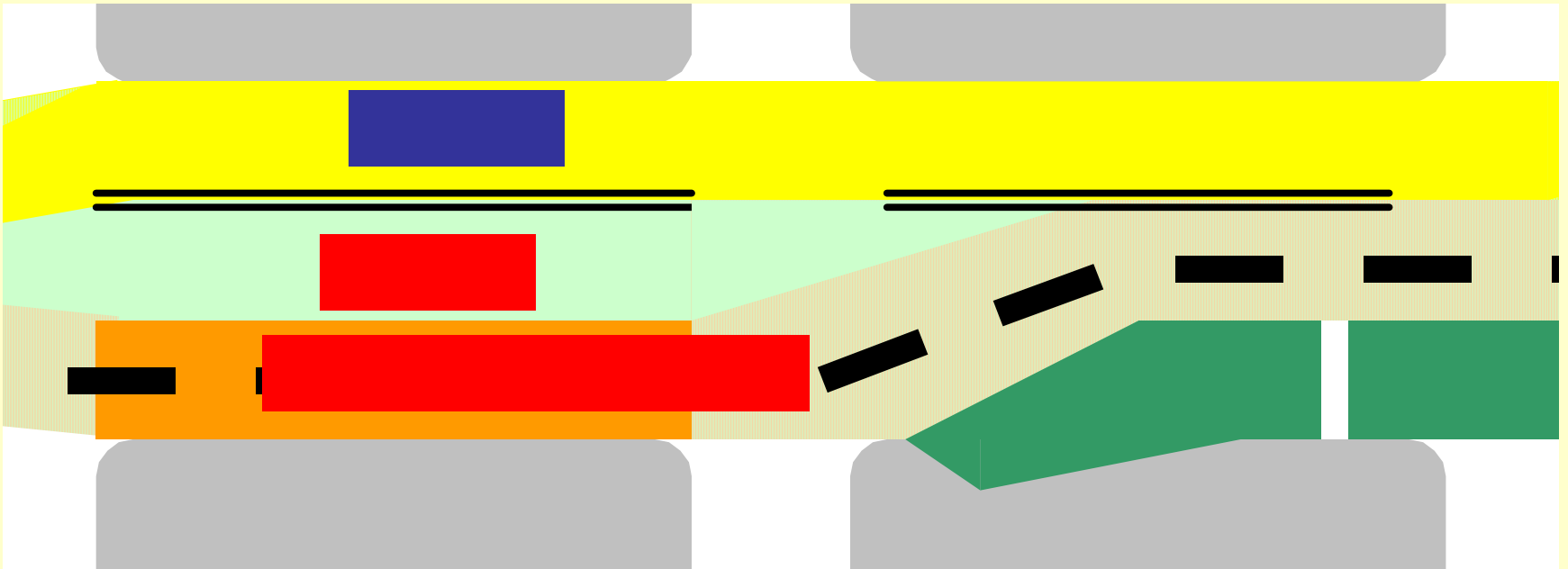


Right of Way Rules

You =



Yield to =



Bus Travel Procedures cont.

3. Do not turn on to the Mall on a red light, except when turning to SW 6th at Main
4. Do not exceed 20 MPH on the Mall
5. Following distance-
Bus to train: 40ft. (one bus length)
Train to bus: 100ft. (one LRV car length)
6. Observe all posted traffic signs and signals
7. Do not stop the bus outside of the transitway in a manner that blocks the dynamic envelope of a MAX train

Service Lane Procedures

1. If the service lane is full, wait in the transitway nearside of the intersection until the closest bus position is available
2. Enter the service lane at the beginning of the block
3. Do not exceed 10 MPH when traveling within the service lane
4. Continue to move forward in the service lane through each bus position
5. Board and deboard passengers from the first and second bus positions

Service Lane Procedures cont.

6. Passengers may be deboarded in other bus positions
7. All buses must stop at the first position, unless there are no waiting passengers
8. Only exit the service lane from the first bus position
9. Observe and obey the nearside bus signal
10. Yield to all traffic in the transitway at all times



**On old mall
buses stopped
every other block**



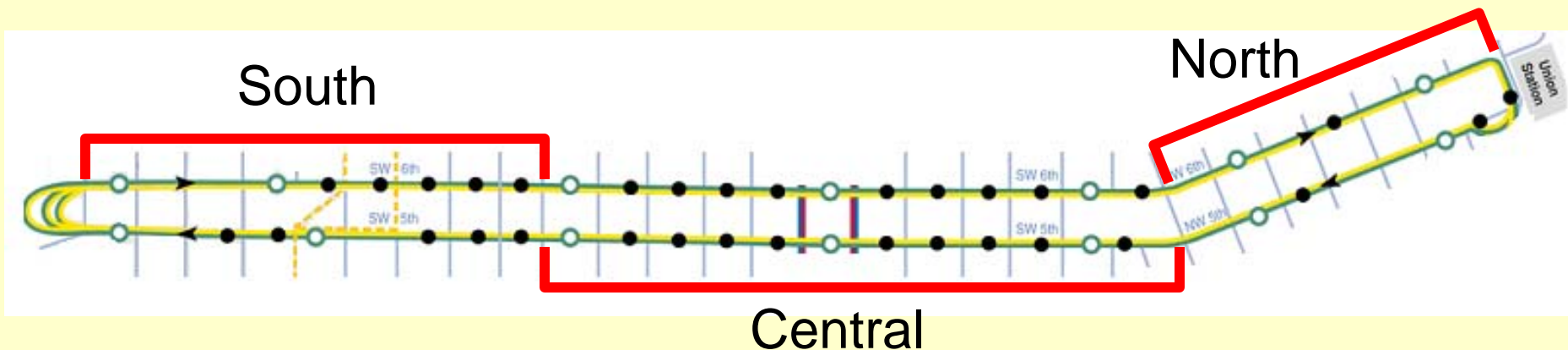
**Bus stop spacing
will be similar to
MAX**

Portland Mall

North Mall- NW Irving to W Burnside

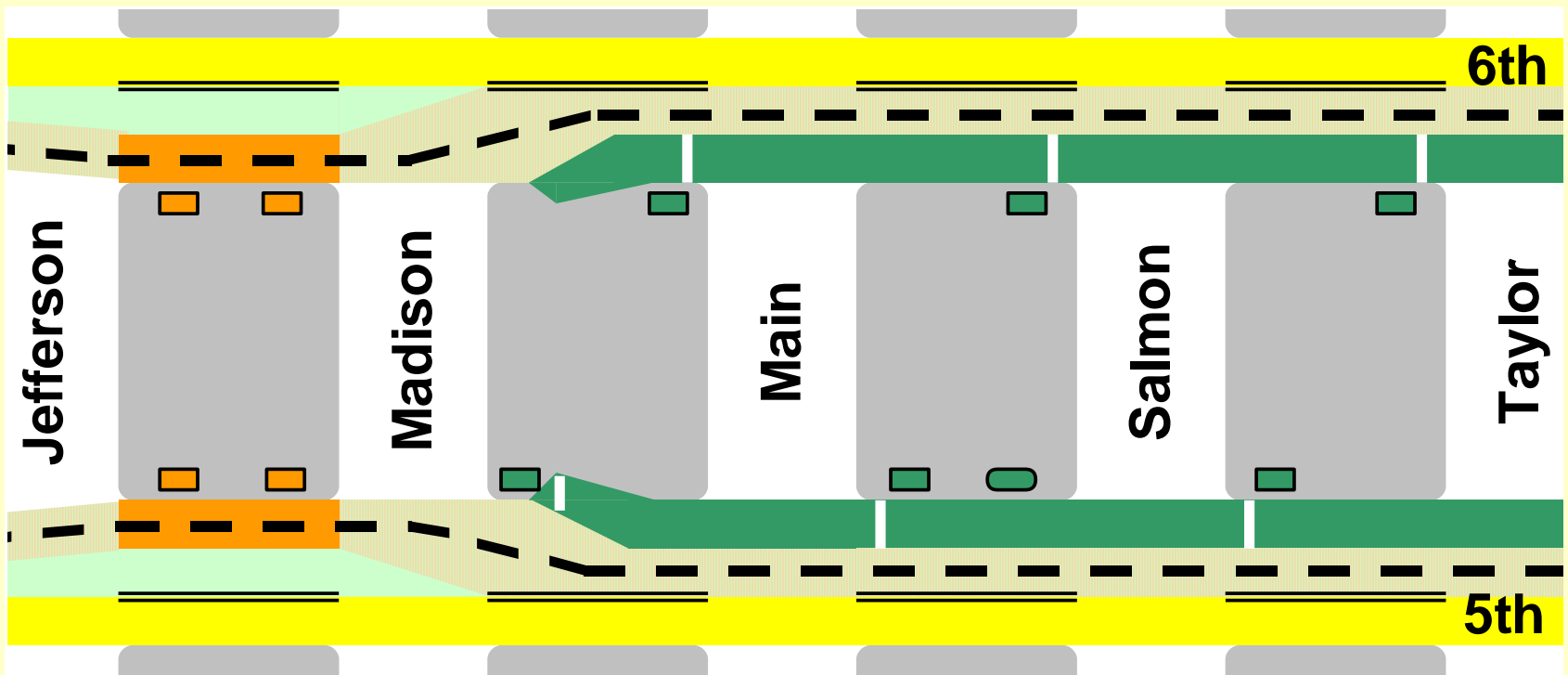
Central Mall- W Burnside to SW Jefferson

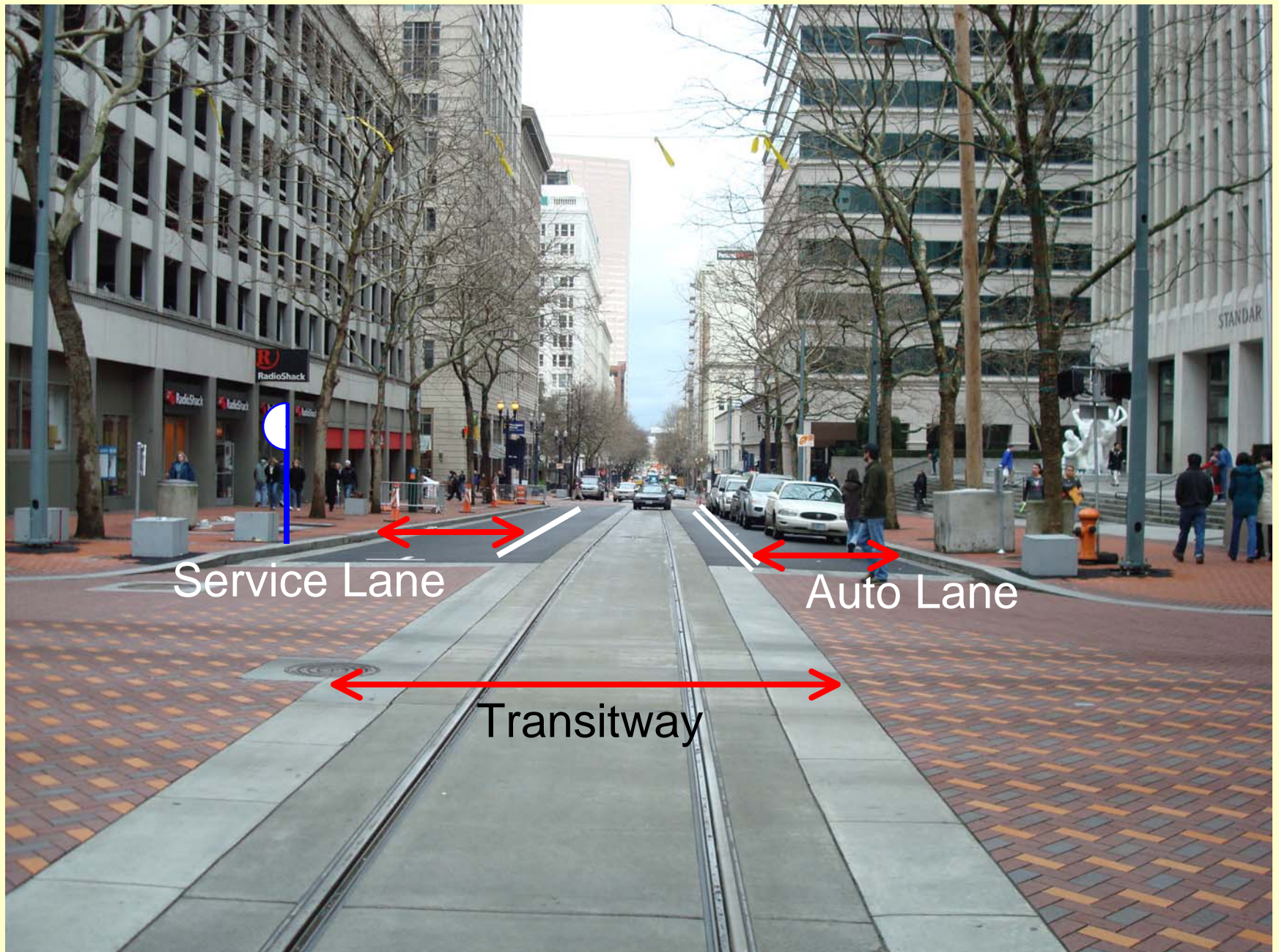
South Mall- SW Jefferson to SW Jackson



Central Mall Operations

- Auto lane
- Transitway (bus and MAX)
- Service stops (within service lane)
- MAX stations



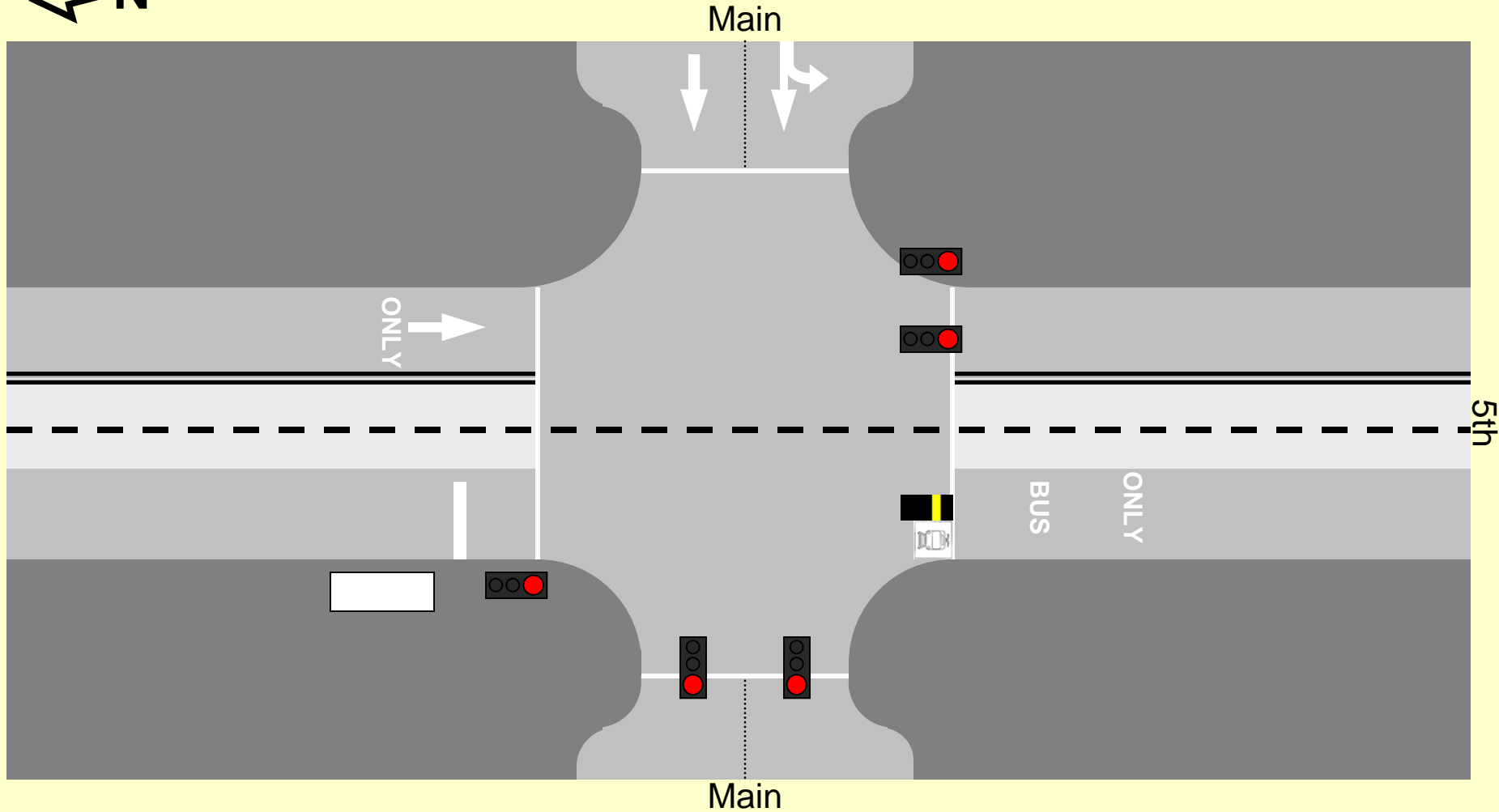


Service Lane

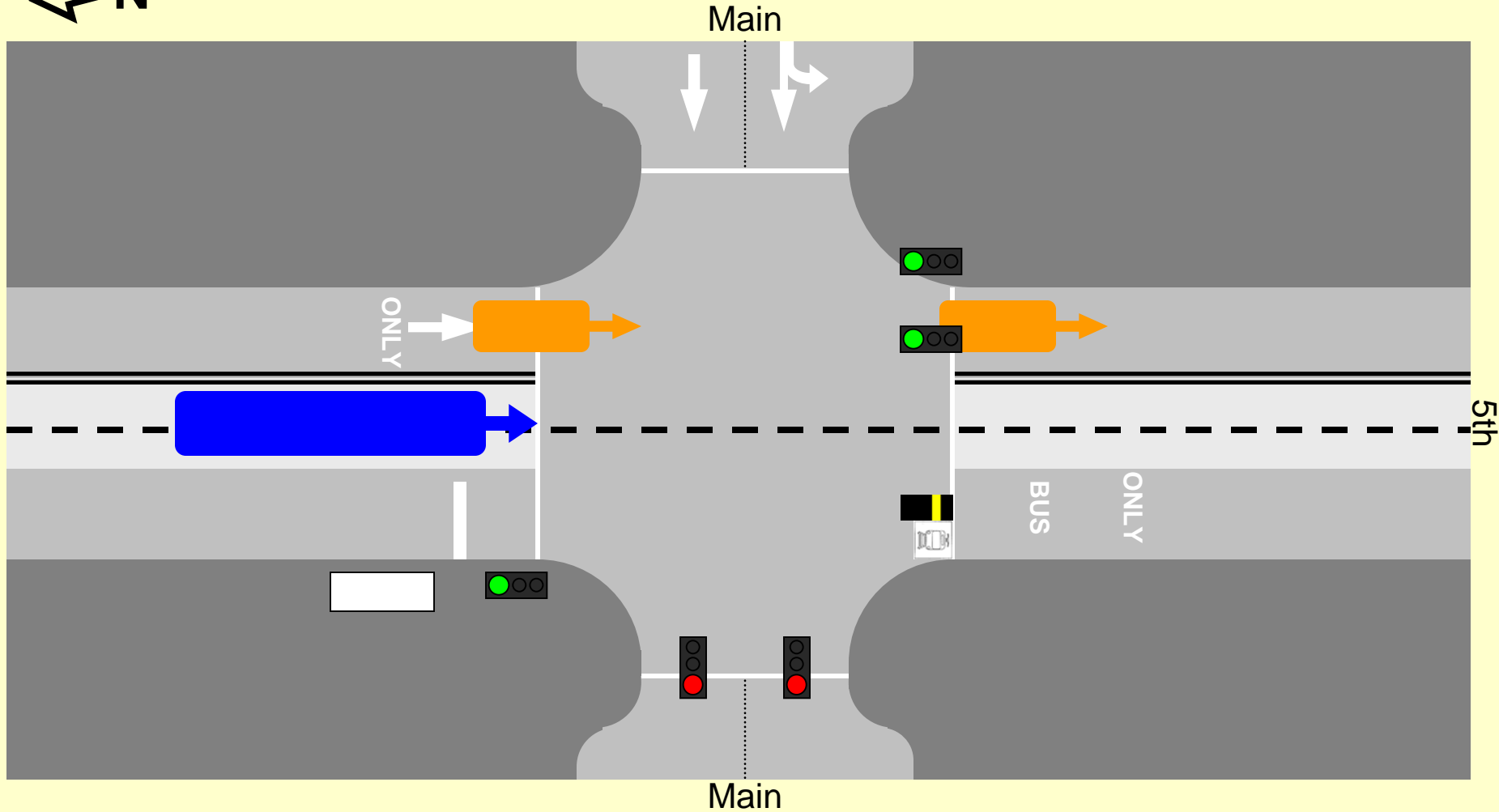
Auto Lane

Transitway

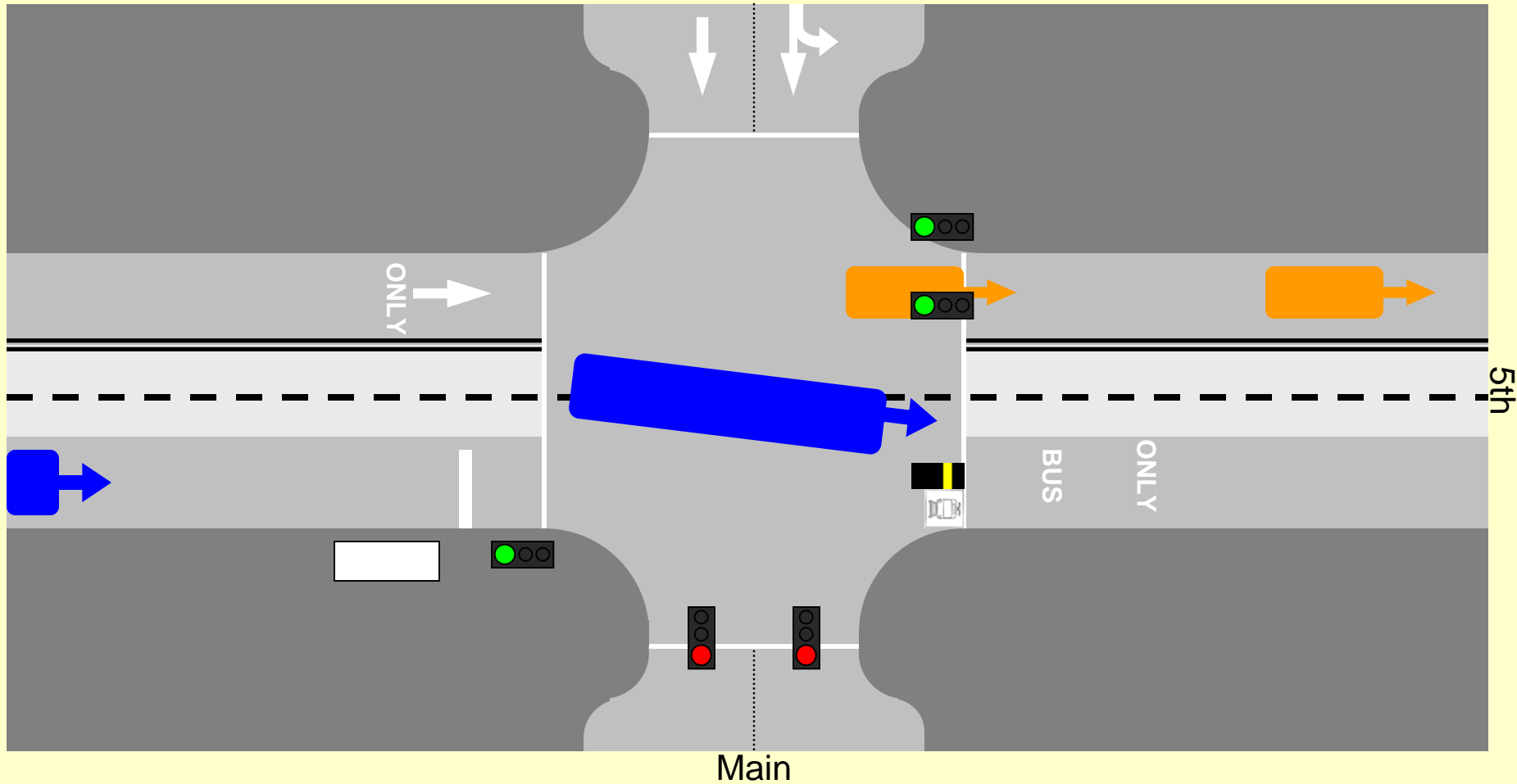
Central Mall Operations



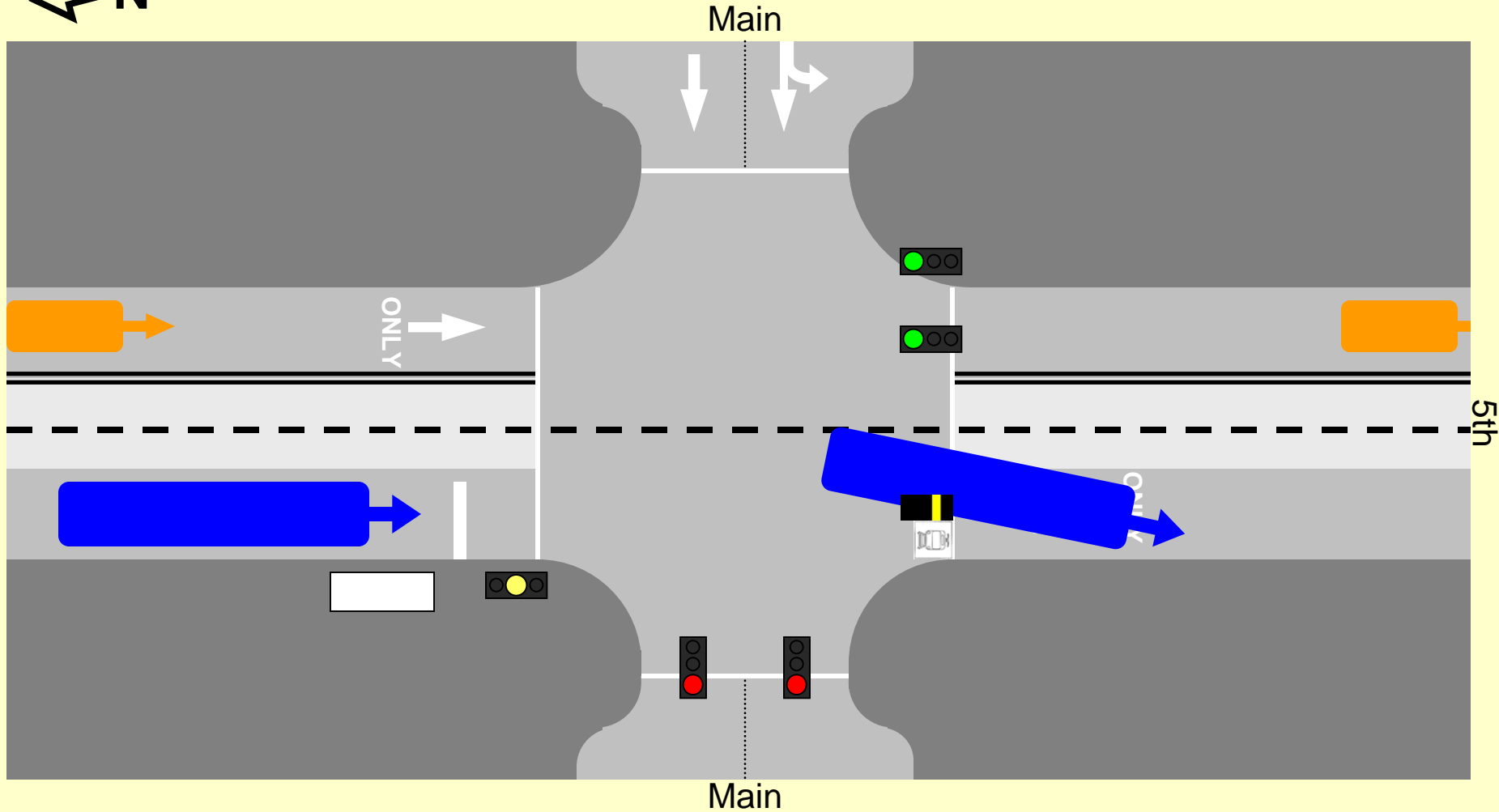
Central Mall Operations



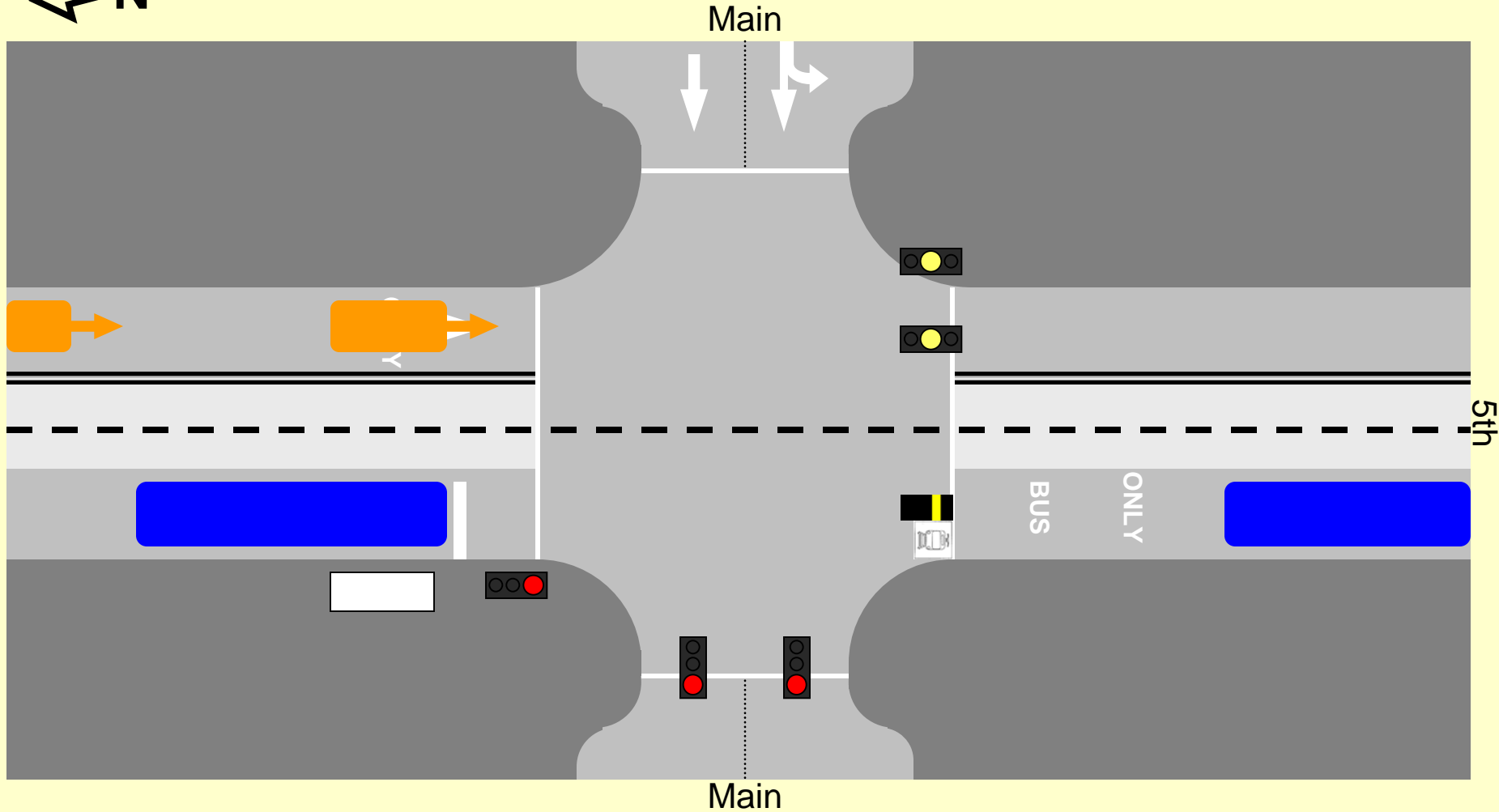
Central Mall Operations



Central Mall Operations



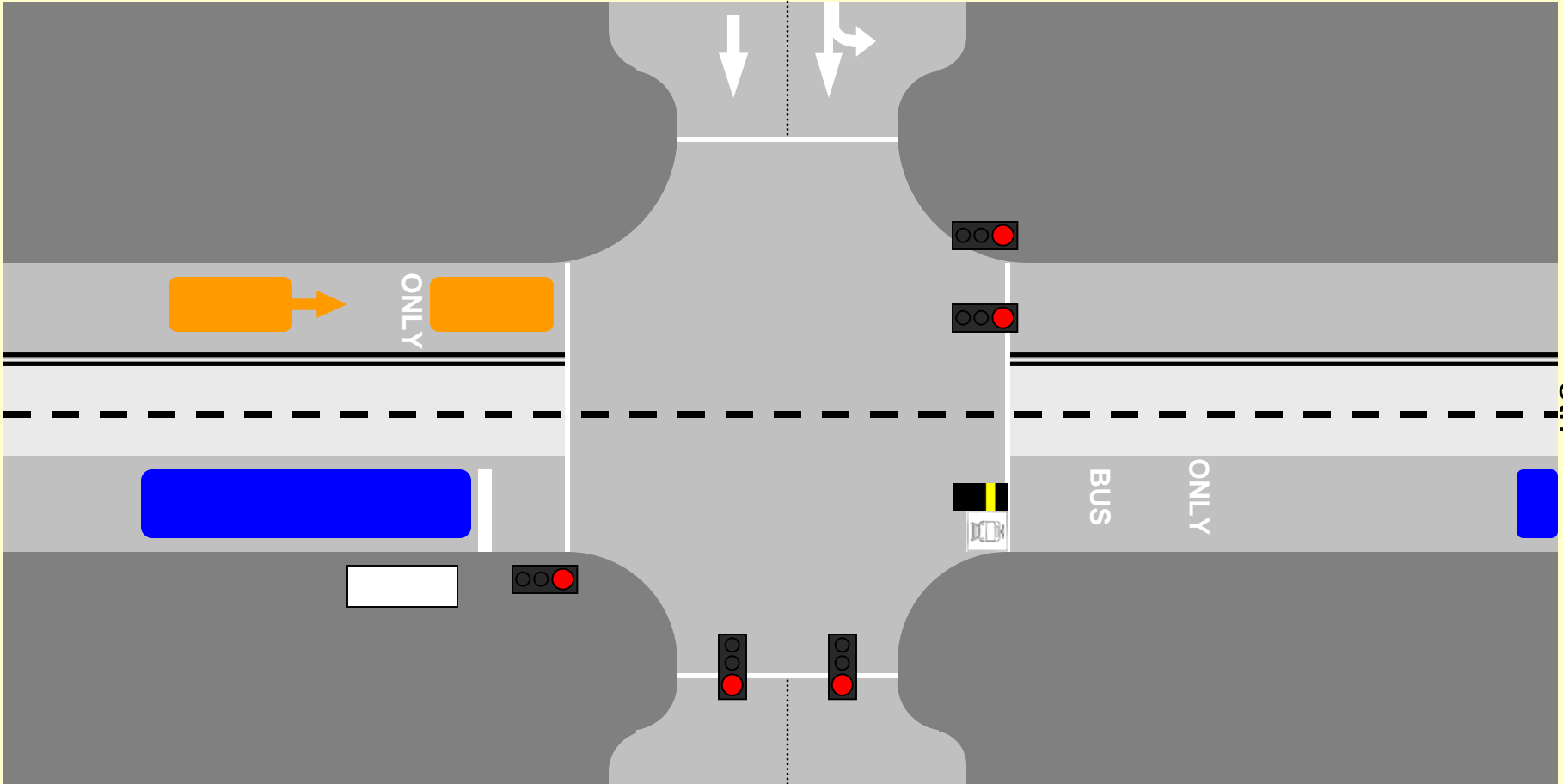
Central Mall Operations



Central Mall Operations



Main

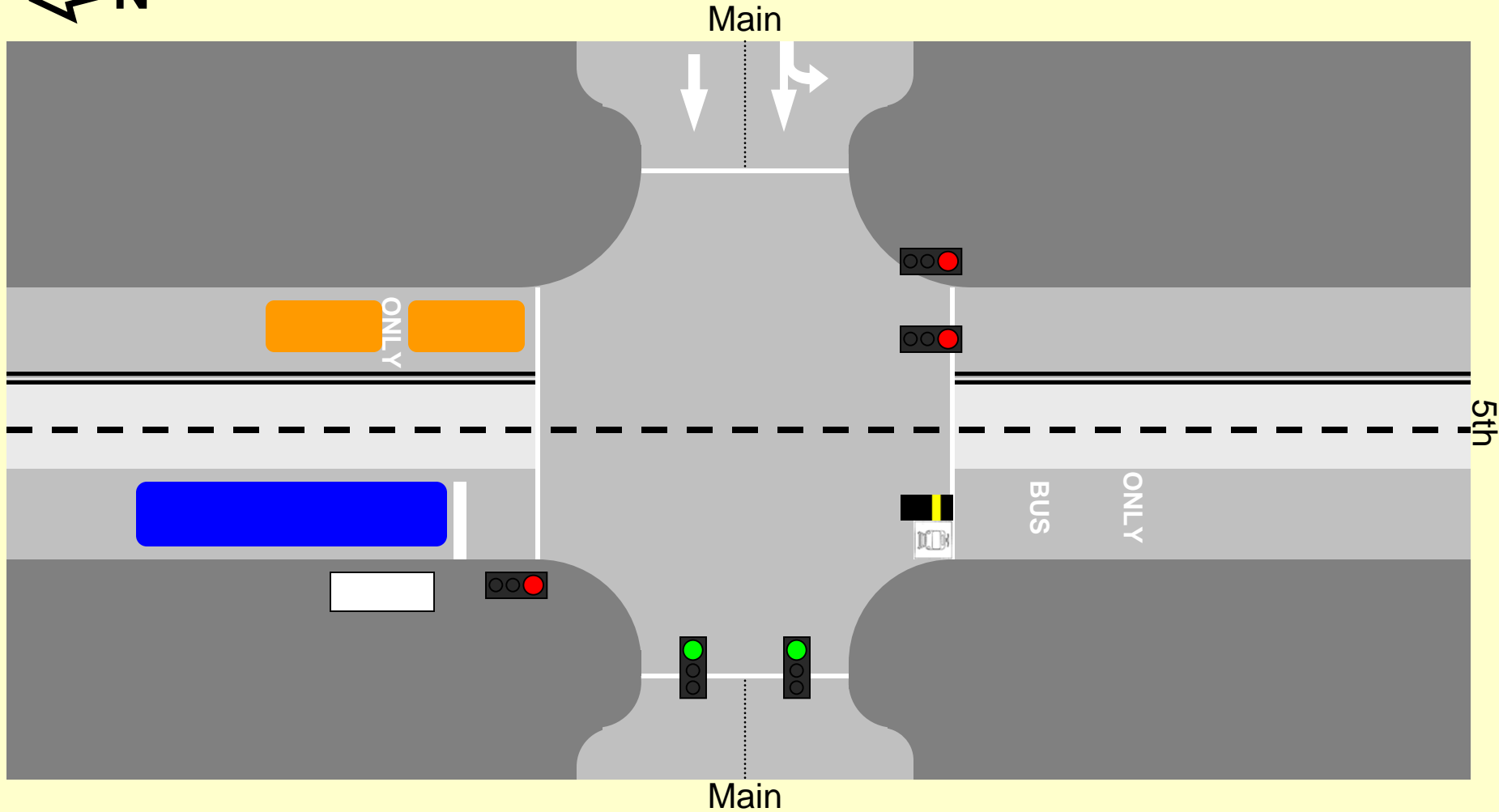


Main

5th

5th

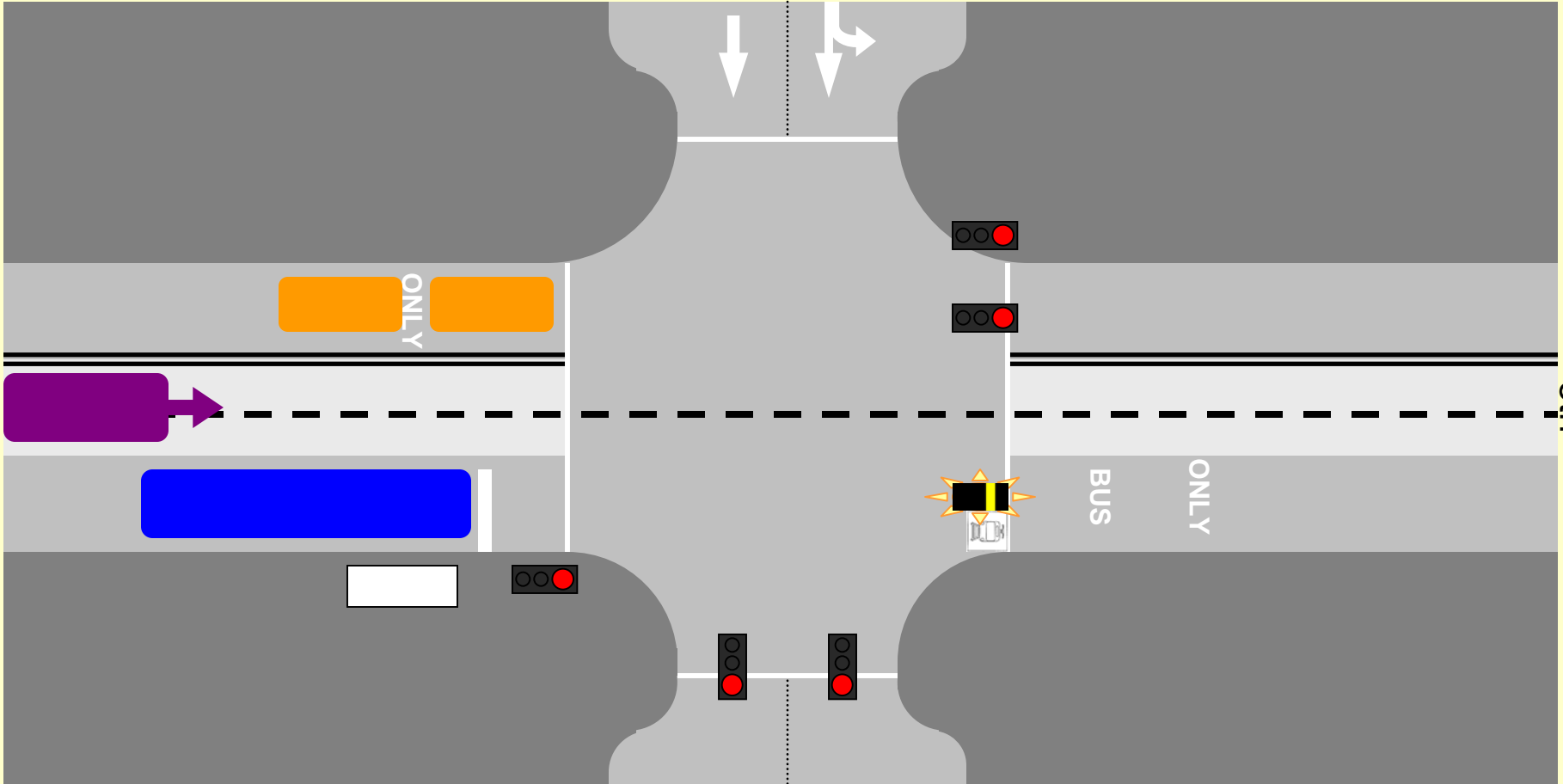
Central Mall Operations



Central Mall Operations



Main



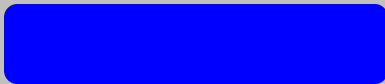
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Main

Central Mall Operations



Main



BUS

ONLY

Main

5th

5th

Central Mall Operations



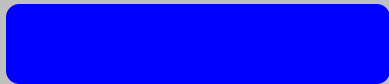
Main



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5th



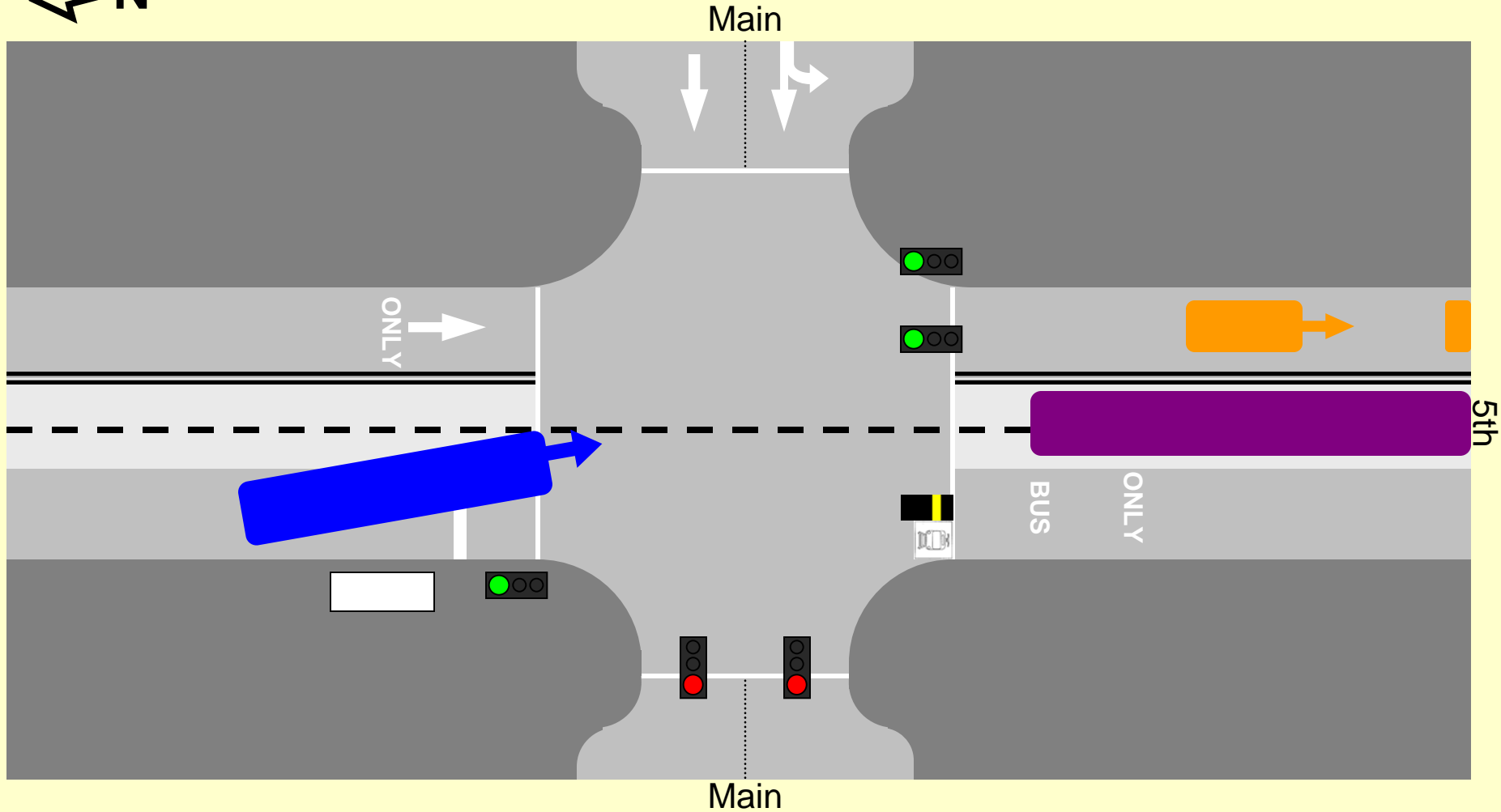
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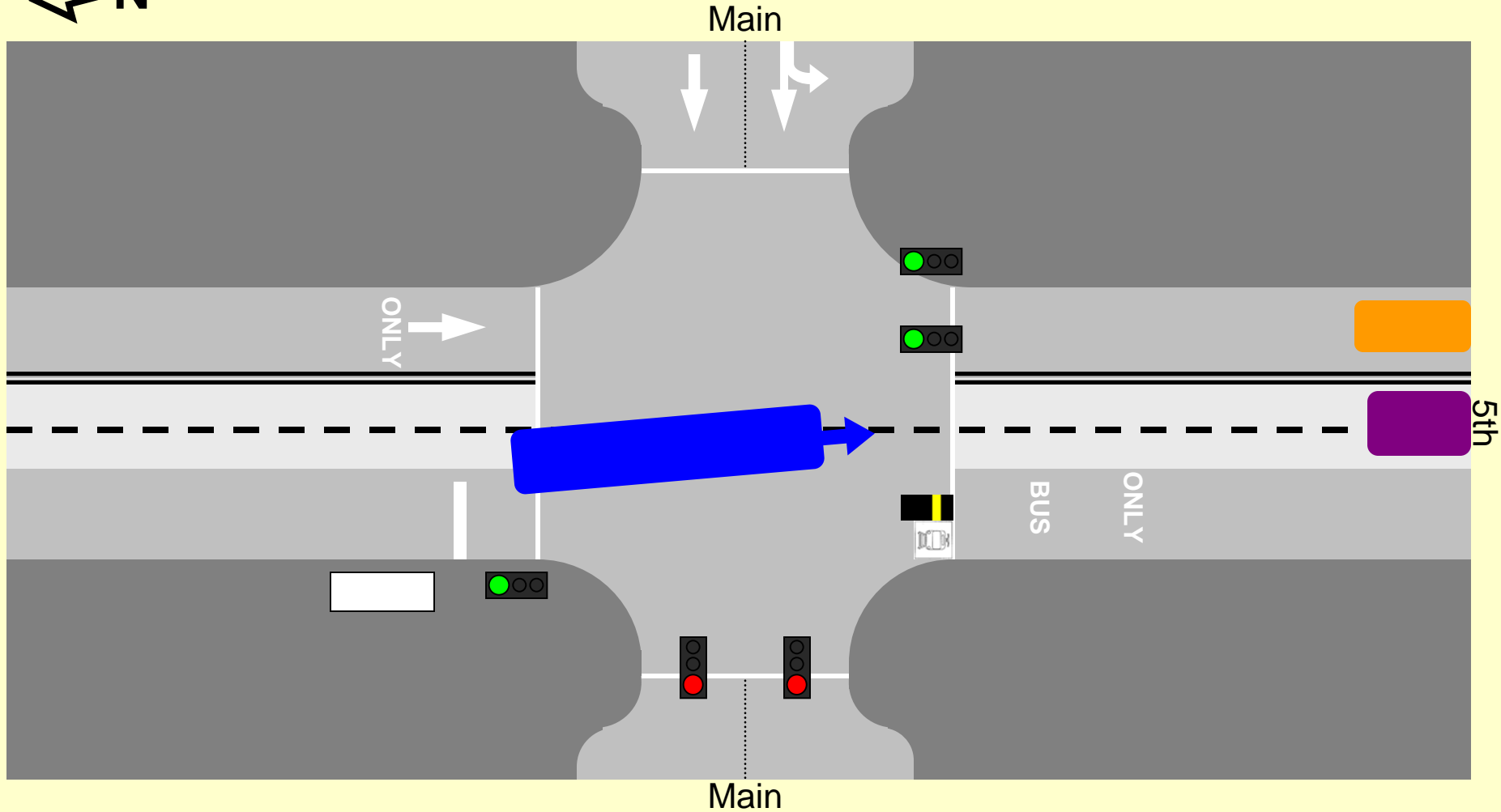


Main

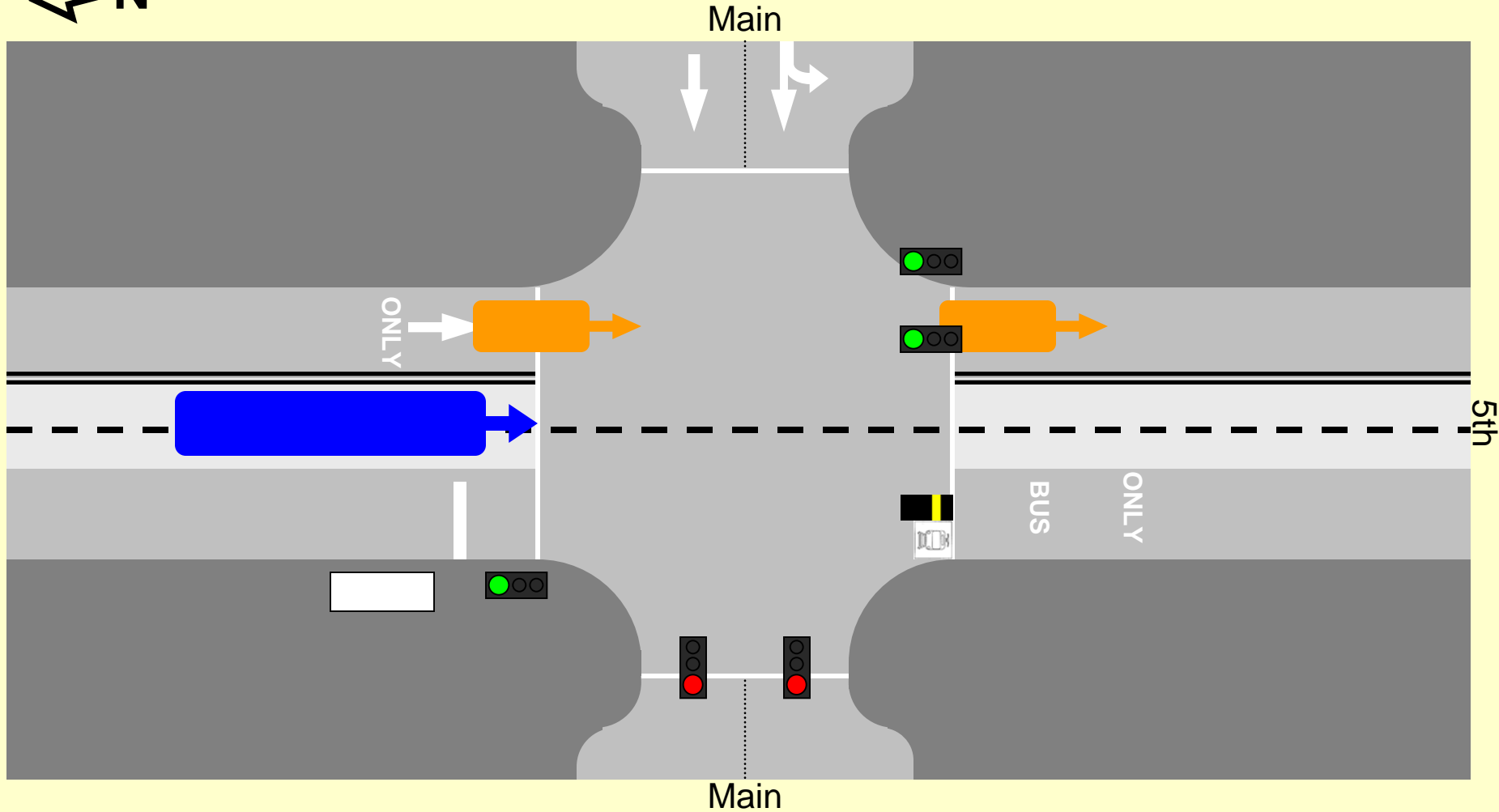
Central Mall Operations



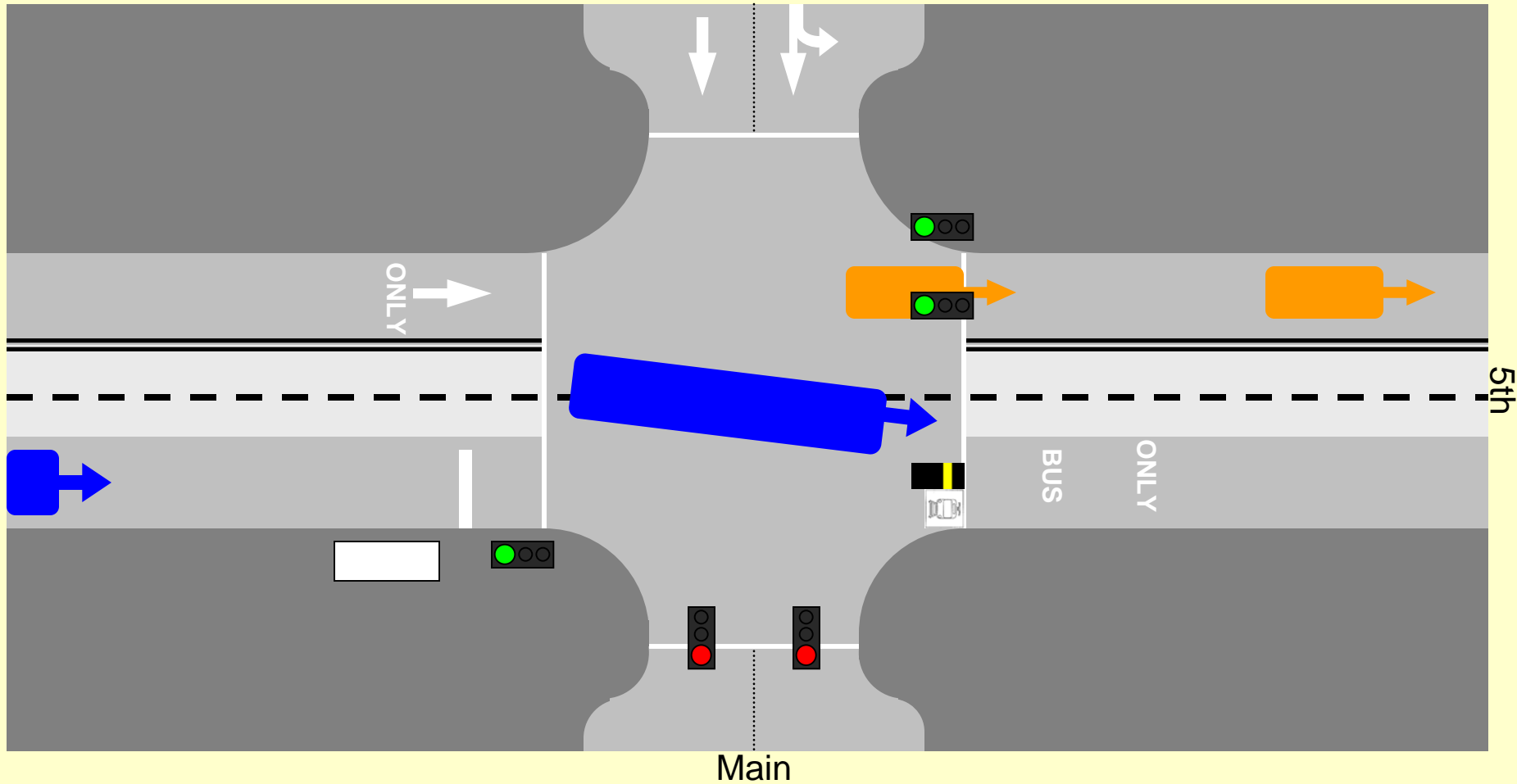
Central Mall Operations



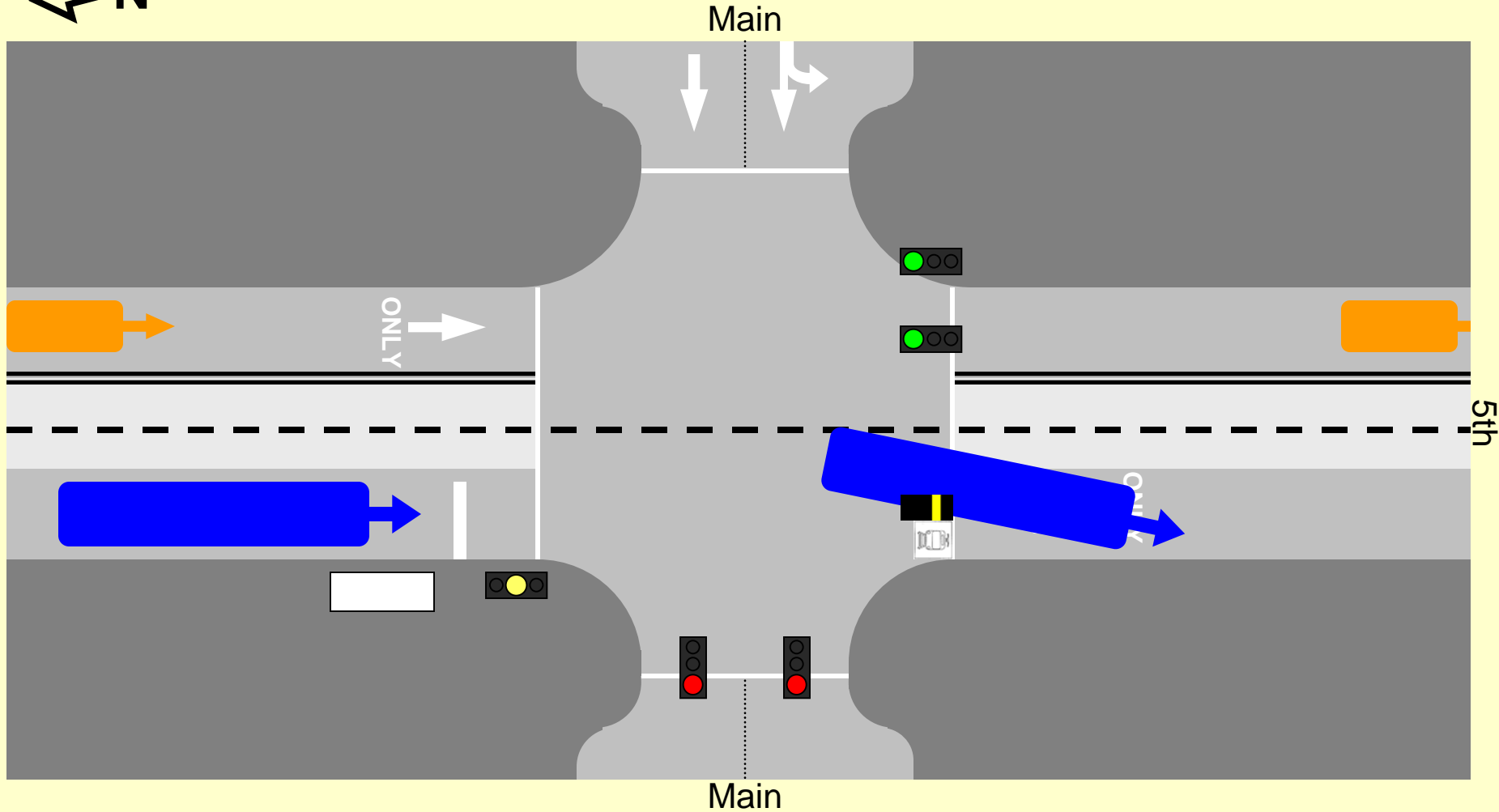
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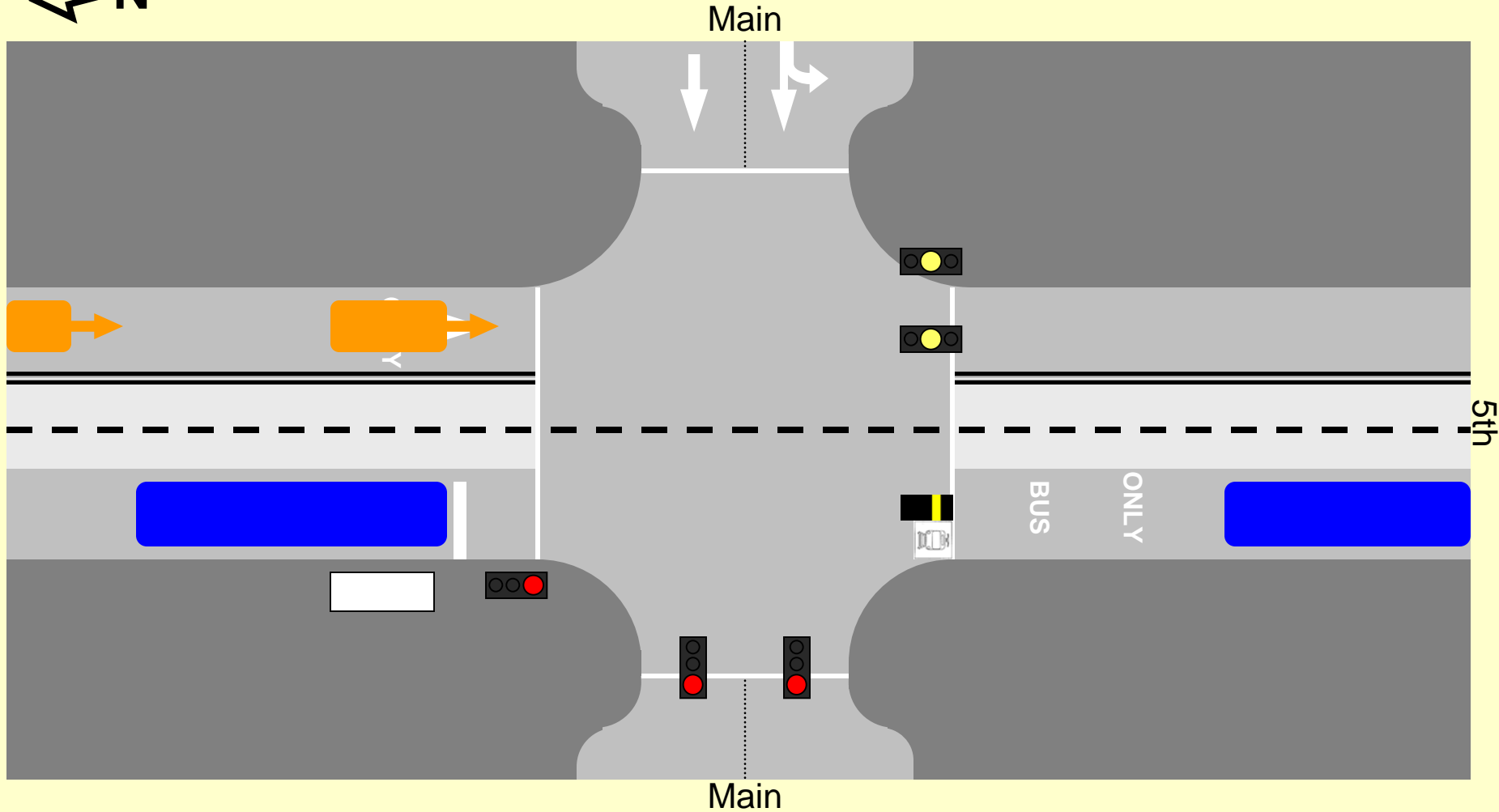
Central Mall Operations



Central Mall Operations



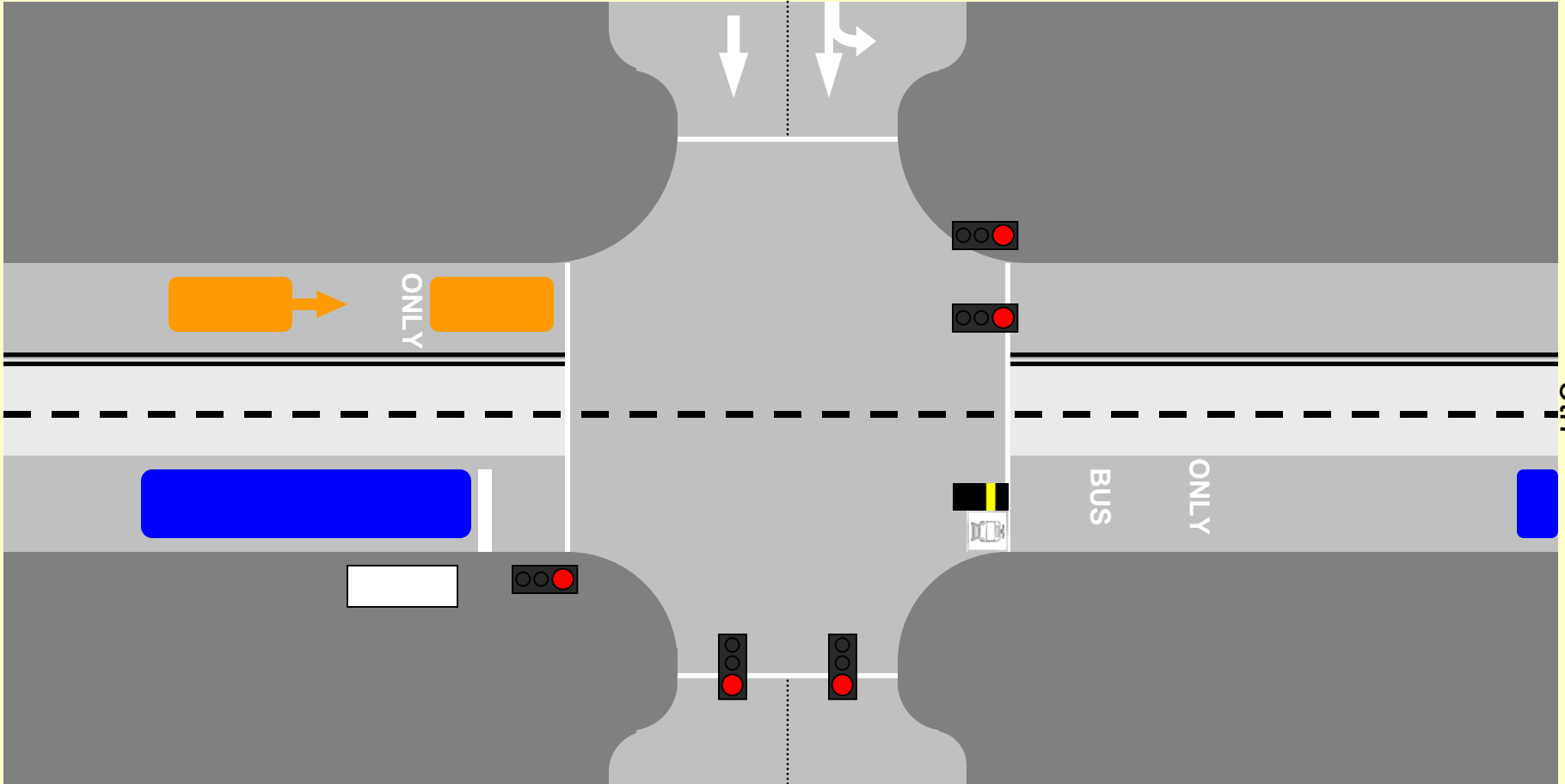
Central Mall Operations



Central Mall Operations



Main

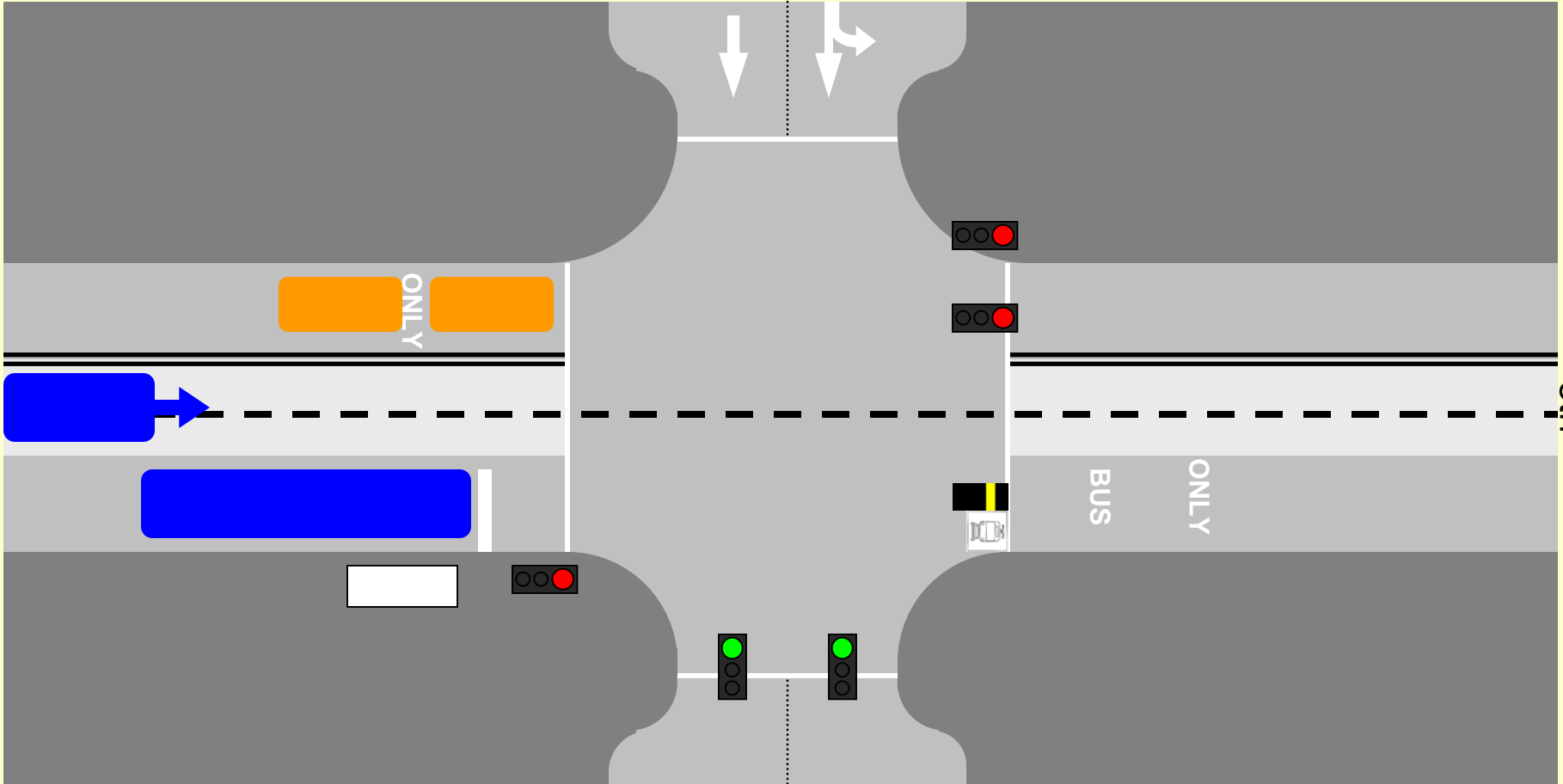


Main

Central Mall Operations



Main

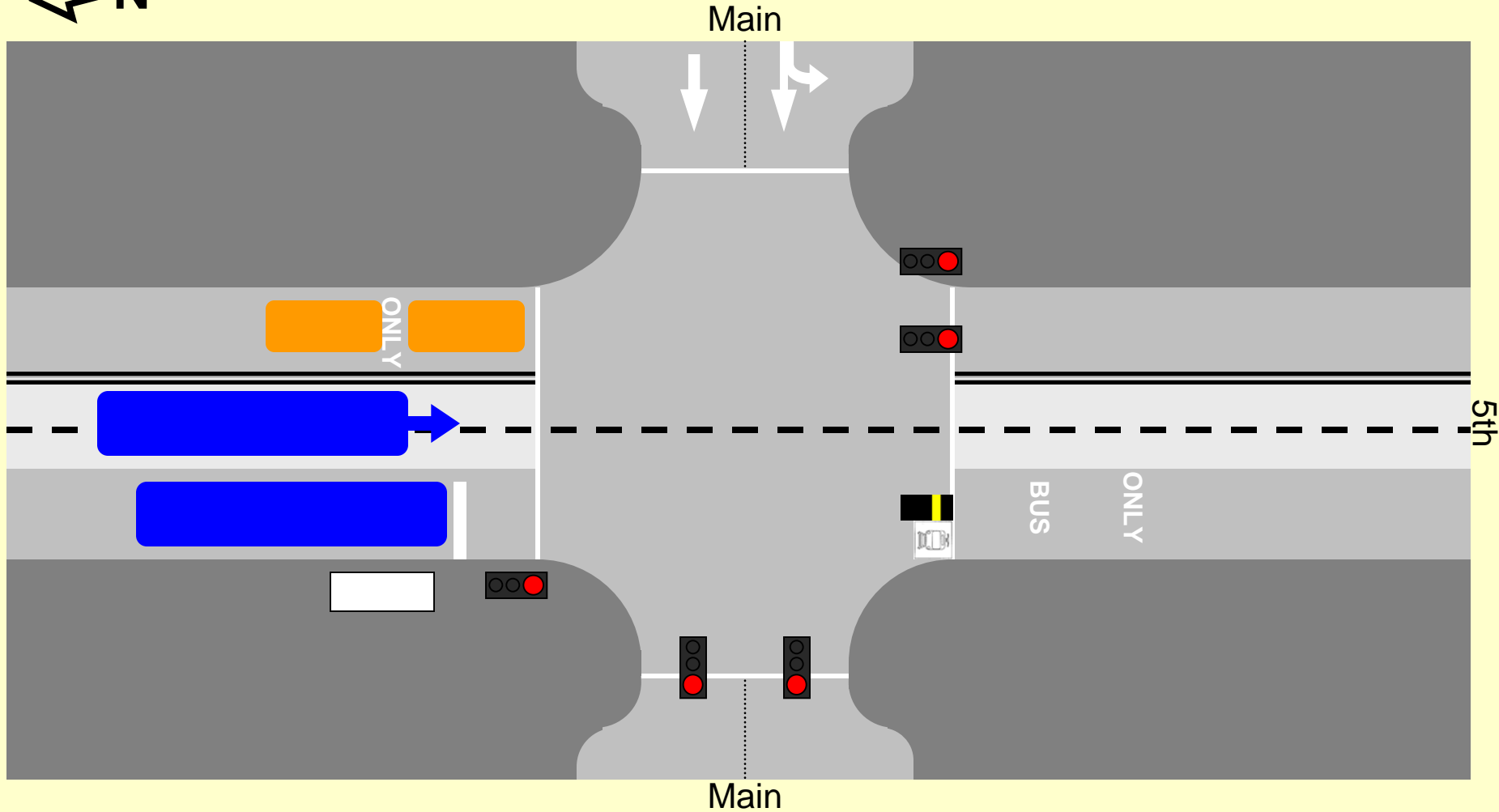


Main

5th

5th

Central Mall Operations



Central Mall Operations



Main

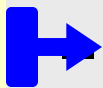
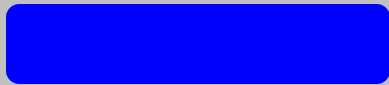


5th

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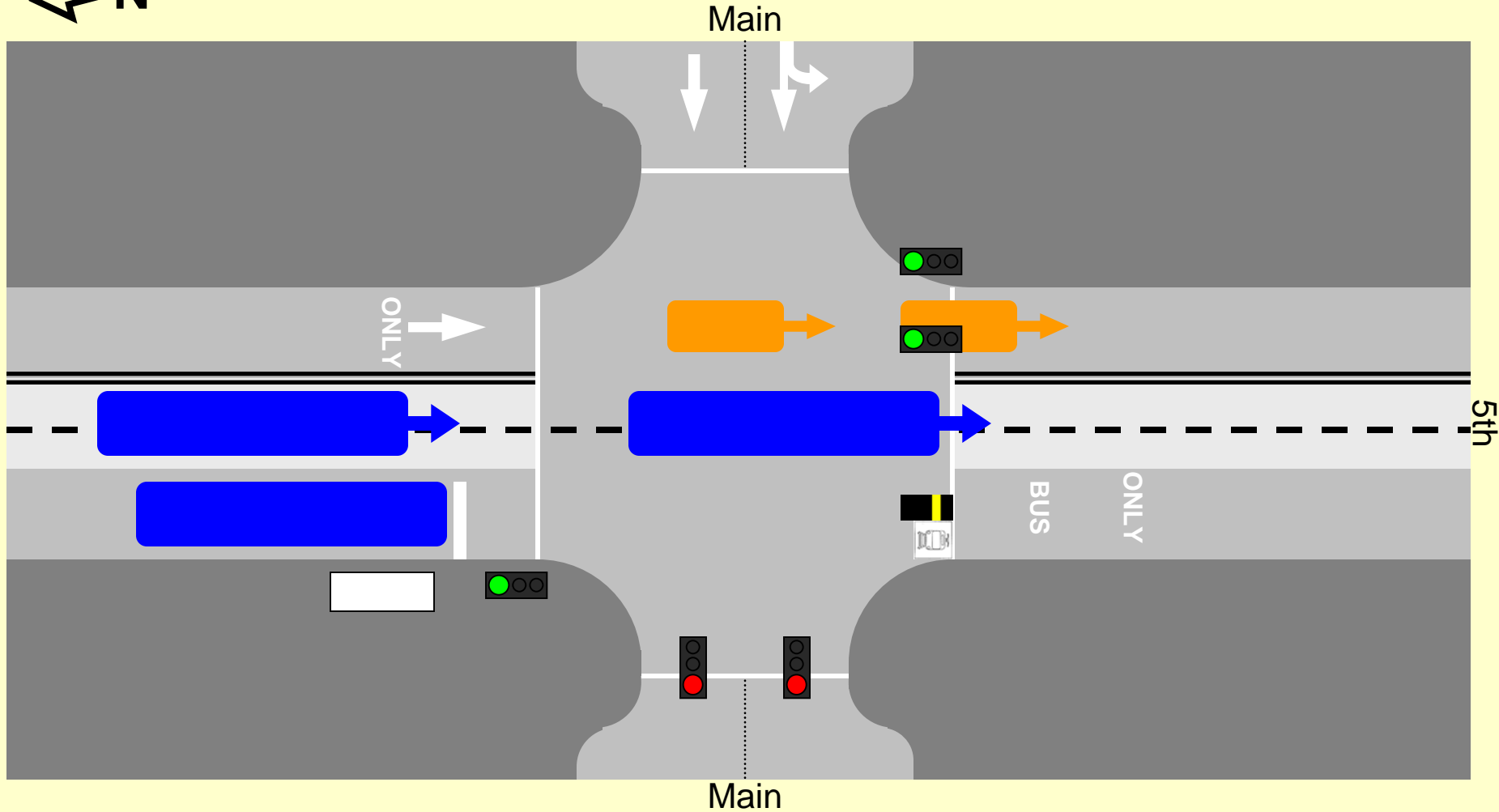


Main



5th

Central Mall Operations



Central Mall Operations



Main



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5th

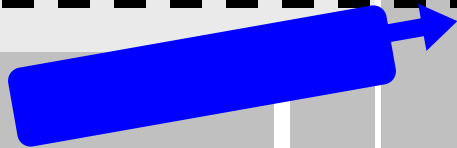


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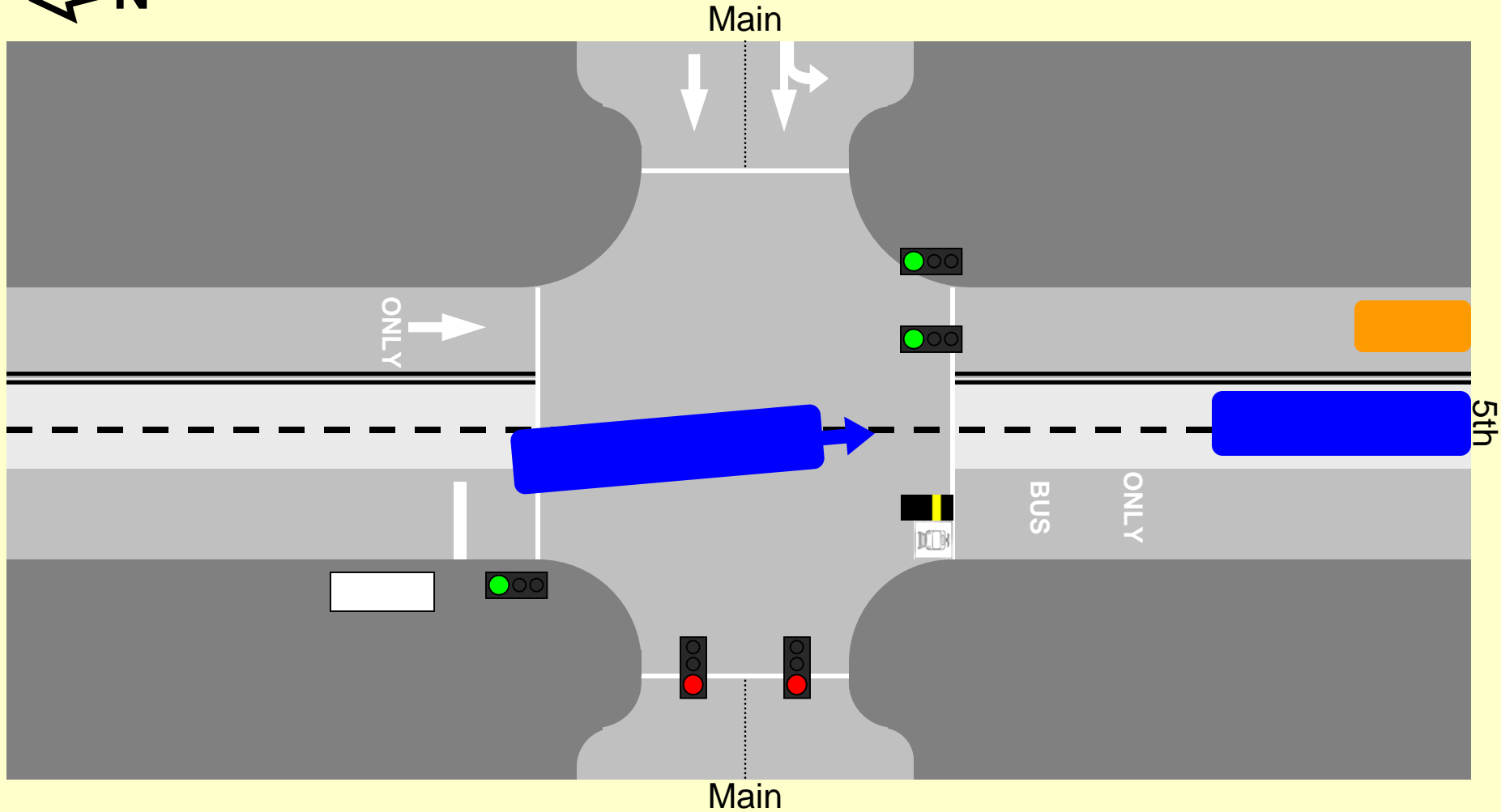


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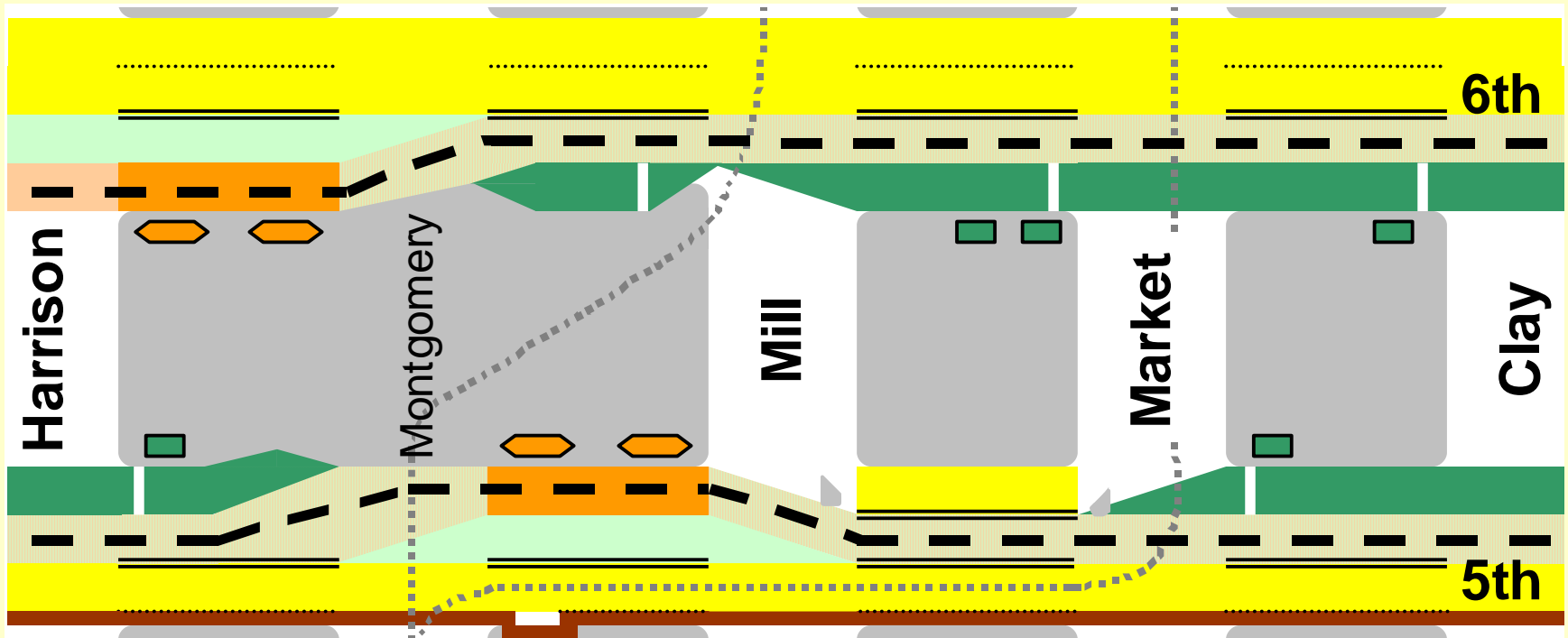
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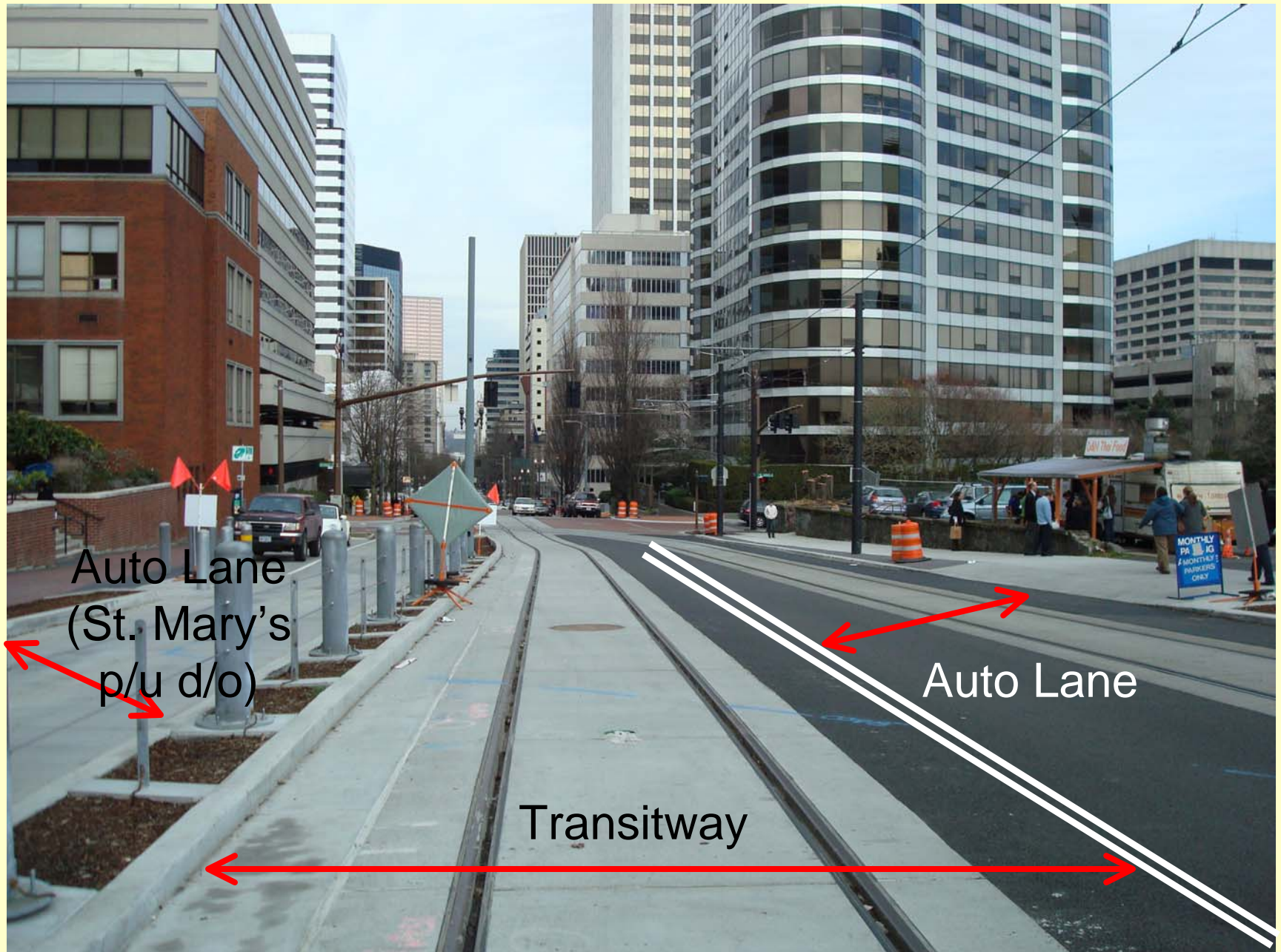
Central Mall Operations



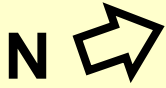
South Mall Operations

- Auto lane(s) (Streetcar)
- Transitway (bus and MAX)
- Service stops (within service lane)
- MAX stations
- Bike lane





South Mall Operations



Market



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6th

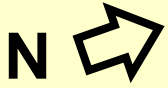
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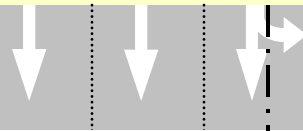
Market



South Mall Operations



Market



ONLY ONLY



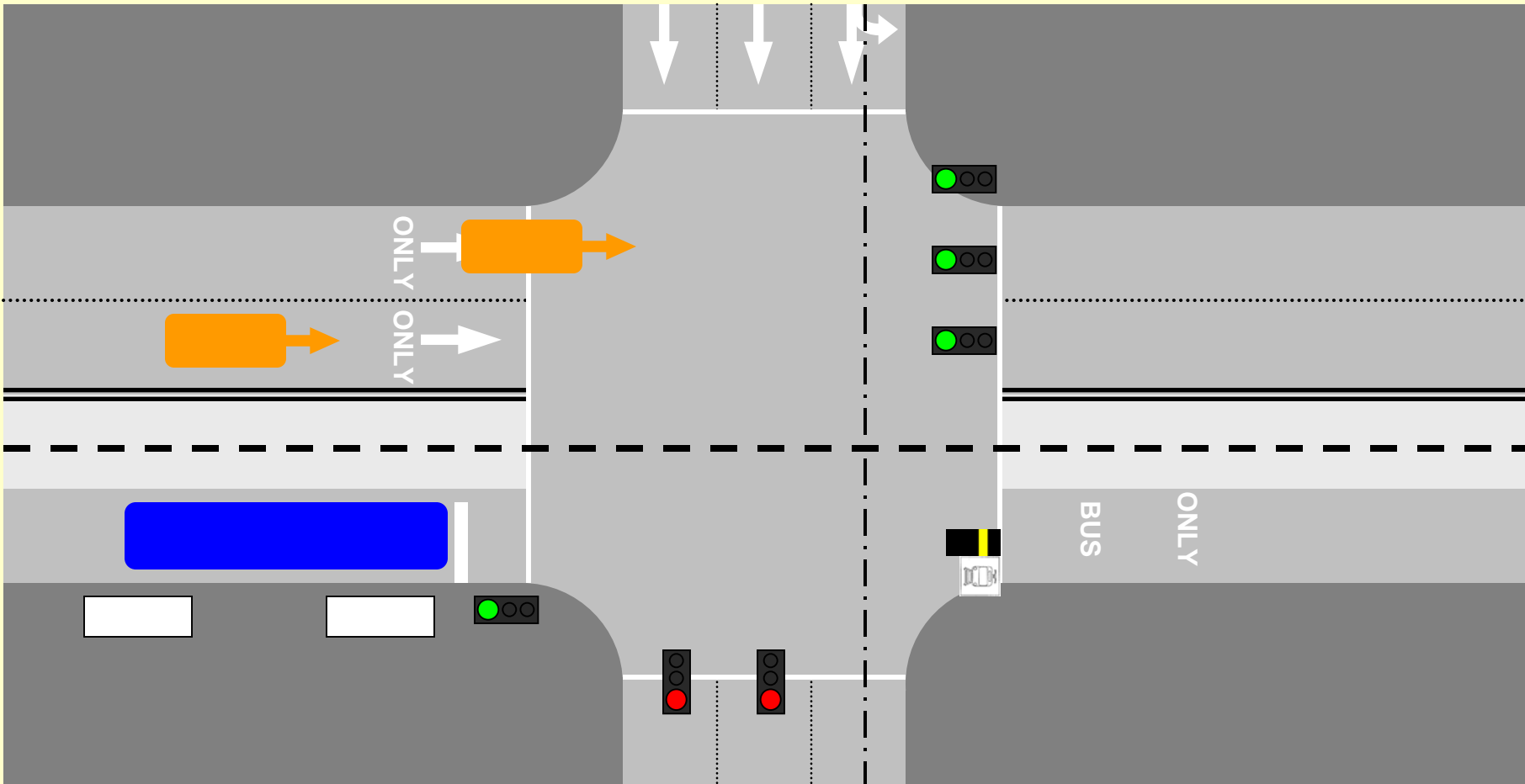
BUS ONLY



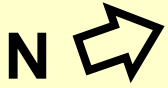
Market

6th

6th



South Mall Operations



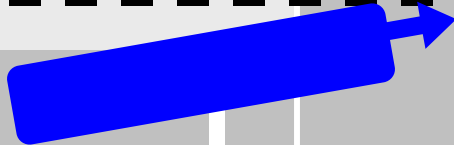
Market



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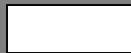
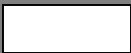
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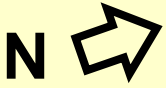
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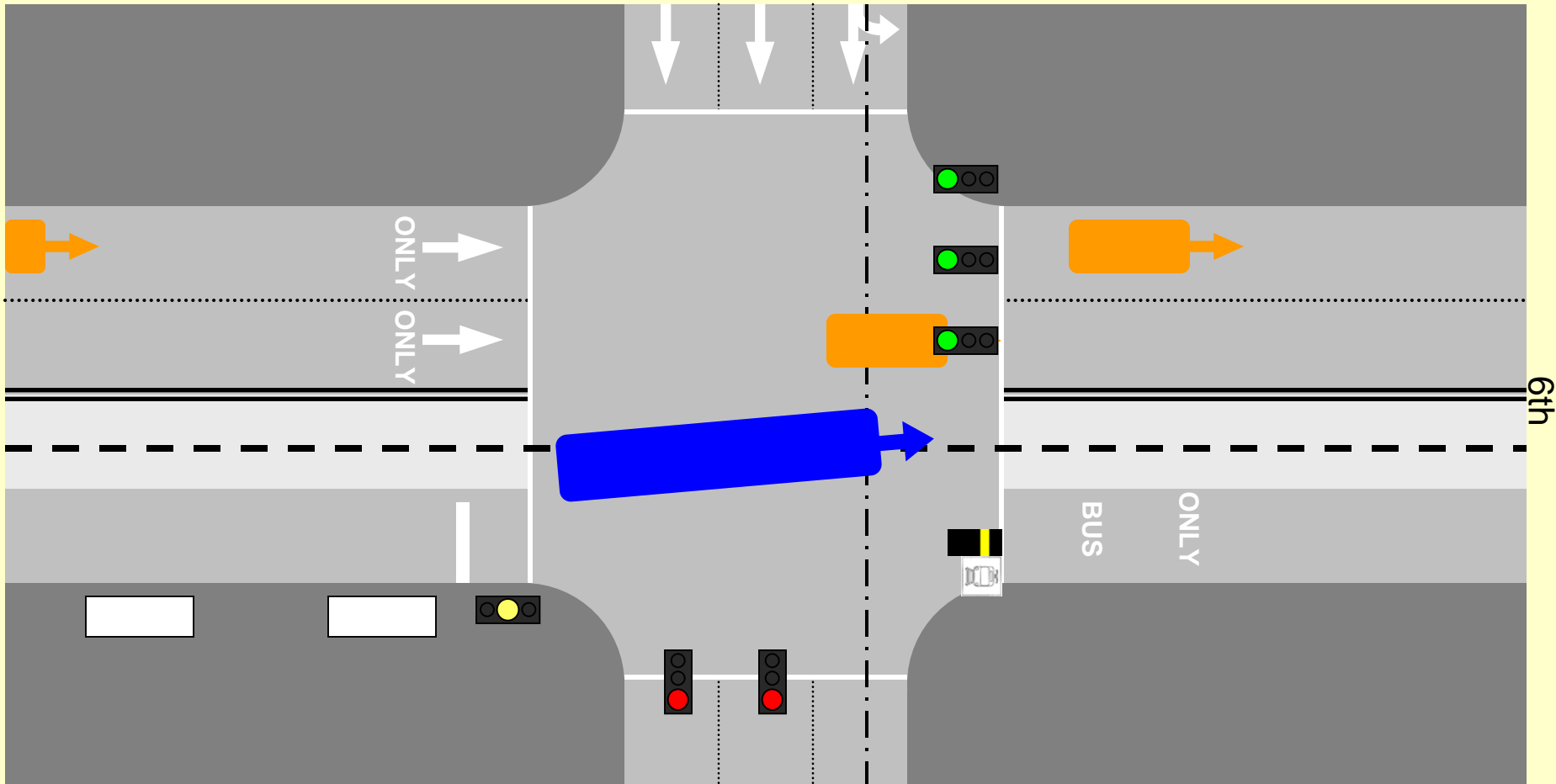
Market



South Mall Operations

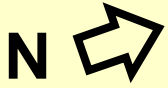


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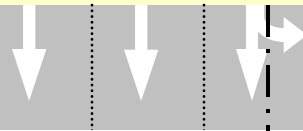


Market

South Mall Operations



Market



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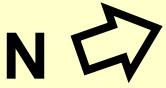


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Market

South Mall Operations



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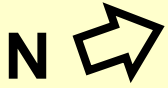


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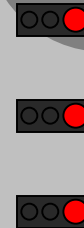
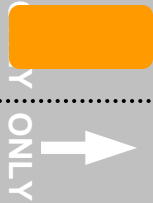
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South Mall Operations



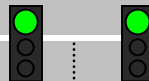
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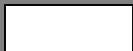
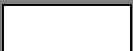
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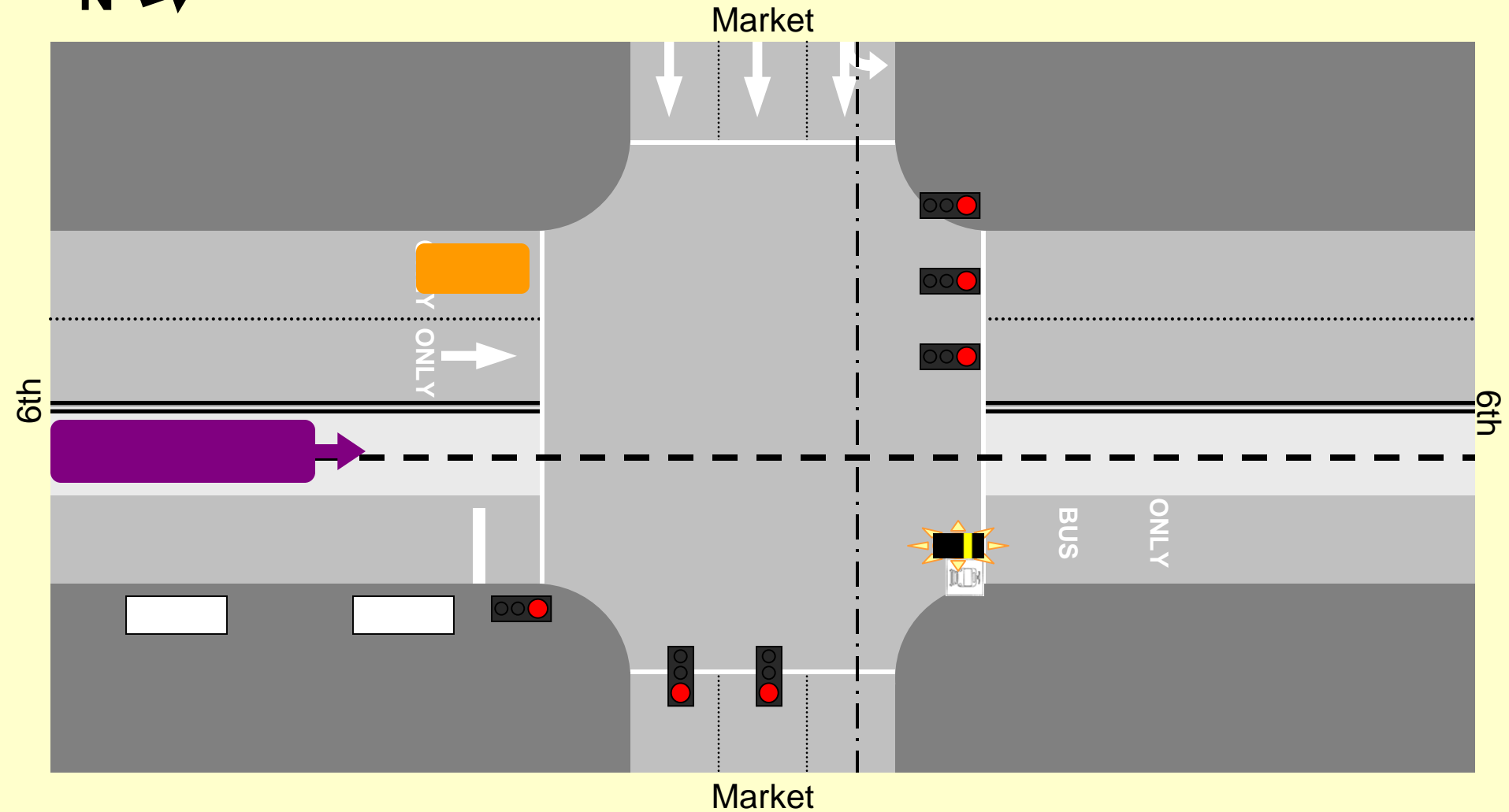
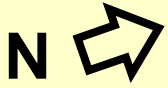


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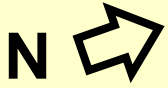


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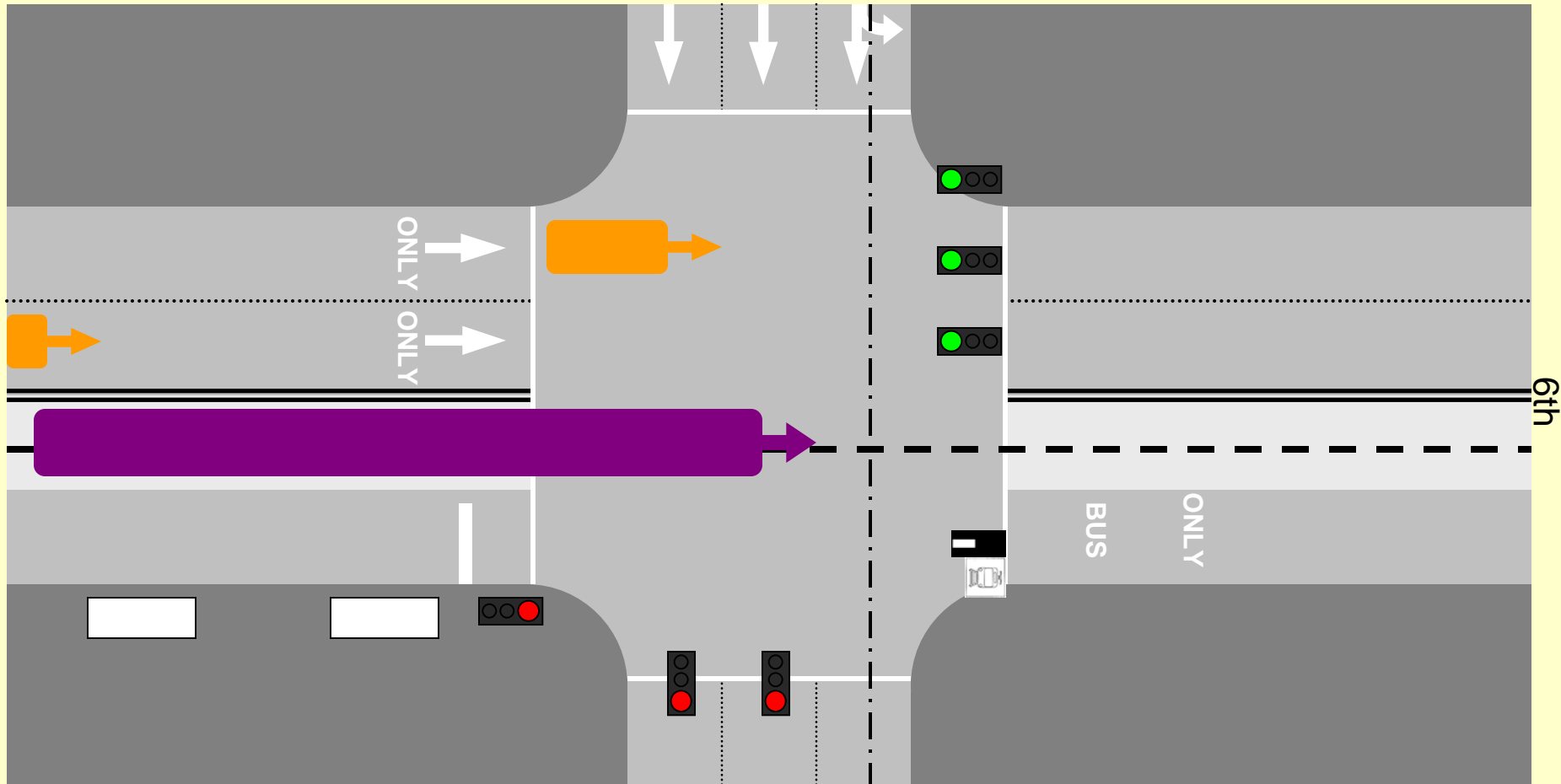
South Mall Operations



South Mall Operations



Market

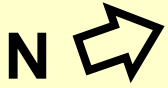


Market

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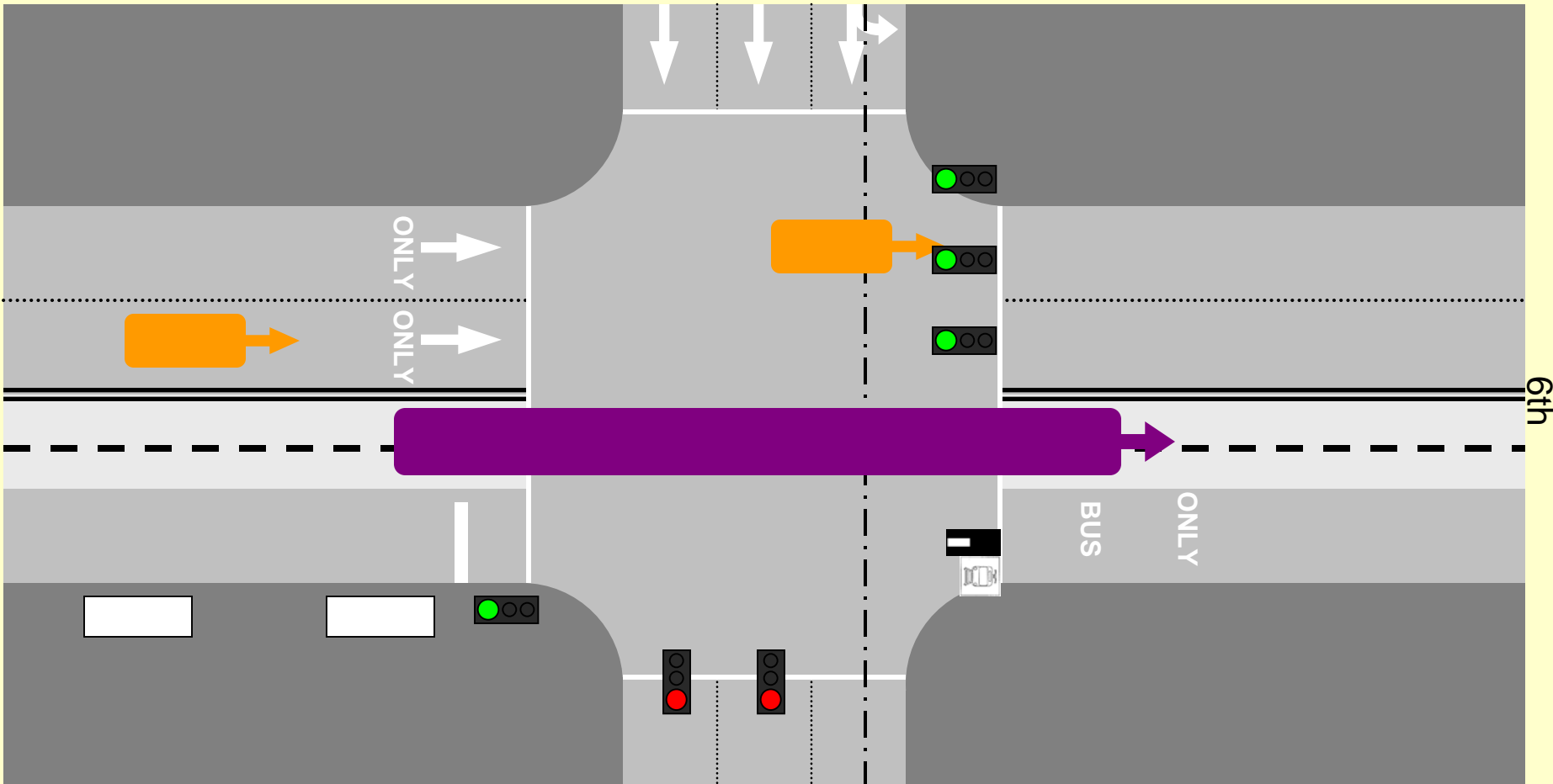
South Mall Operations



Market

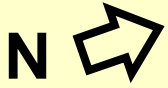
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Market

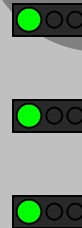
South Mall Operations



Market



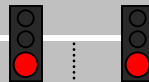
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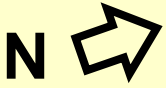


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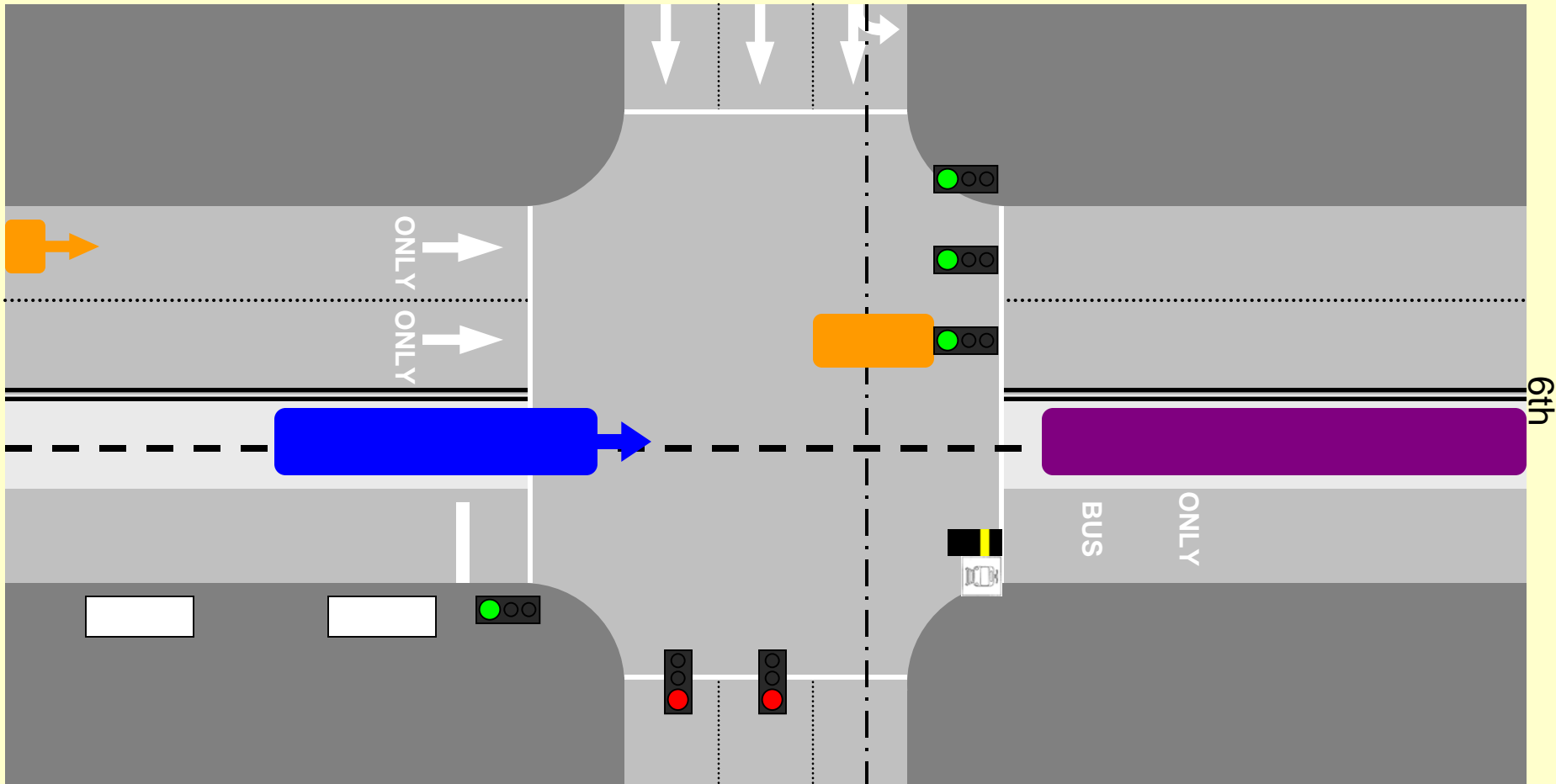


Market

South Mall Operations

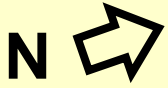


Market



Market

South Mall Operations

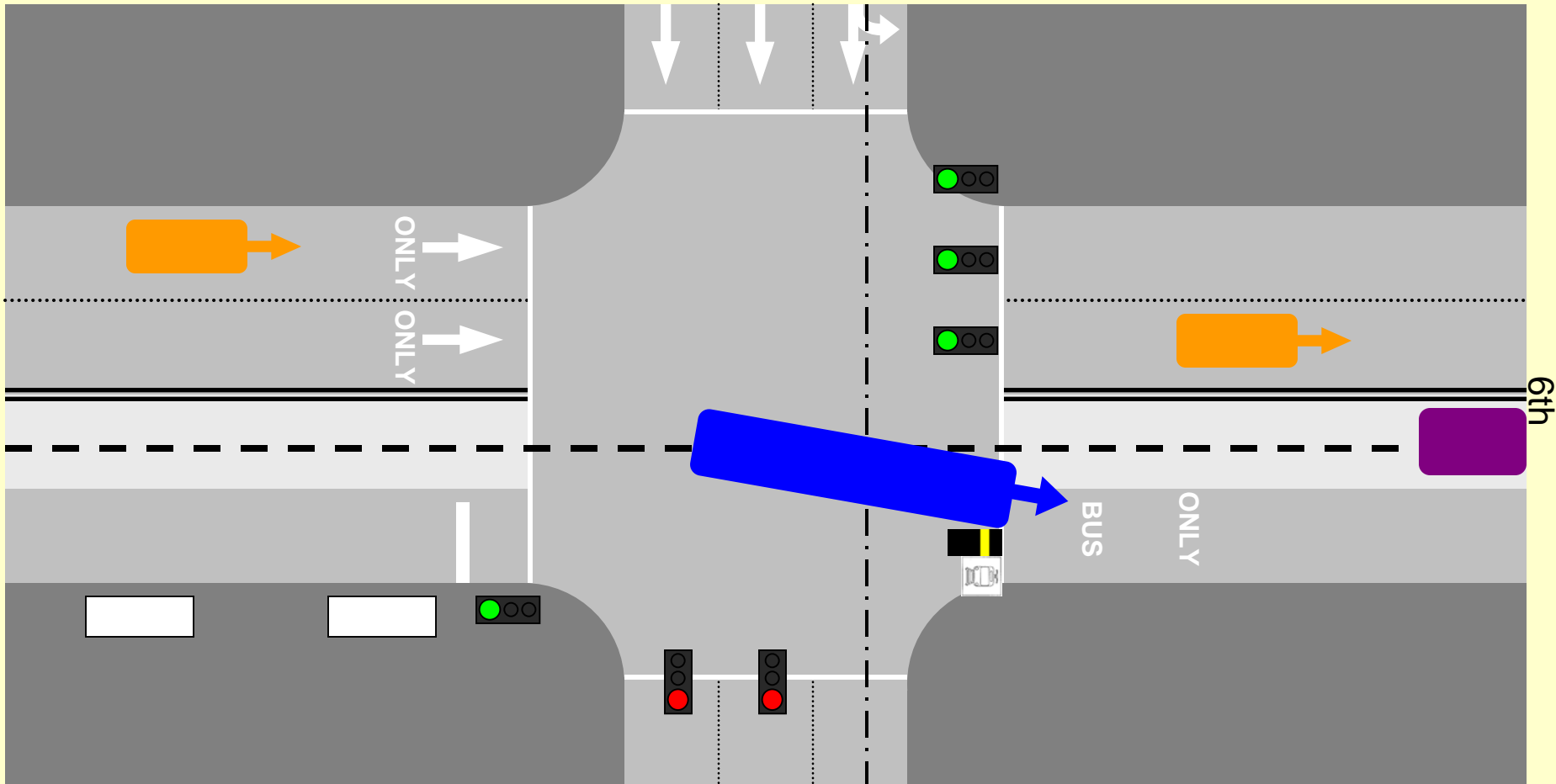


Market

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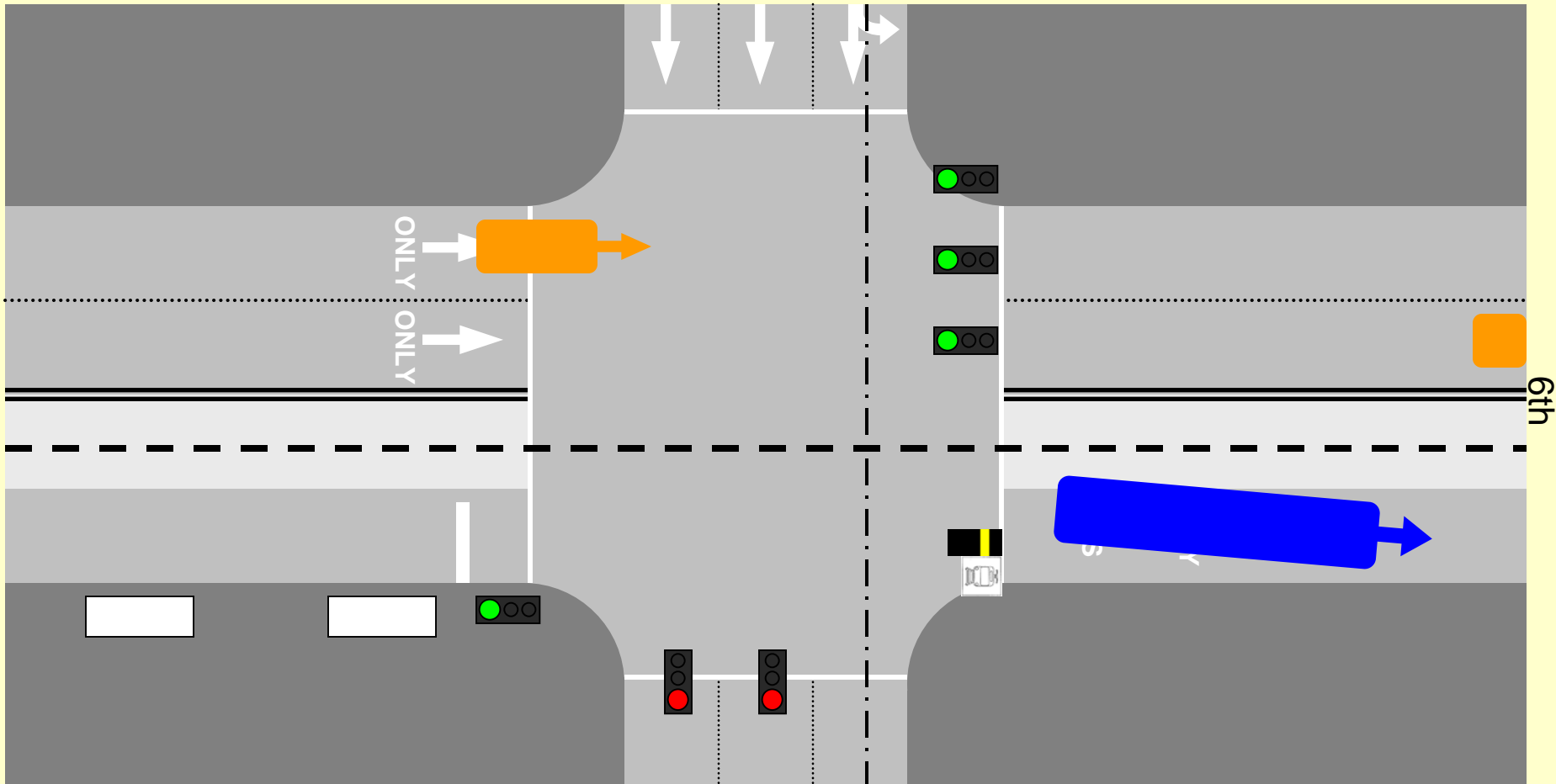
Market



South Mall Operations



Market

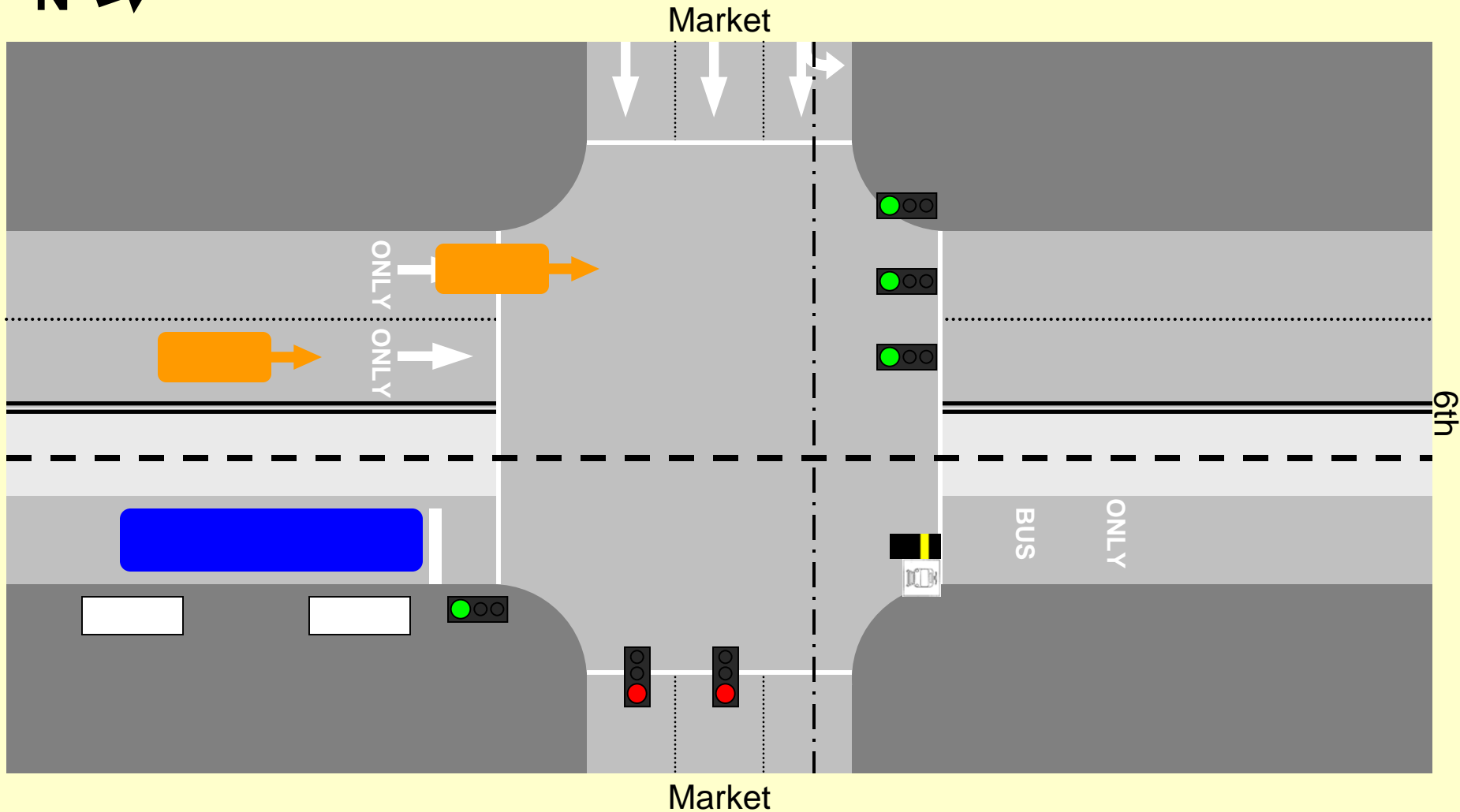
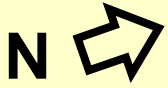


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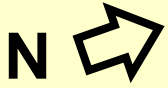
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South Mall Operations



South Mall Operations



Market



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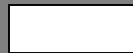
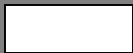
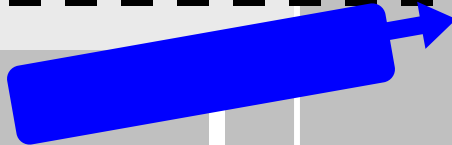


6th

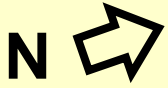
BUS
ONLY



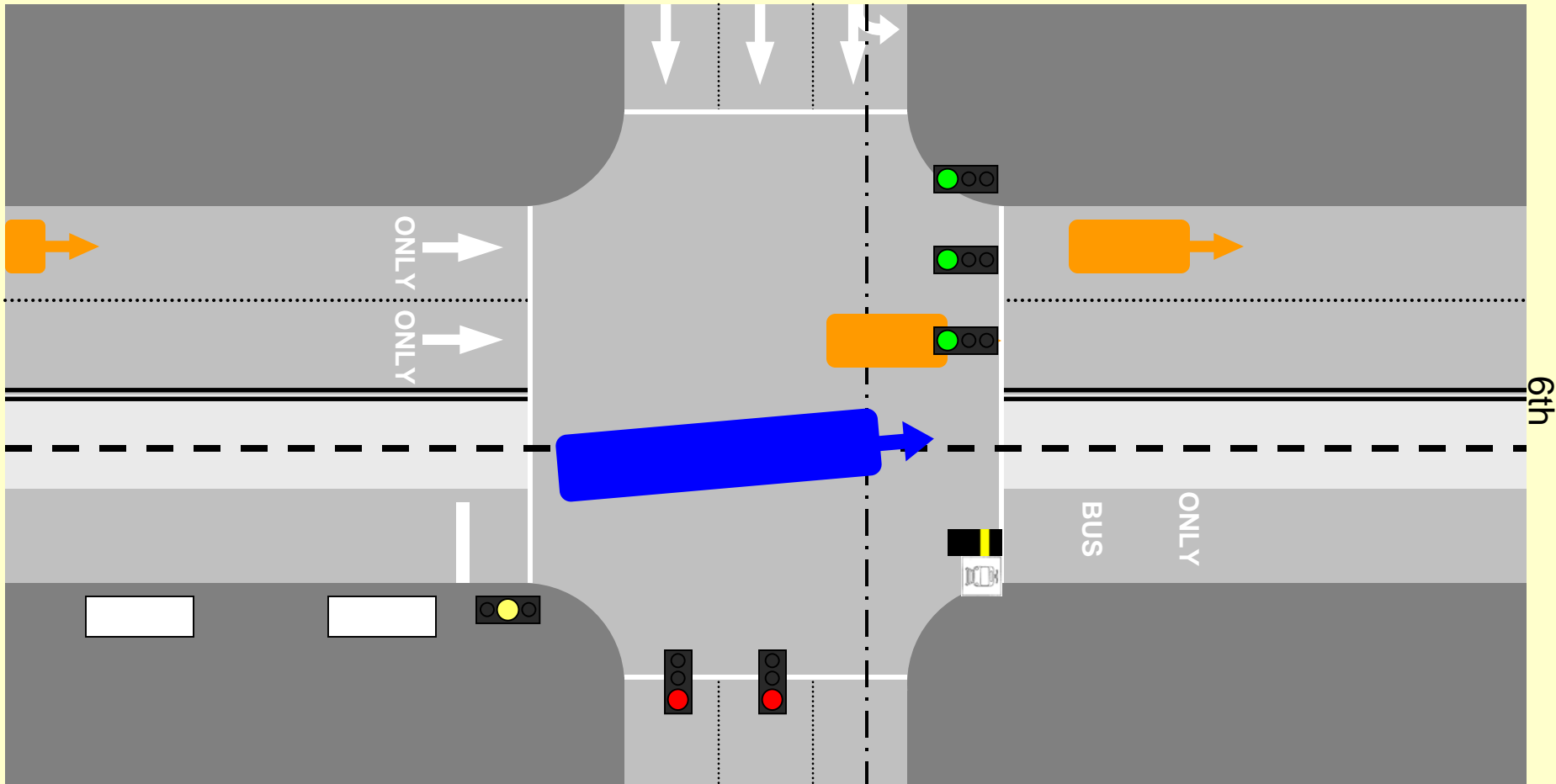
Market



South Mall Operations



Market

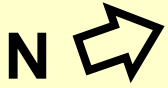


6th

Market

6th

South Mall Operations



Market



ONLY
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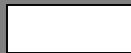
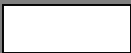
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BUS
ONLY

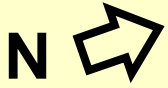


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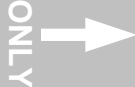


6th

South Mall Operations



Market



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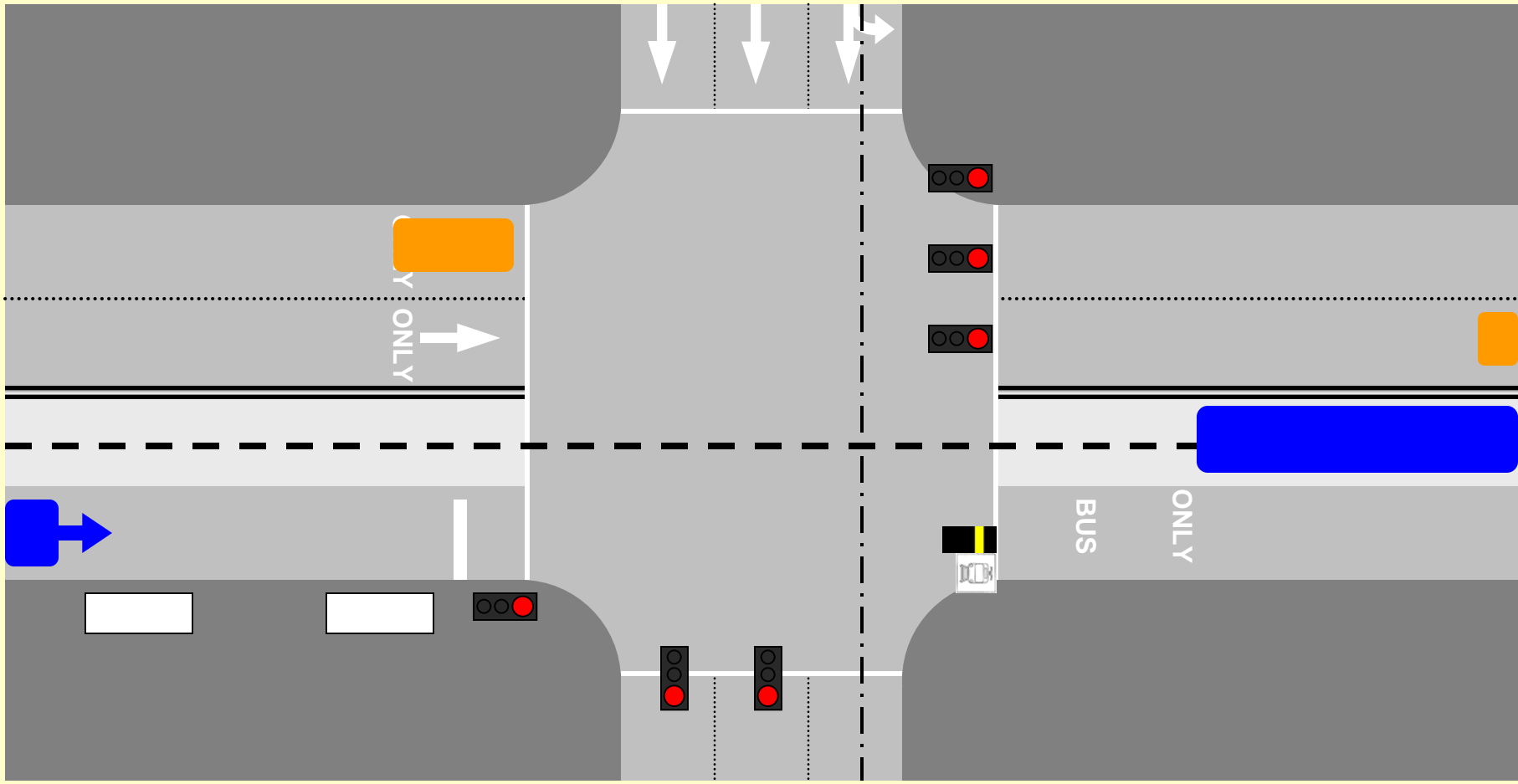
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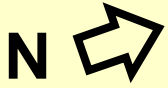
Market

6th

6th



South Mall Operations



Market



6th



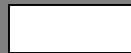
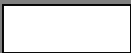
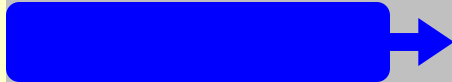
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Market

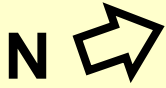


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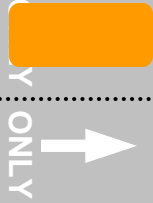


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South Mall Operations



Market



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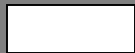
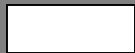


6th

BUS ONLY



Market

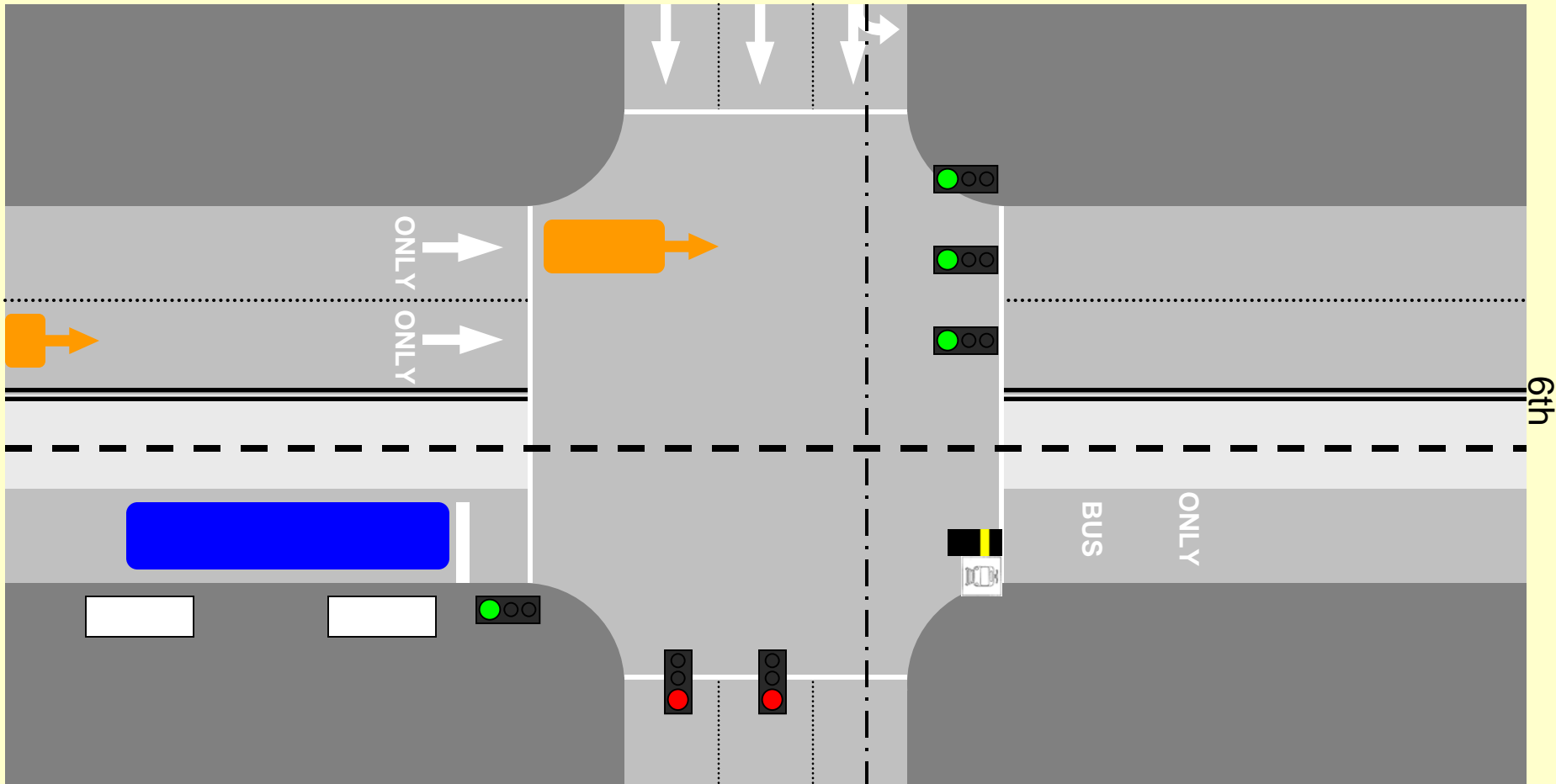


6th

South Mall Operations



Market

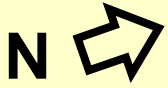


Market

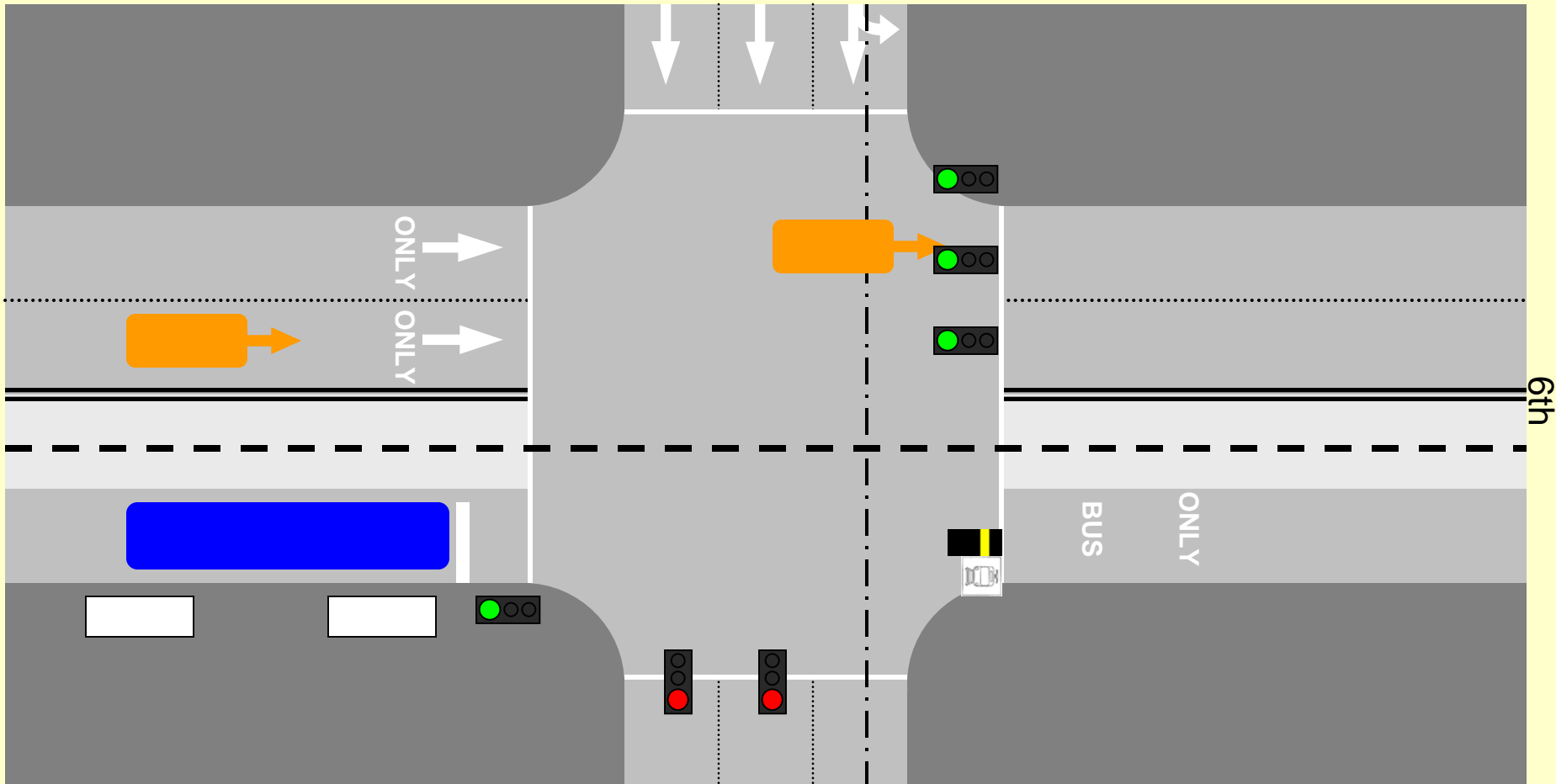
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South Mall Operations



Market

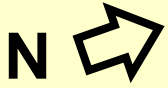


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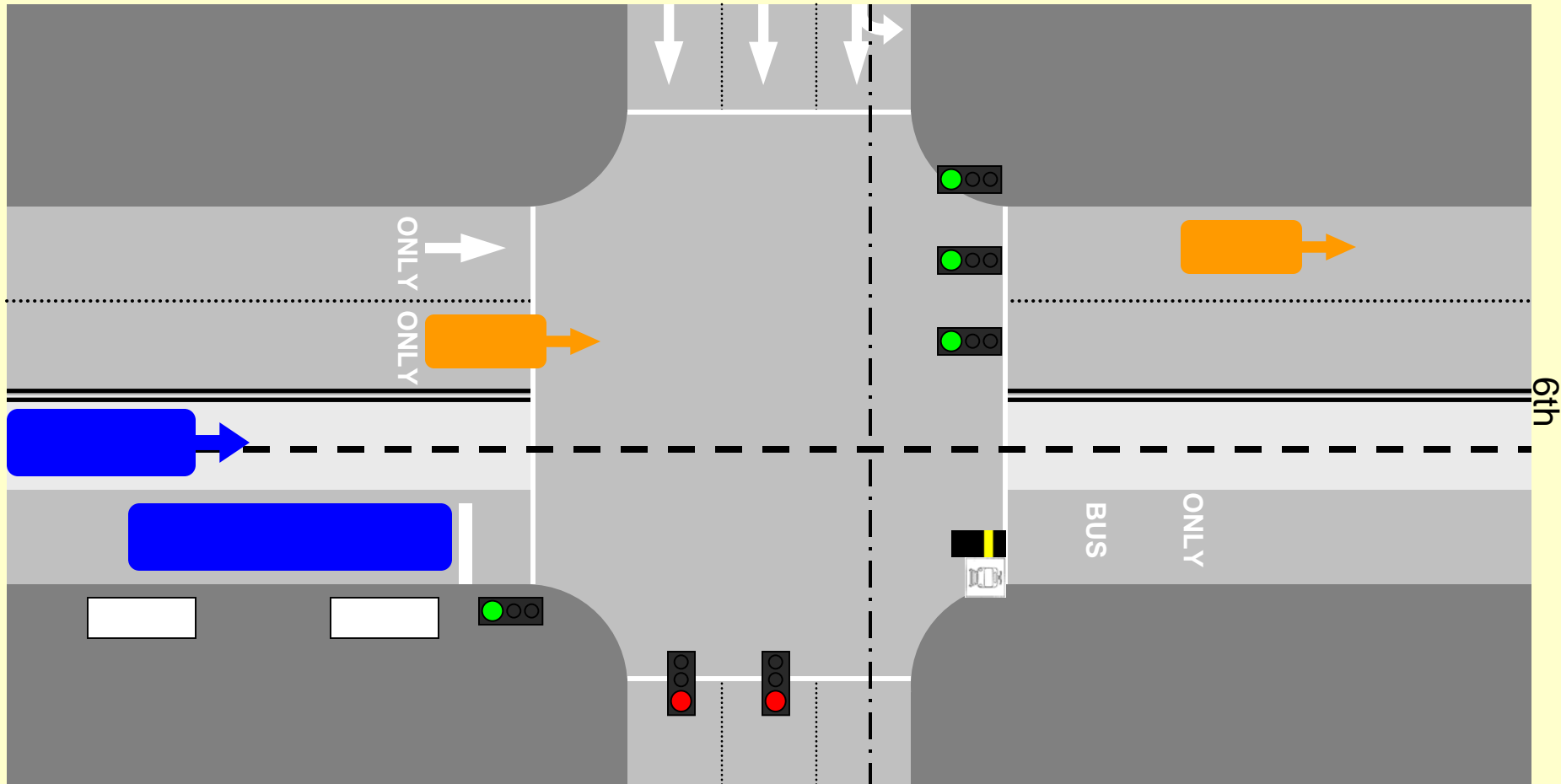
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South Mall Operations



Market

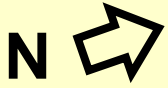


Market

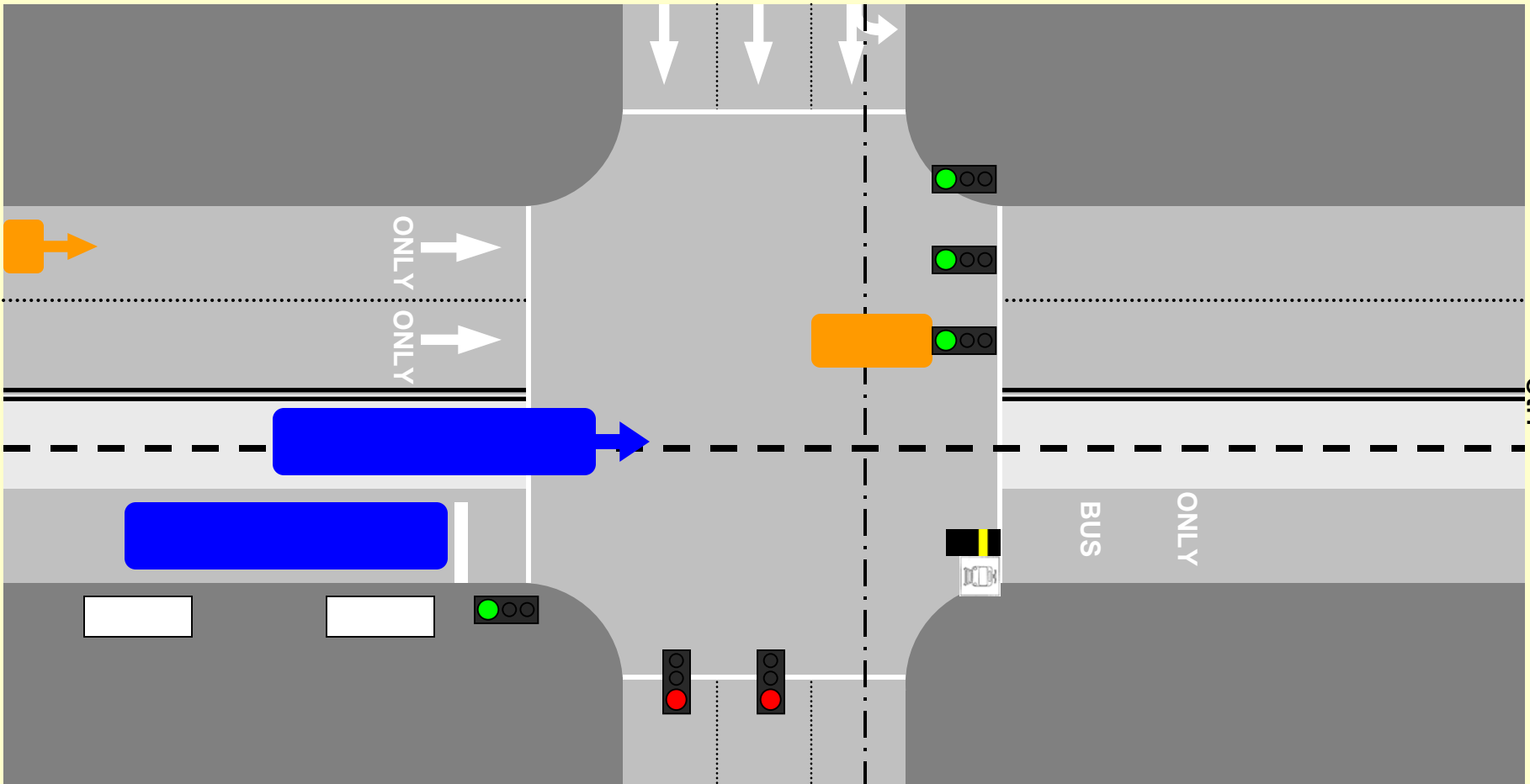
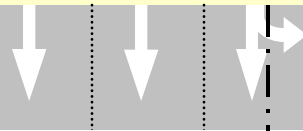
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South Mall Operations



Market

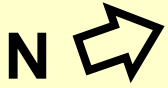


Market

6th

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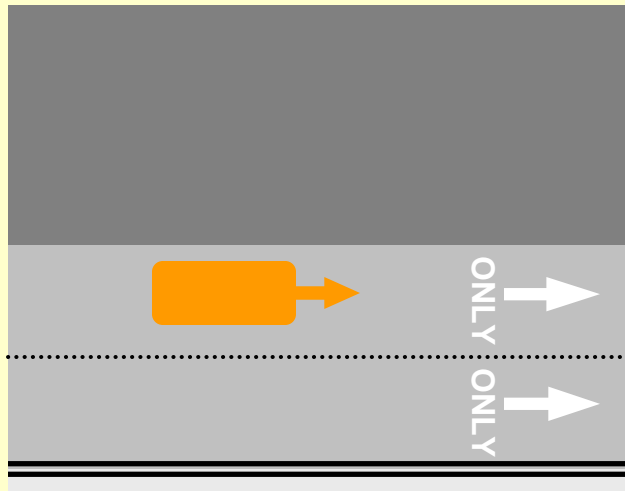
South Mall Operations



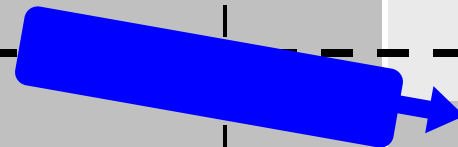
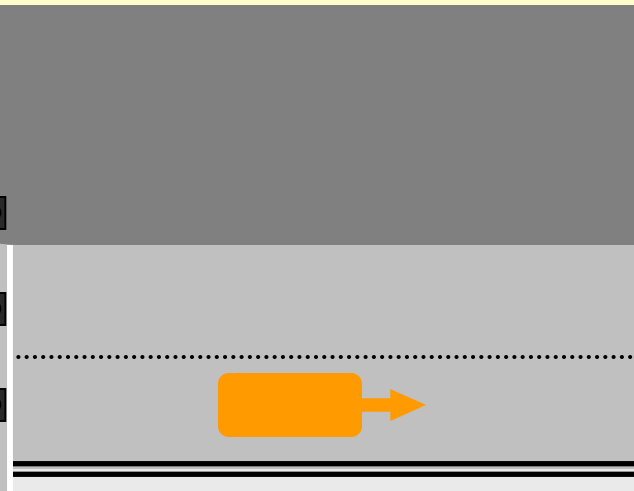
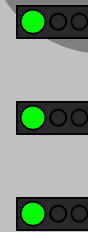
Market



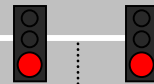
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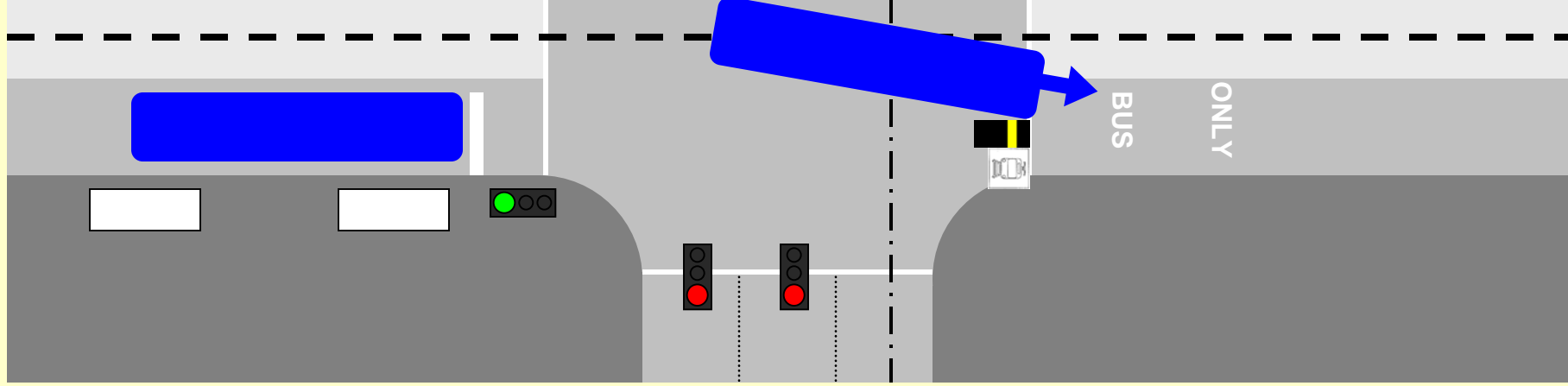
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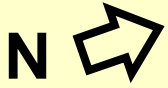
BUS ONLY



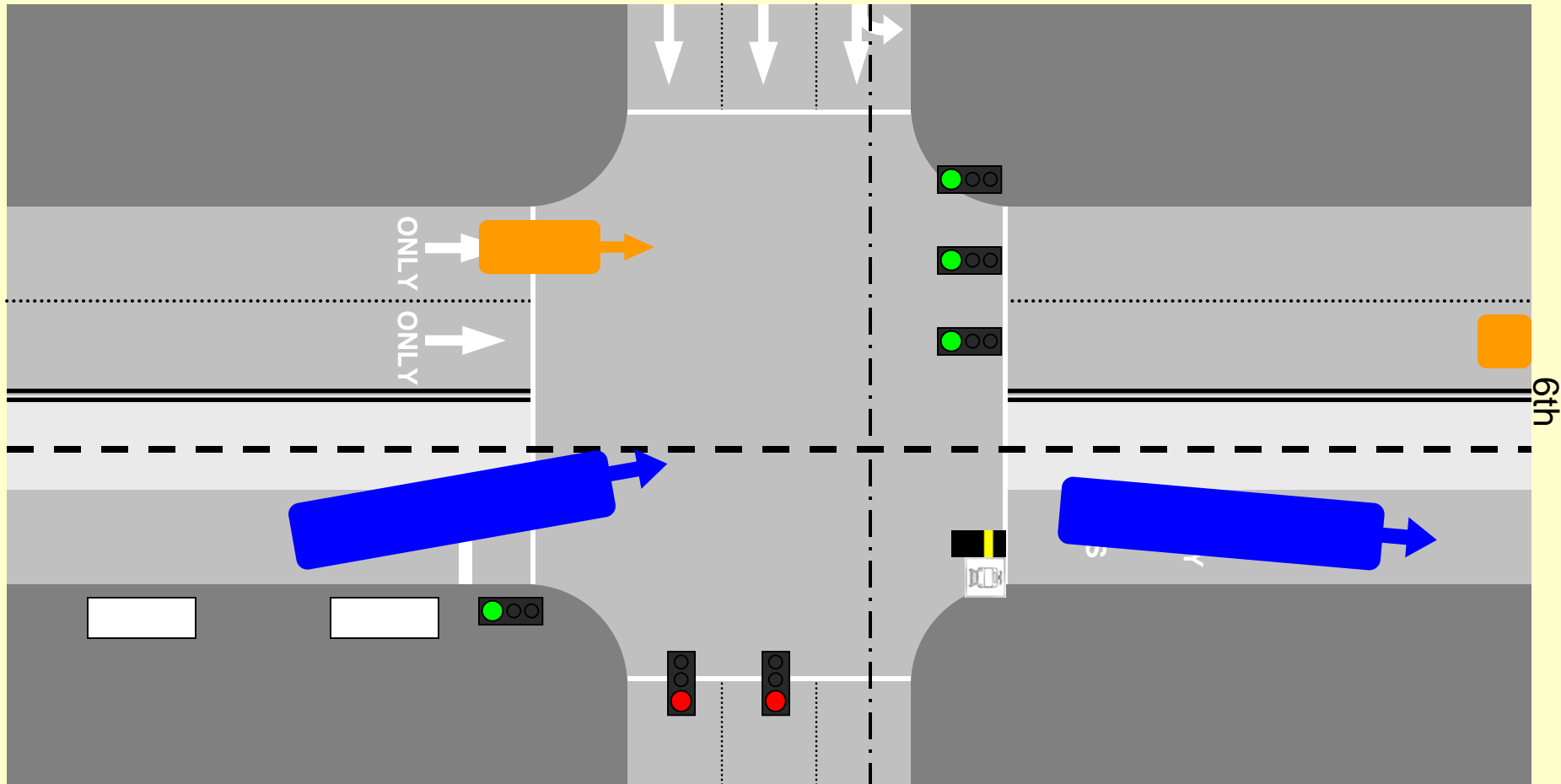
Market



South Mall Operations



Market



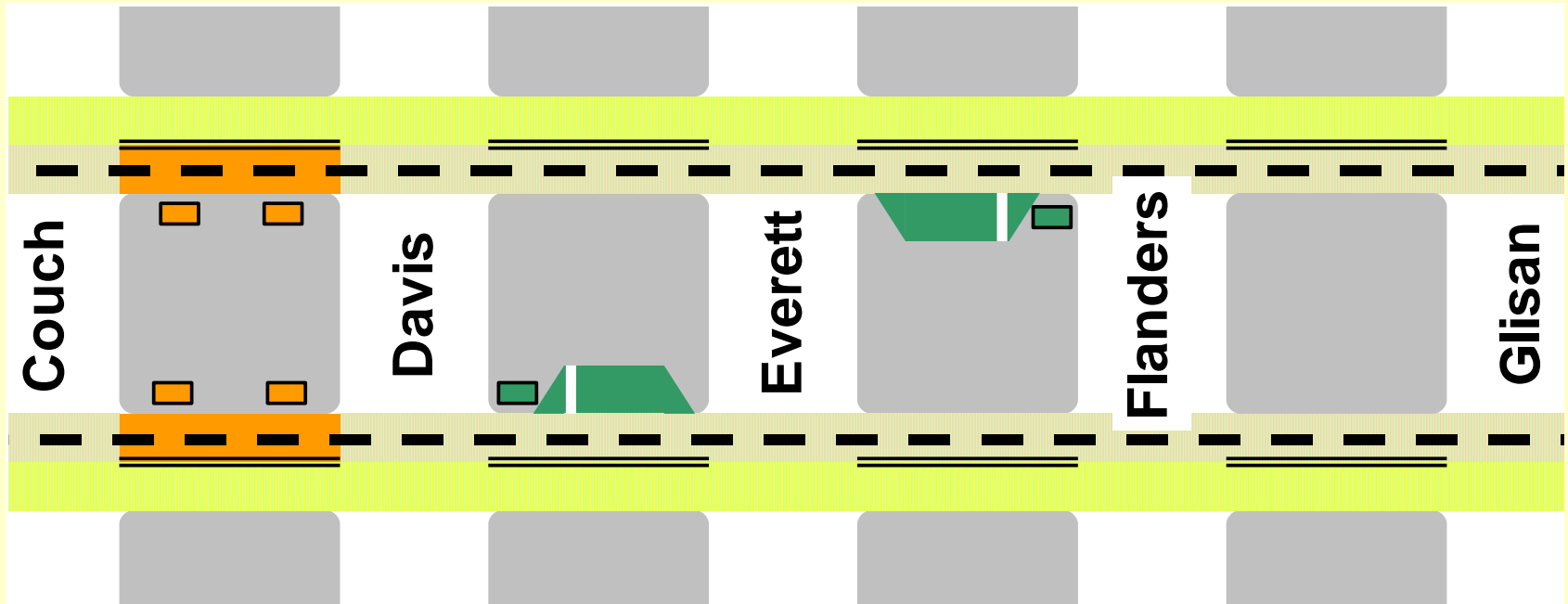
Market

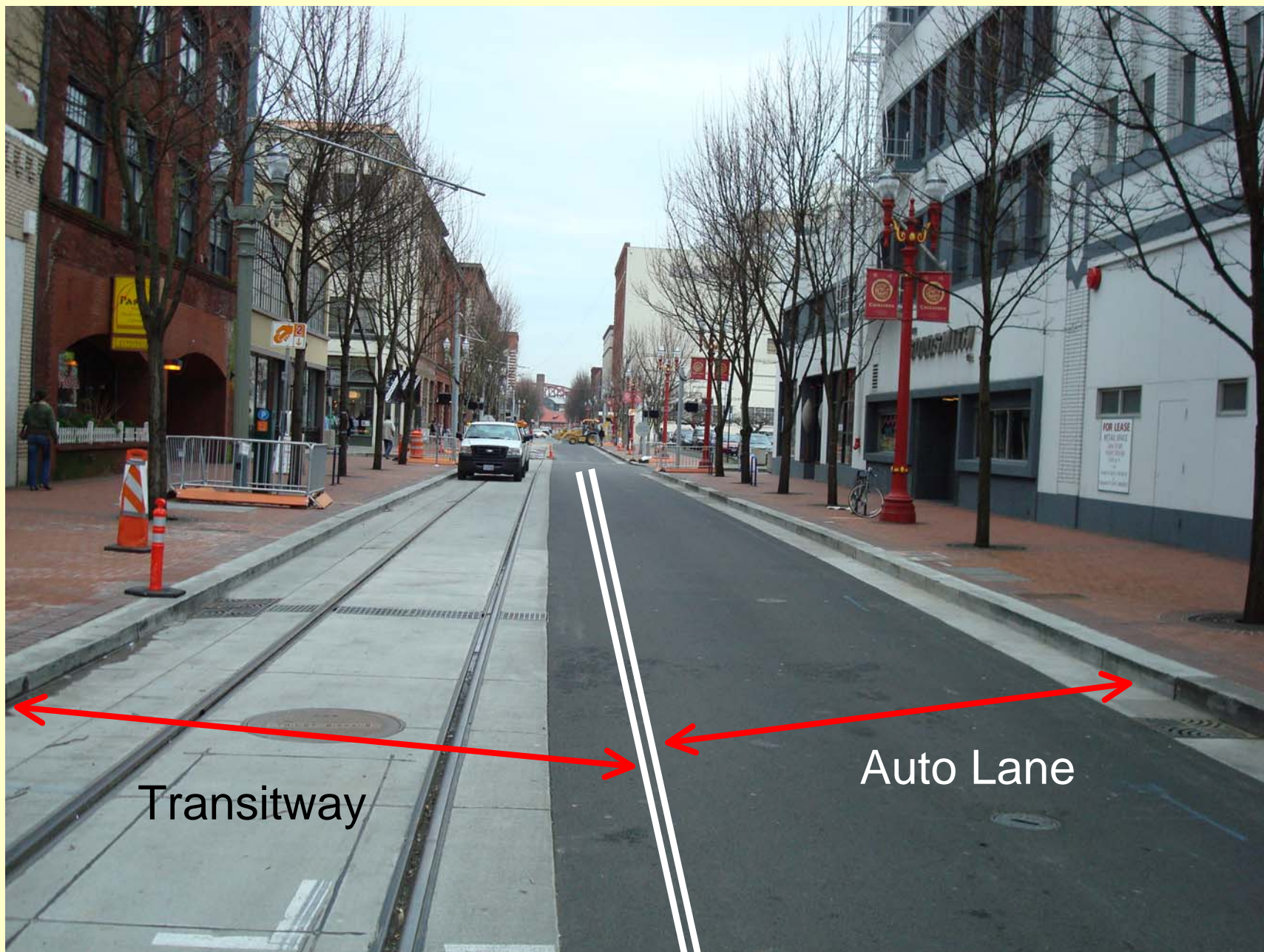
6th

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North Mall Operations

- Auto lane
- Transitway (bus and MAX)
- MAX station in transitway
- Service stop (pullout)

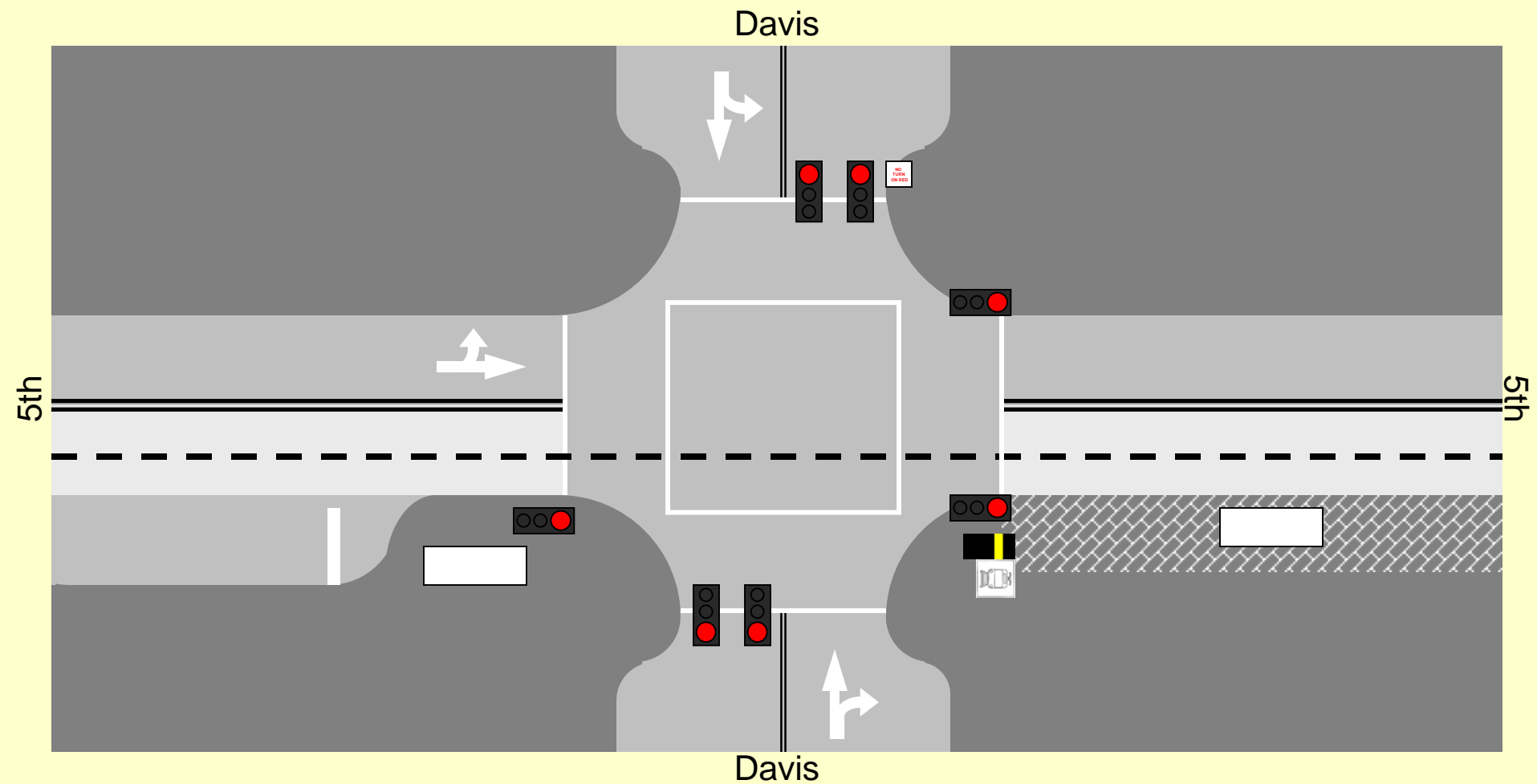
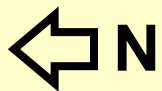




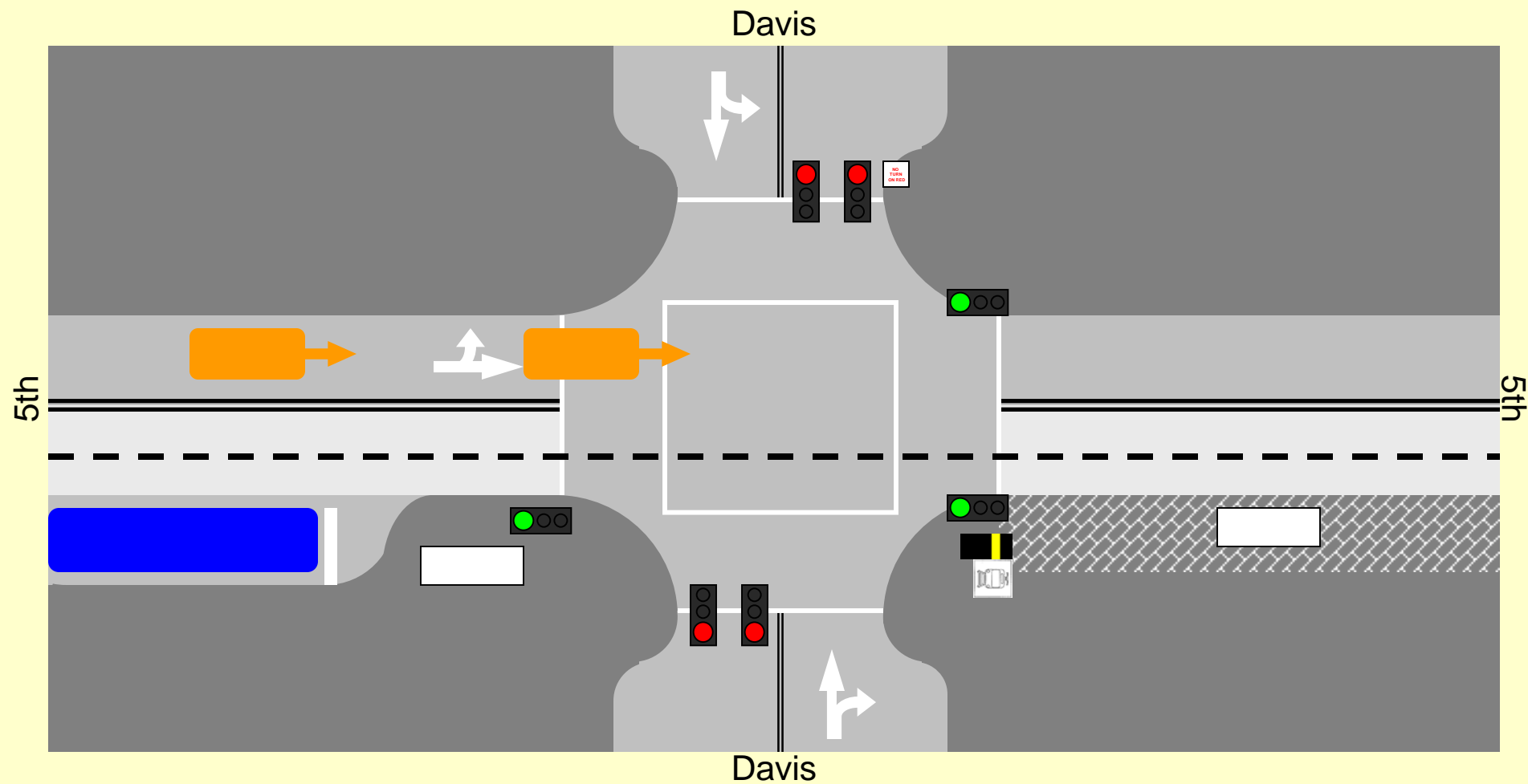
Transitway

Auto Lane

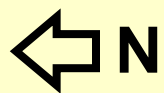
North Mall Operations



North Mall Operations



North Mall Operations

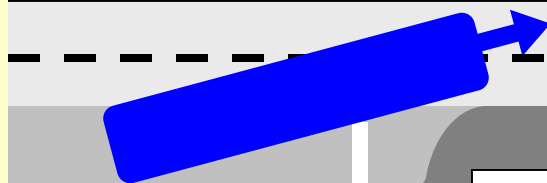


Davis

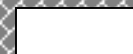


5th

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Davis



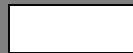
North Mall Operations



Davis



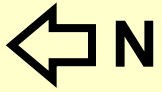
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Davis



North Mall Operations



Davis



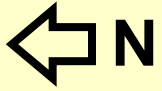
Davis

5th

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North Mall Operations



Davis



NO
TURN
ON RED



Davis



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North Mall Operations

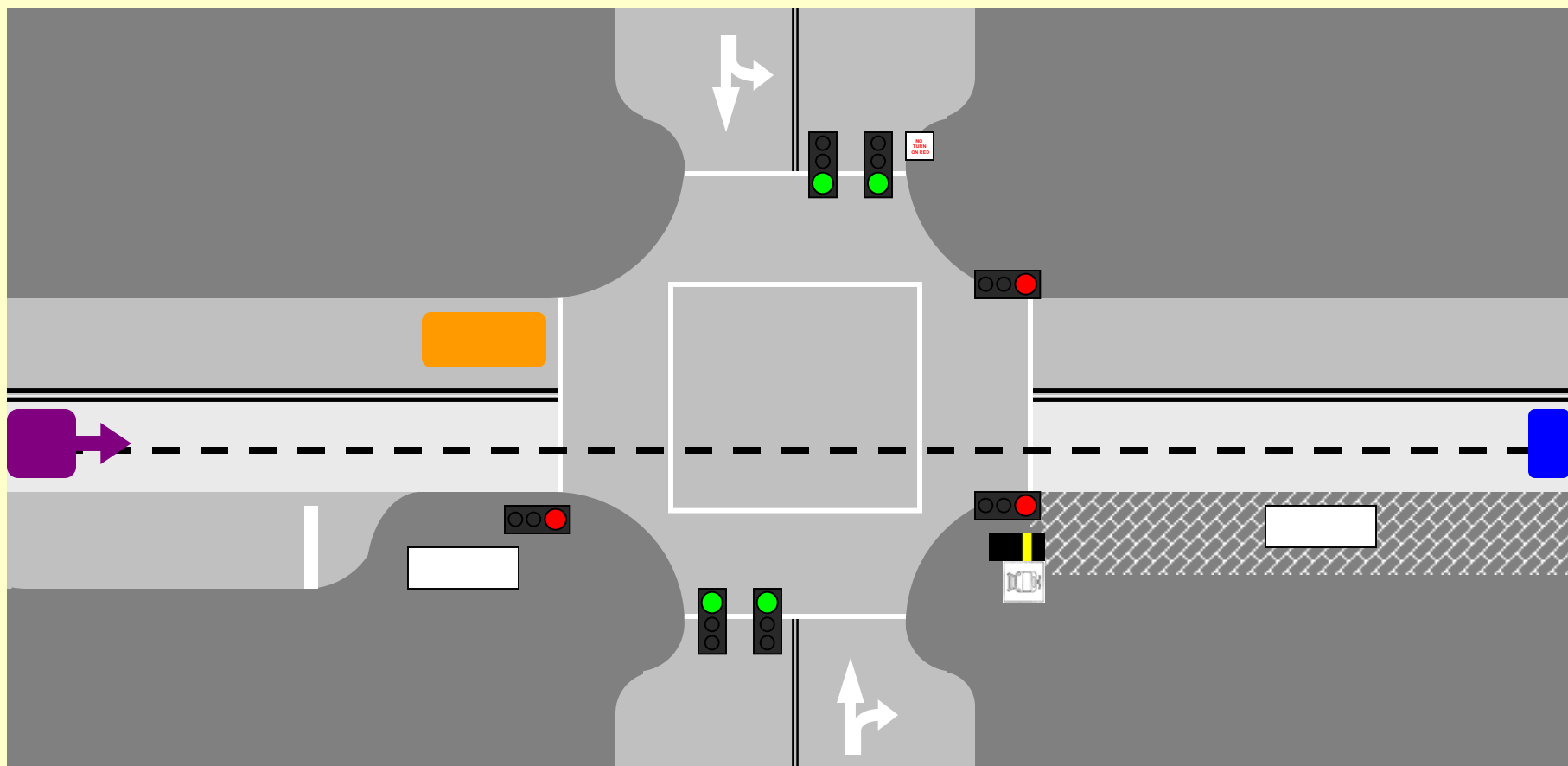


Davis

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Davis



North Mall Operations

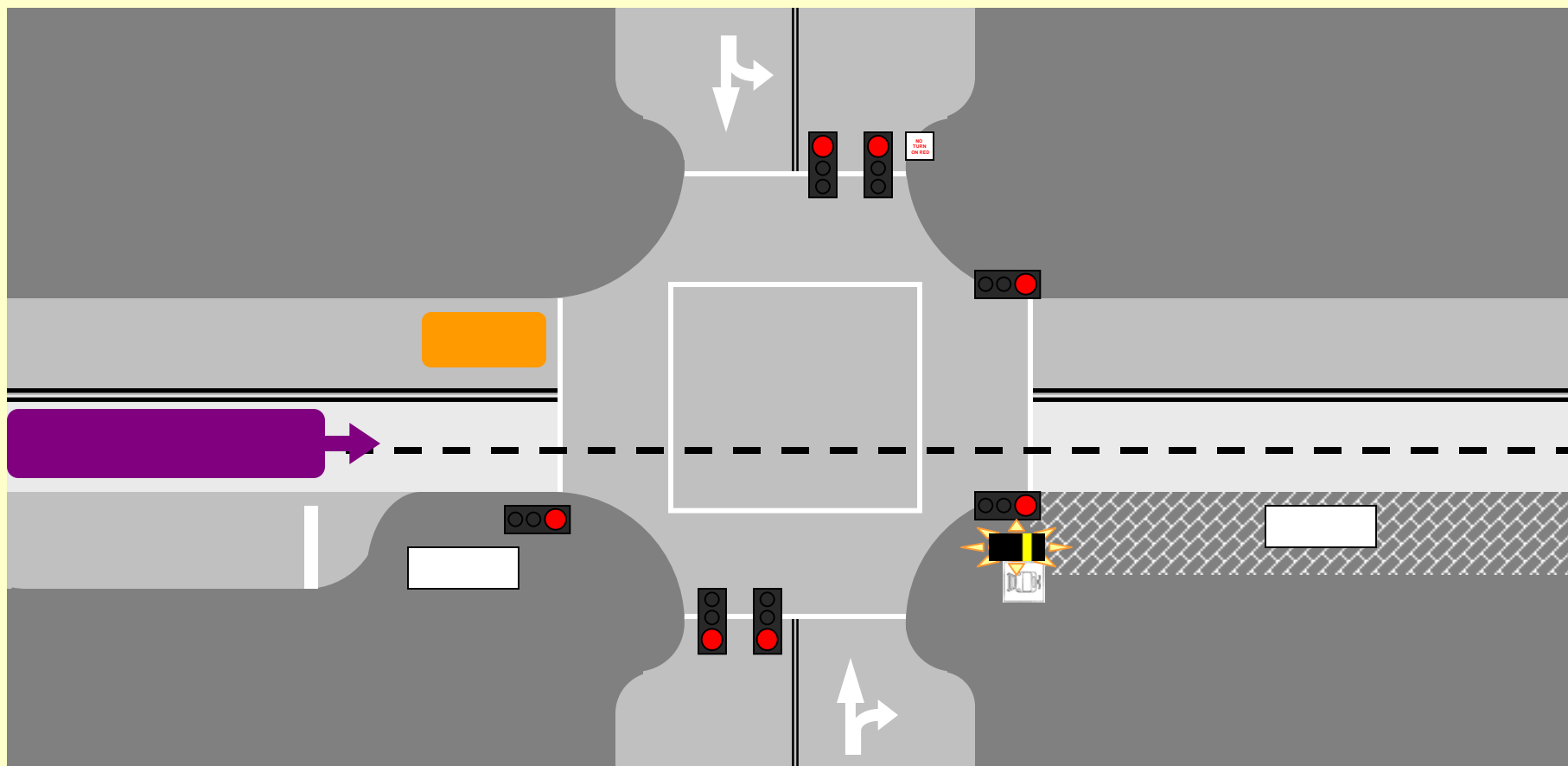


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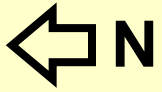
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Davis



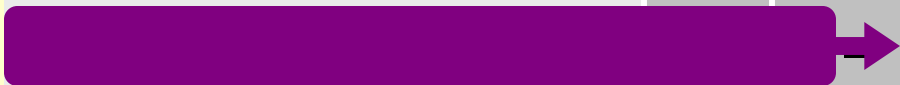
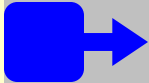
North Mall Operations



Davis



NO
TURN
ON RED



Davis

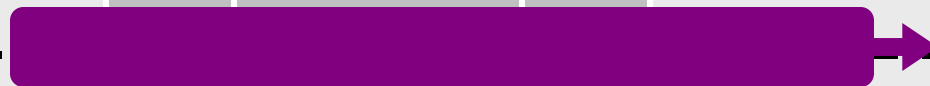
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North Mall Operations



Davis



Davis

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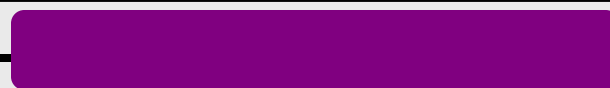
North Mall Operations



Davis



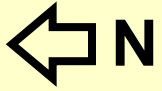
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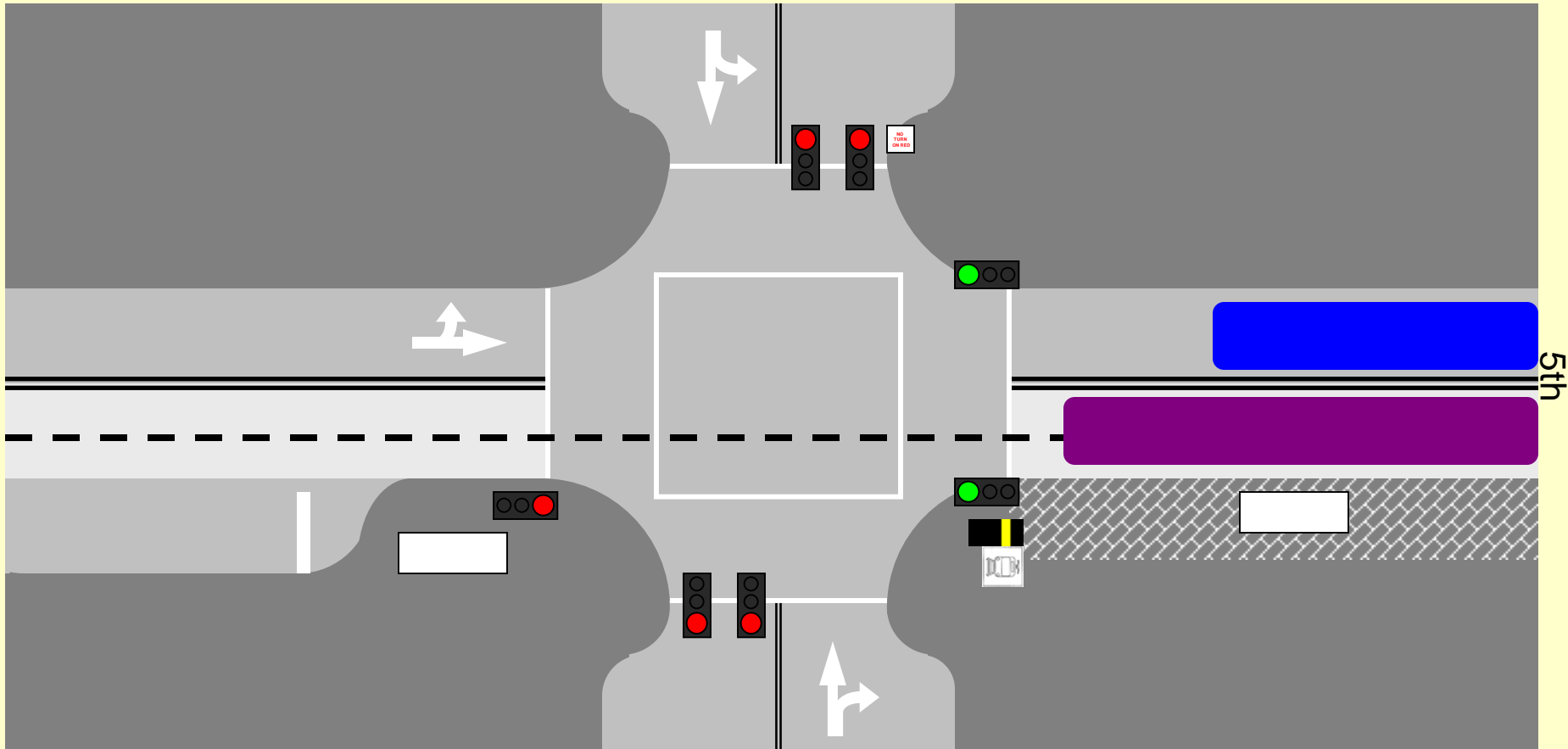
Davis

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North Mall Operations

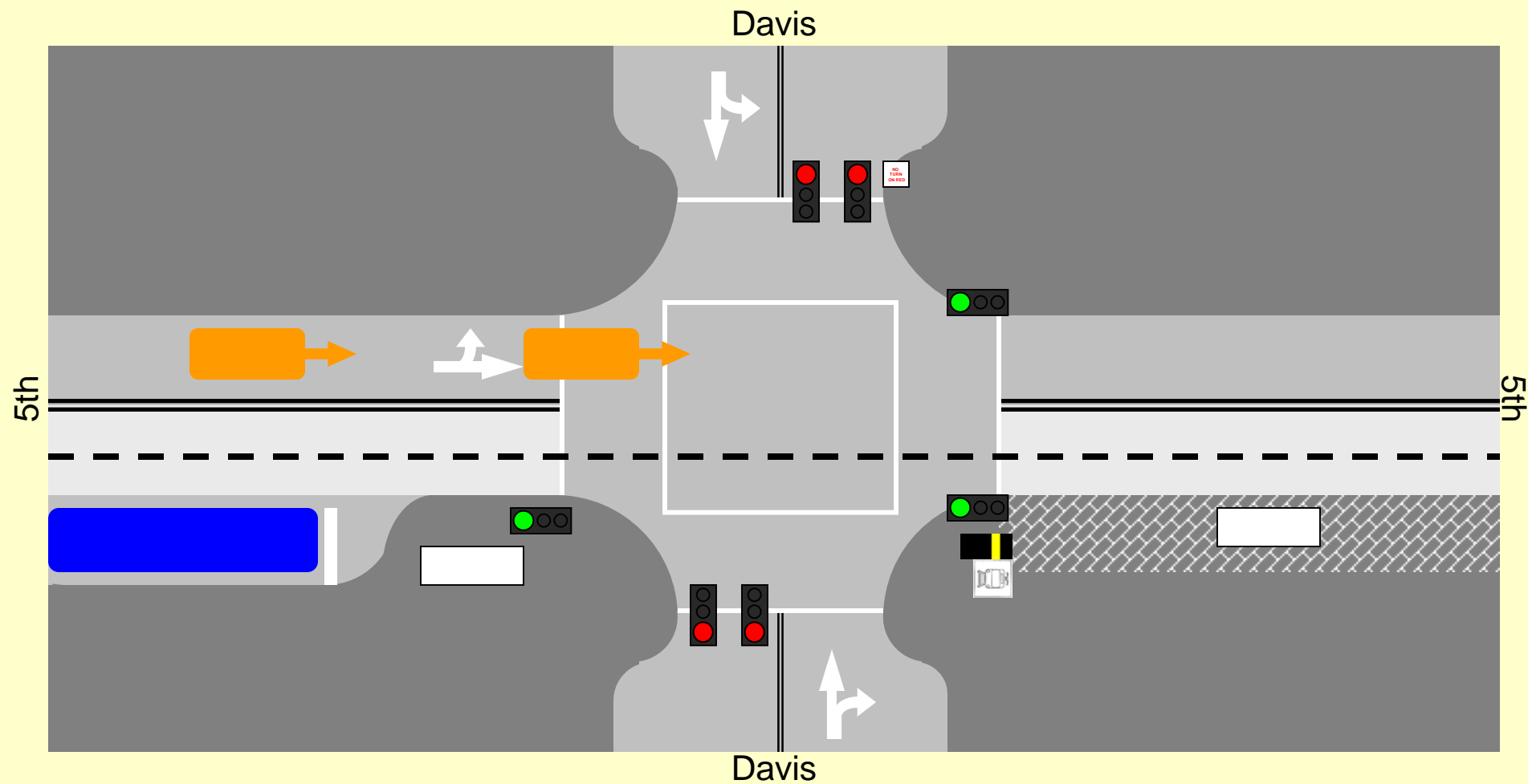
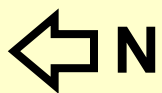


Davis

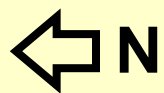


Davis

North Mall Operations



North Mall Operations

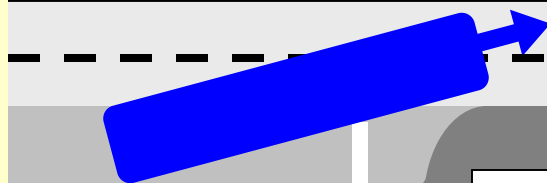


Davis



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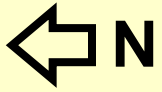
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Davis



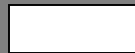
North Mall Operations



Davis



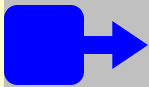
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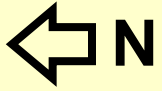
Davis



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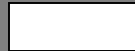
North Mall Operations



Davis



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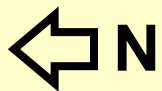


Davis



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North Mall Operations

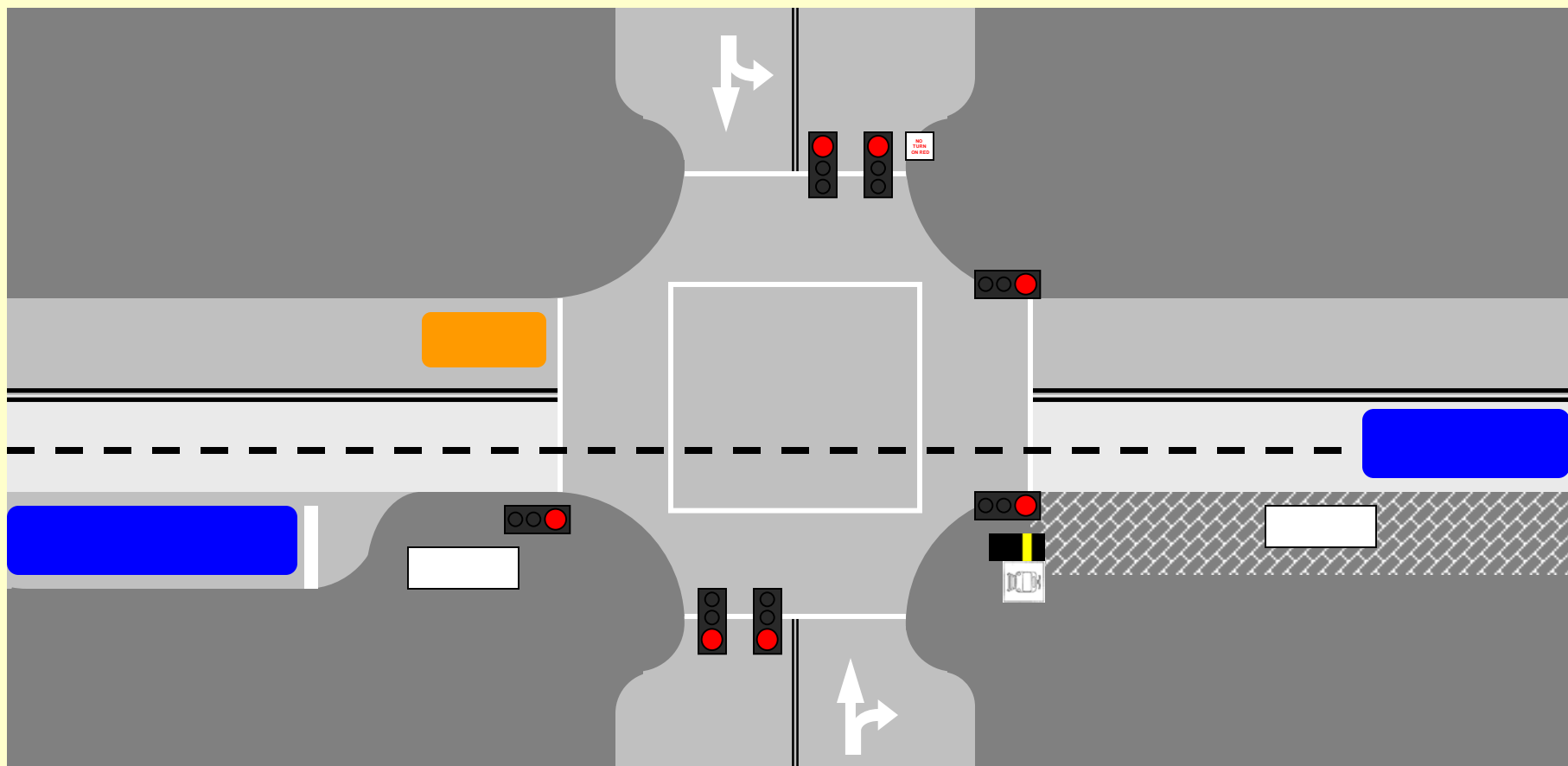


Davis

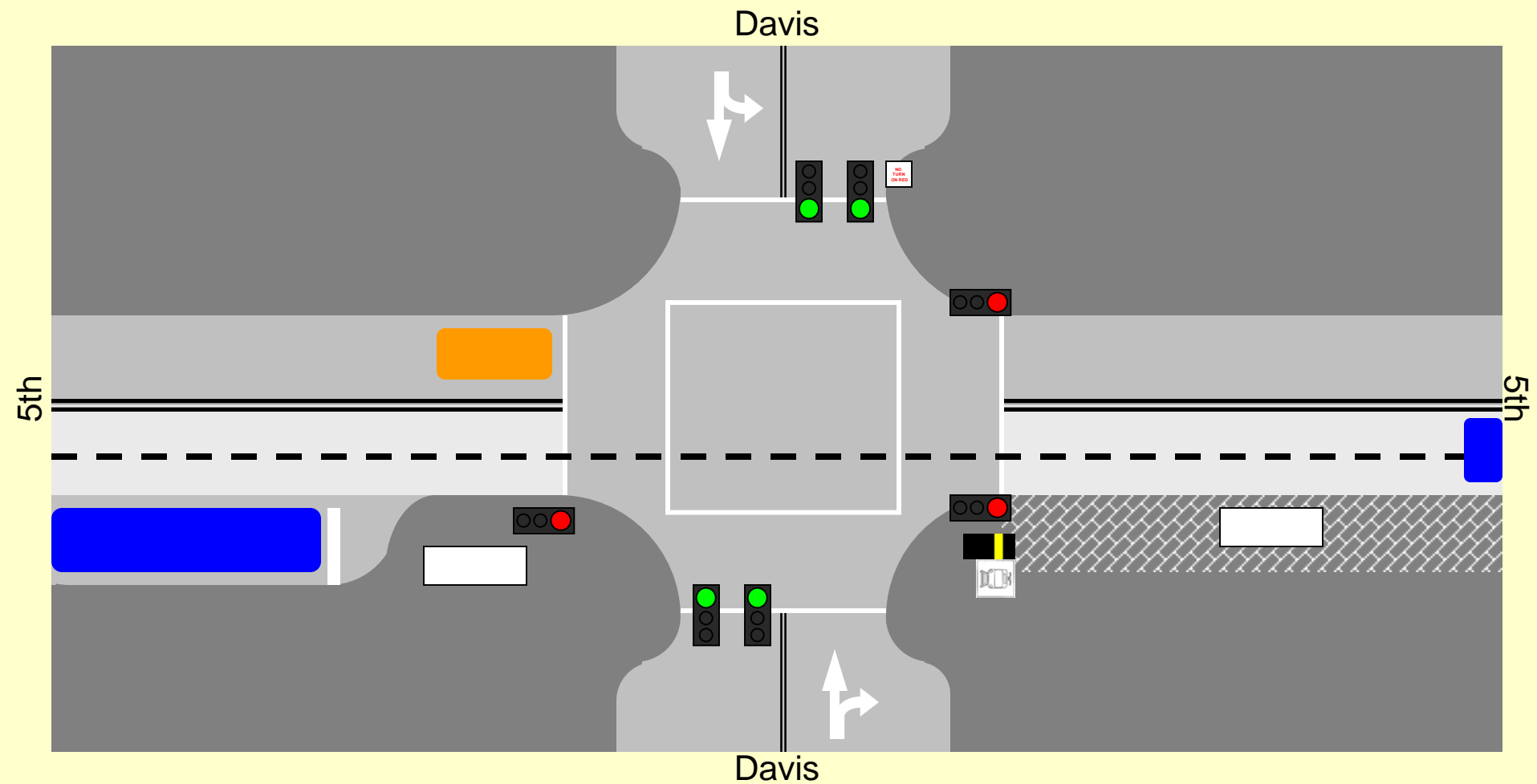
5th

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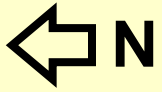
Davis



North Mall Operations



North Mall Operations



Davis



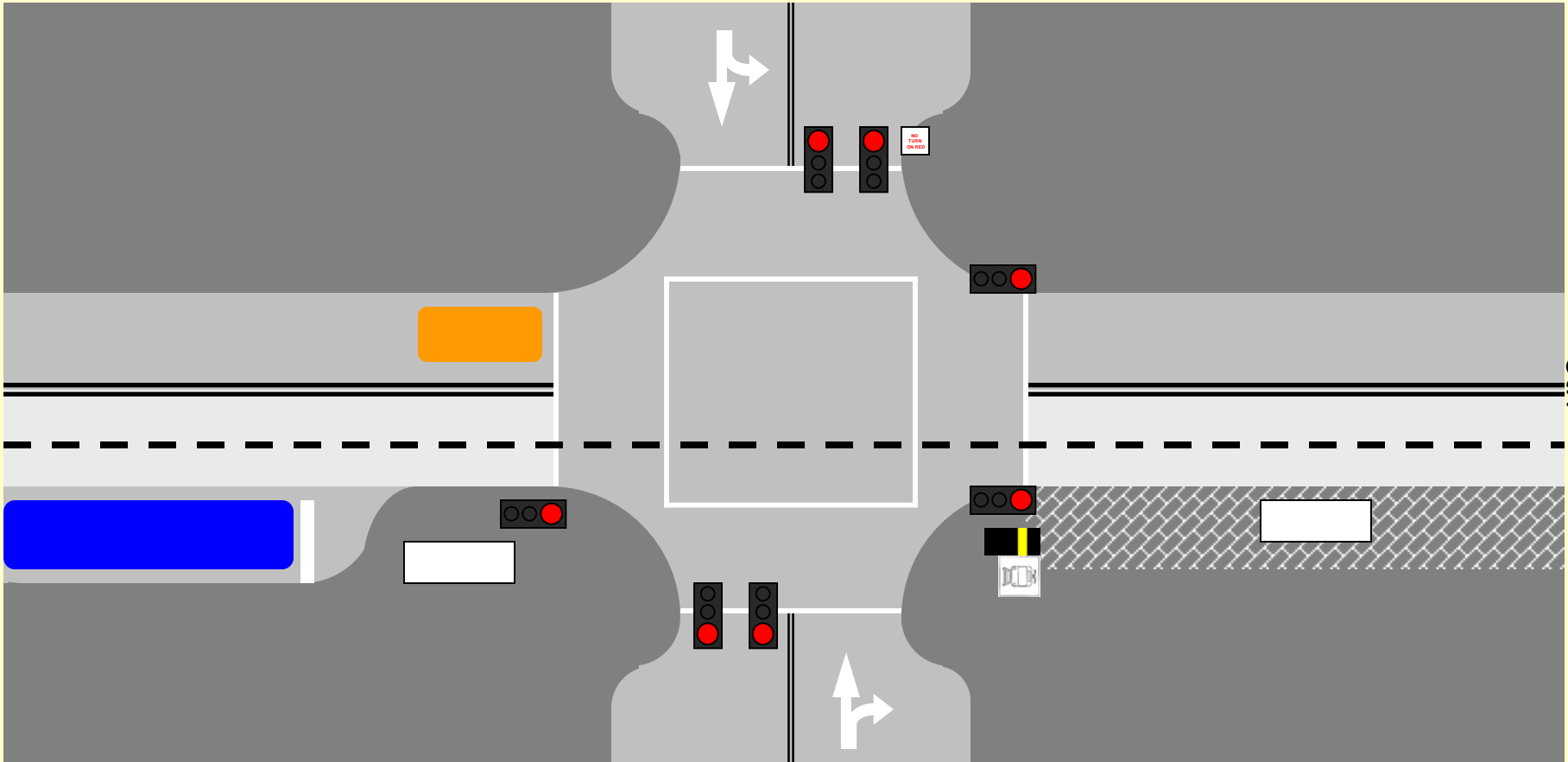
NO
TURN
ON RED



Davis

5th

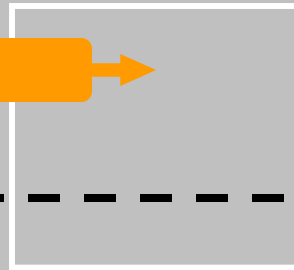
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North Mall Operations



Davis

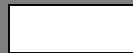


Davis

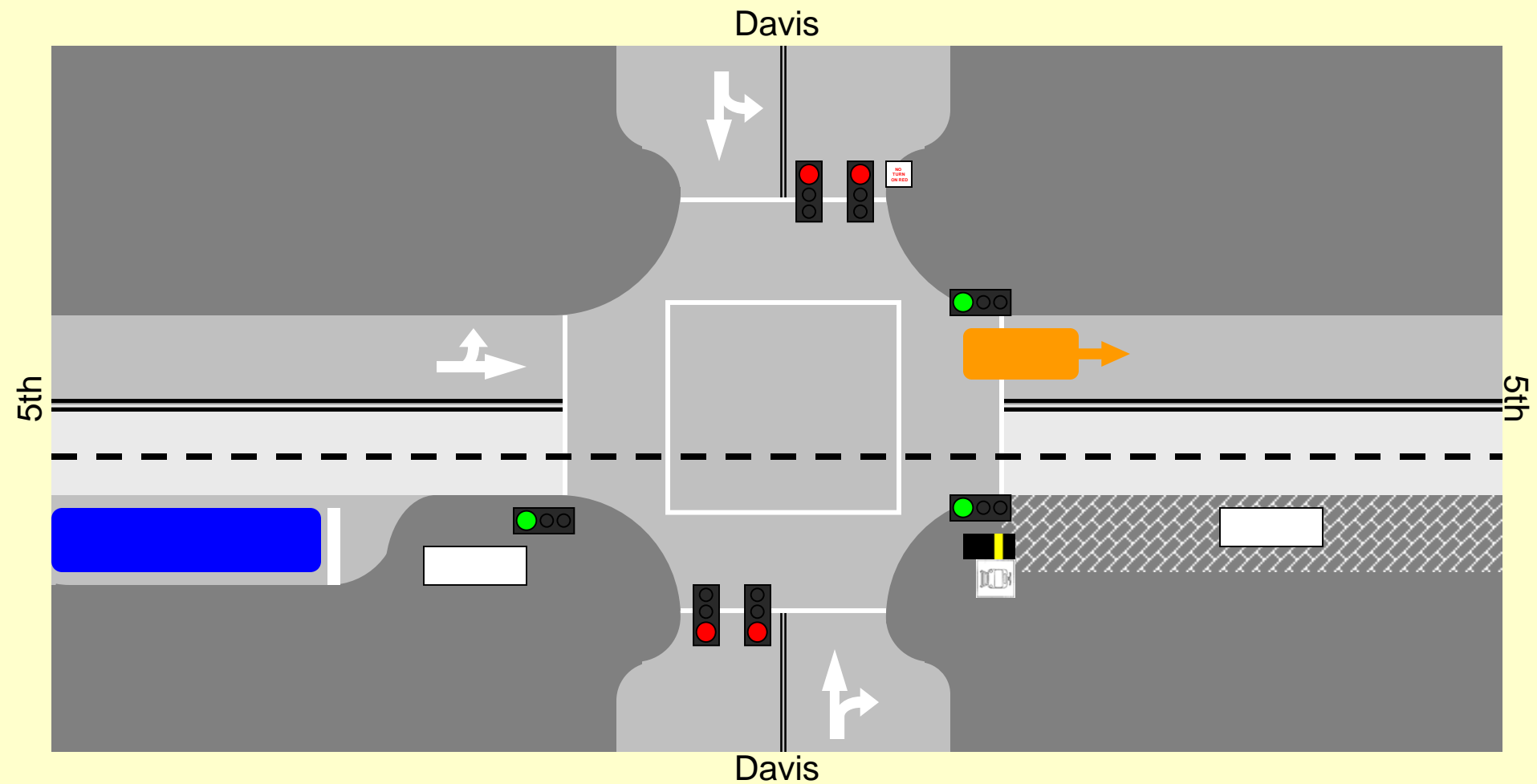
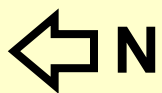
5th

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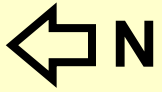
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North Mall Operations



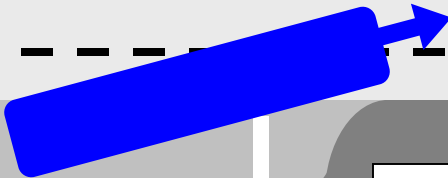
North Mall Operations



Davis



NO
TURN
ON RED



Davis

5th

5th

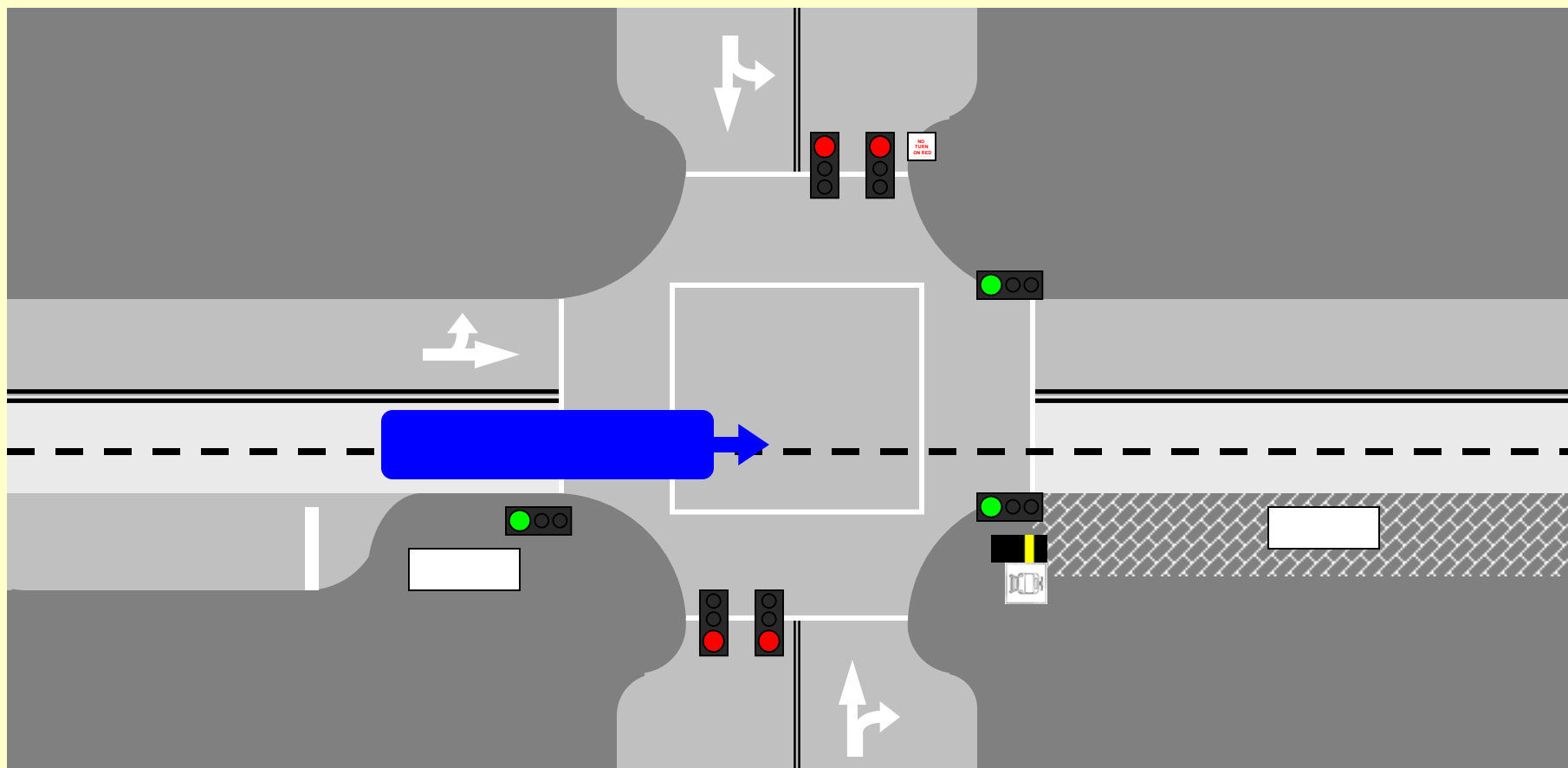
North Mall Operations



Davis

5th

5th



Davis

Welcome Back



Your dreams were your ticket out.

Welcome back,
To that same old place that you laughed about.

Well the names have all changed since you hung around,
But those dreams have remained and they're turned around.

Who'd have thought they'd lead ya (Who'd have thought they'd lead ya)
Back here where we need ya (Back here where we need ya)