Representative State Diagram

Its complex diagram to show complete state transitions.
We got 8 states. Any state can move to any other remaining states depending on direction and signal color. So 8*8 + 8*4 = 96 transitions possible

4 Important representational examples to learn this signal system.

Note- signal color persist in case of add instructions. Just direction matters.
        And Signal color instruion automatically triggers removeCar() functionality if color is RED

Example 1 : suppose currentState = NorthGreen
Now if action instruction is "ADD West 4" then currentState = WestGreen

Example 2 : suppose currentState = SouthRed
Now if action instruction is "ADD East 5" then currentState =EastRed

Example 3 : suppose currentState = NorthGreen
Now if action instruction is "North Red" then currentState =NorthRed

Example 4 : suppose currentState = SouthRed
Now if action instruction is "South Green" then currentState =EastRed