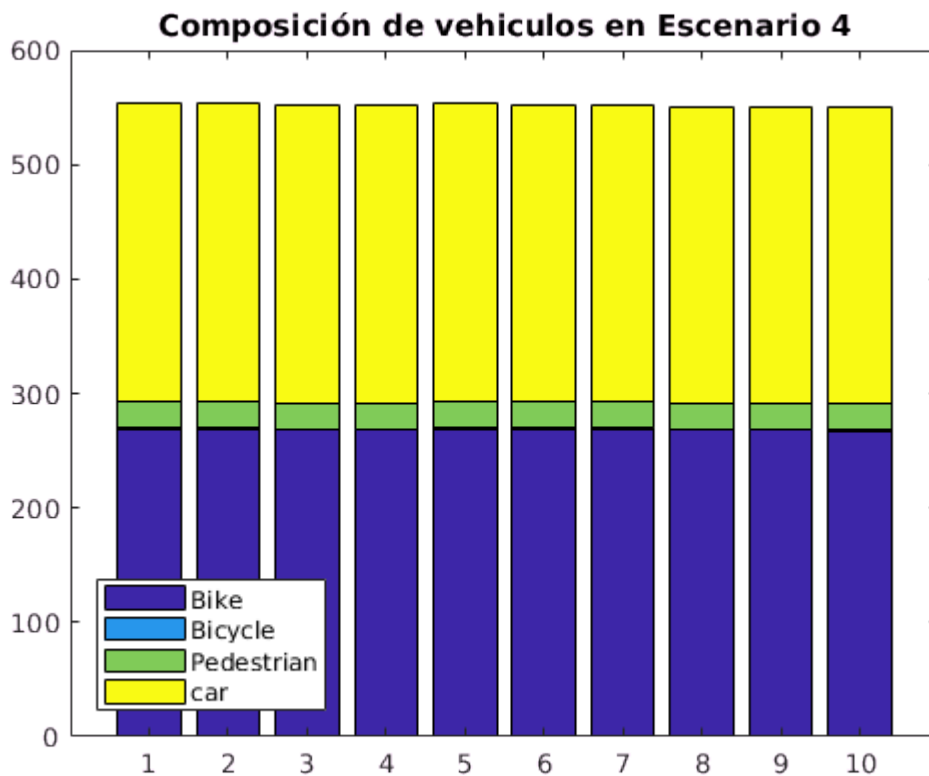


## Análisis de composición de Nodos Escenario 4

```
% Bikenode -> 1
% Bicyclenode -> 2
% Pednode -> 3
% Car -> 4

ind = zeros(4,10);
for i=1:length(HD_Nodes)
    for k=0:9
        if HD_Nodes(i,1) <= 38500+k && HD_Nodes(i,2)>38500+k
            ind(HD_Nodes(i,3),k+1)=ind(HD_Nodes(i,3),k+1)+1;
        end
    end
end
end
```

```
bar(ind','stacked')
title('Composición de vehiculos en Escenario 4')
legend('Bike','Bicycle','Pedestrian','car','Location','SouthWest');
xlim([0,11])
```



ind

```
ind =
    269    269    268    268    269    269    269    268    268    267
      1      1      1      1      1      1      1      1      1      1
```

```

23 23 23 23 23 23 23 23 23 23
260 260 260 260 260 259 259 259 259 260

```

```
sum(ind)
```

```

ans =
553 553 552 552 553 552 552 551 551 551

```

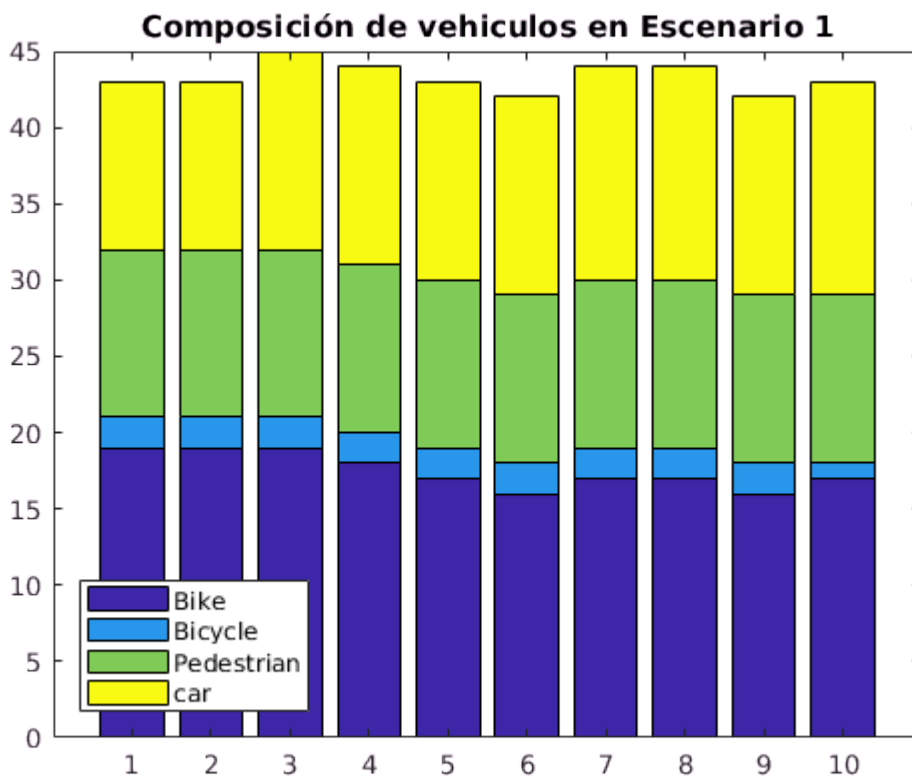
## Análisis de composición de Nodos Escenario 1

```

ind2 = zeros(4,10);
for i=1:length(LD_Nodes)
    for k=0:9
        if LD_Nodes(i,1) <= 23500+k && LD_Nodes(i,2)>23500+k
            ind2(LD_Nodes(i,3),k+1)=ind2(LD_Nodes(i,3),k+1)+1;
        end
    end
end

bar(ind2','stacked')
title('Composición de vehiculos en Escenario 1')
legend('Bike','Bicycle','Pedestrian','car','Location','SouthWest');
xlim([0,11])

```



```
ind2
```

```
ind2 =  
    19    19    19    18    17    16    17    17    16    17  
     2     2     2     2     2     2     2     2     2     1  
    11    11    11    11    11    11    11    11    11    11  
    11    11    13    13    13    13    14    14    13    14
```

•

```
sum(ind2)
```

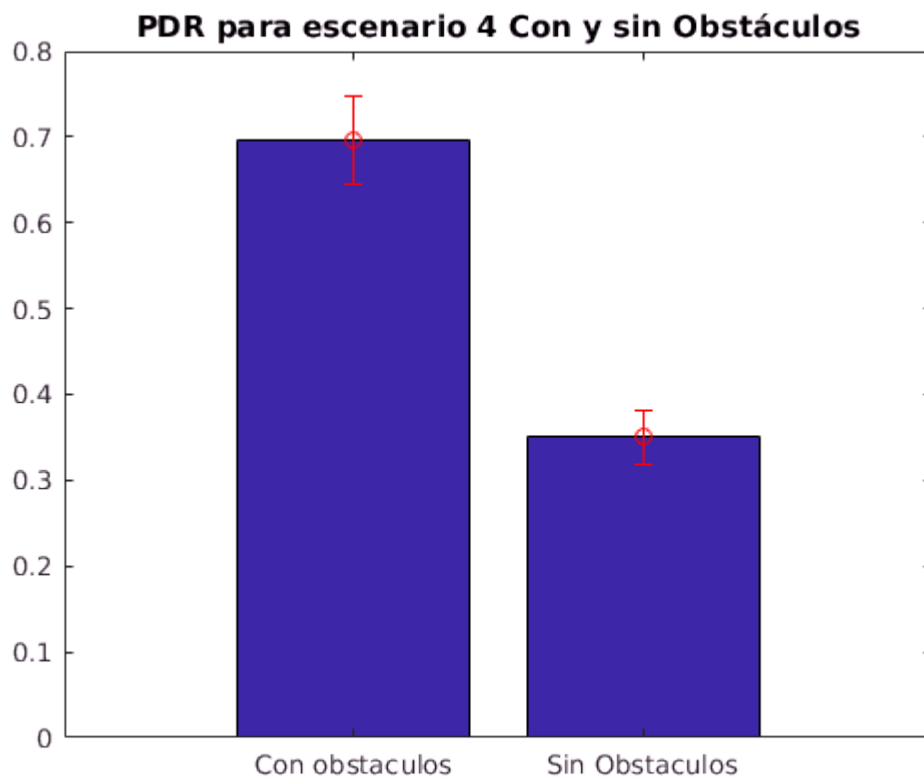
```
ans =  
    43    43    45    44    43    42    44    44    42    43
```

•

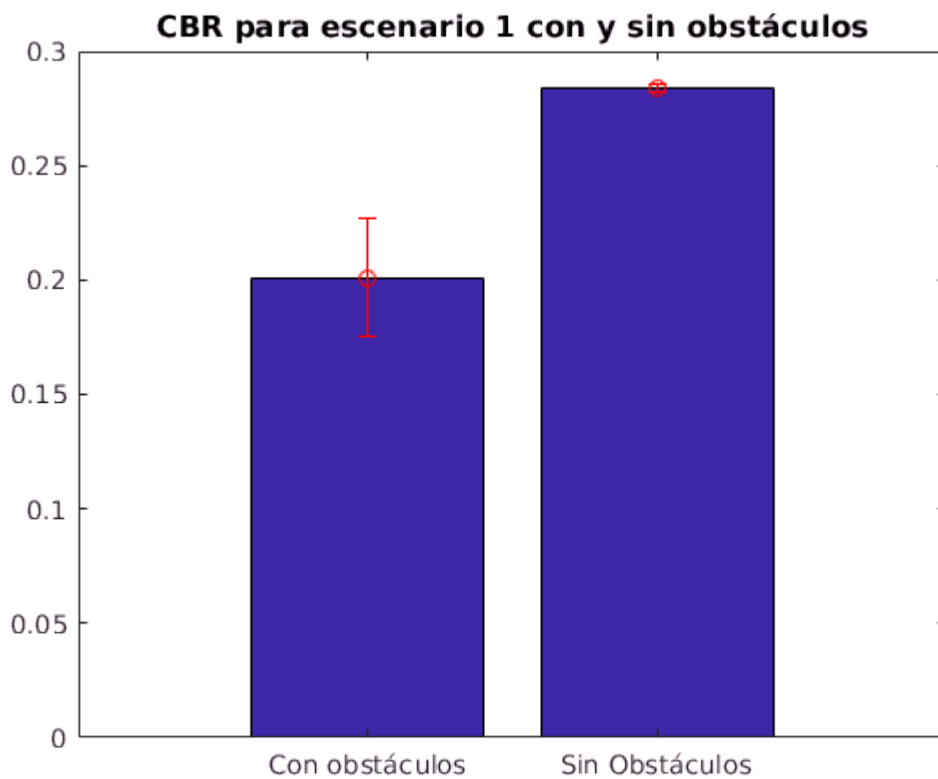
## Diferencias Escenario sin Obstáculos Escenario 4 - $r=10\text{Hz}$

- Para el escenario con obstaculos se consideran 10 repeticiones mientras en el que no se consideran solo se toma una corrida.

```
PDR = [0.696 0.350];  
PDR_STD = [0.052 0.032];  
  
CBR = [0.2010 0.2839];  
CBR_STD = [0.0259 0.00181];  
  
bar(PDR)  
hold on  
errorbar(PDR,PDR_STD, 'ro')  
hold off  
xlim([0,3]);  
title('PDR para escenario 4 Con y sin Obstáculos');  
xticklabels({'Con obstaculos','Sin Obstaculos'});
```



```
bar(CBR)
hold on
errorbar(CBR,CBR_STD, 'ro')
hold off
xlim([0,3]);
title('CBR para escenario 1 con y sin obstáculos');
xticklabels({'Con obstáculos','Sin Obstáculos'});
```

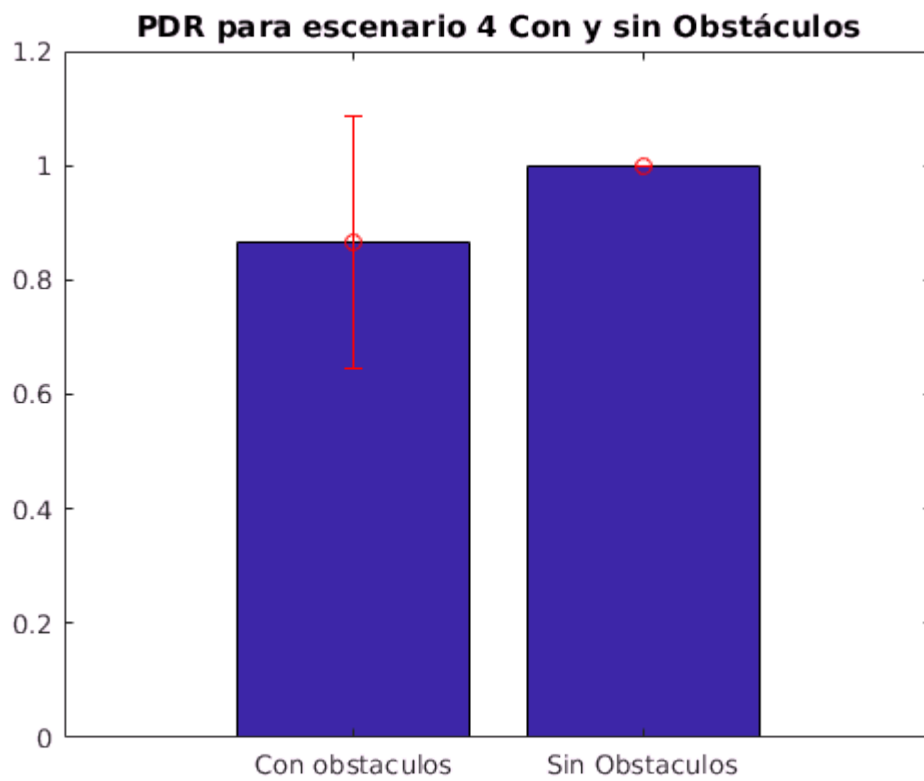


## Diferencias Escenario sin Obstáculos Escenario 1 - r=1Hz

```
PDR = [0.865 1.0];
PDR_STD = [0.22 0];

CBR = [0.00086 0.0044];
CBR_STD = [0.000316 9.530237957286526e-05];

bar(PDR)
hold on
errorbar(PDR,PDR_STD, 'ro')
hold off
xlim([0,3]);
title('PDR para escenario 4 Con y sin Obstáculos');
xticklabels({'Con obstaculos','Sin Obstaculos'});
```



```
bar(CBR)
hold on
errorbar(CBR,CBR_STD, 'ro')
hold off
xlim([0,3]);
title('CBR para escenario 1 con y sin obstáculos');
xticklabels({'Con obstáculos','Sin Obstáculos'});
```

