FORUM8 3Rd CPWC

# Safety notification of when overtaking car through on Screen Display

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FORUM 8

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# 1. Concept of the Program

## DANGEROUS OF CAR PASSING

When you ride a two way lanes road or any other roads.

You may encounter slow vehicle in front of you at the same lane.

So you will try to pass the front car.

But It very dangerous for you and all drivers.

Therefore , the Driver who try to pass front car

need various Information about overtaking

such as front car speed, distance between my car and front car

and passing sight distance of road.

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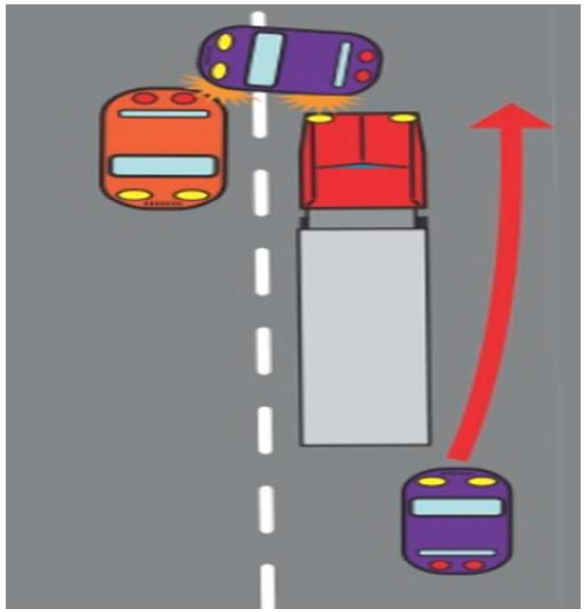
# 2. Purpose of Program

## TO RISE DRIVER'S SAFETY & TO REDUCE ROAD CONSTRUCTION COST



**The driver's safety ensure through the proper Guidance at overtaking situation.**

**Economical road design because excessive passing sight distance for road design cause costs a lot of construction.**

**So Our program target to offer proper information to drivers and to road design engineer.**

**Therefore, This plugin will lead the safe road construction and drive.**

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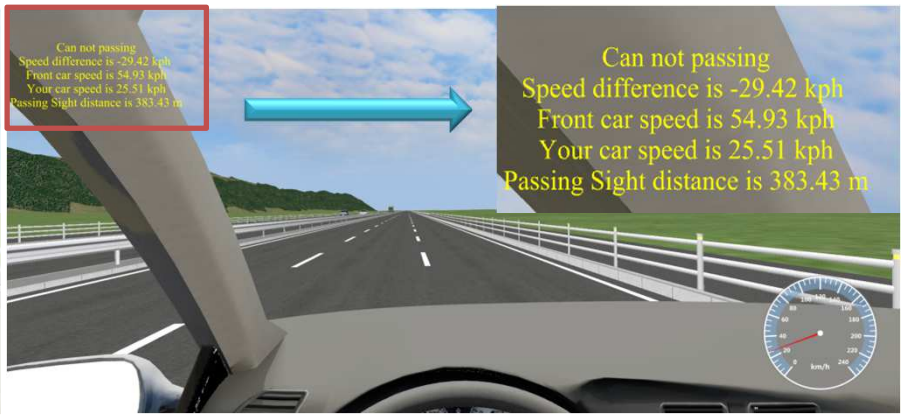
# 3. Function of Program

## DANGEROUS OF CAR PASSING

There are Two case of Result in this plugin.

- Case1. You can passing

- Case2. Can not Passing




**When you overtaking against in front of your car, You have to accelerate speed minimum 20kph more than front car for your safety.**
**Otherwise, you fail to overtake and you will face dangerous accident situation.**
**So, This Plugin will guide you intelligent overtaking judgement and help your decision.**

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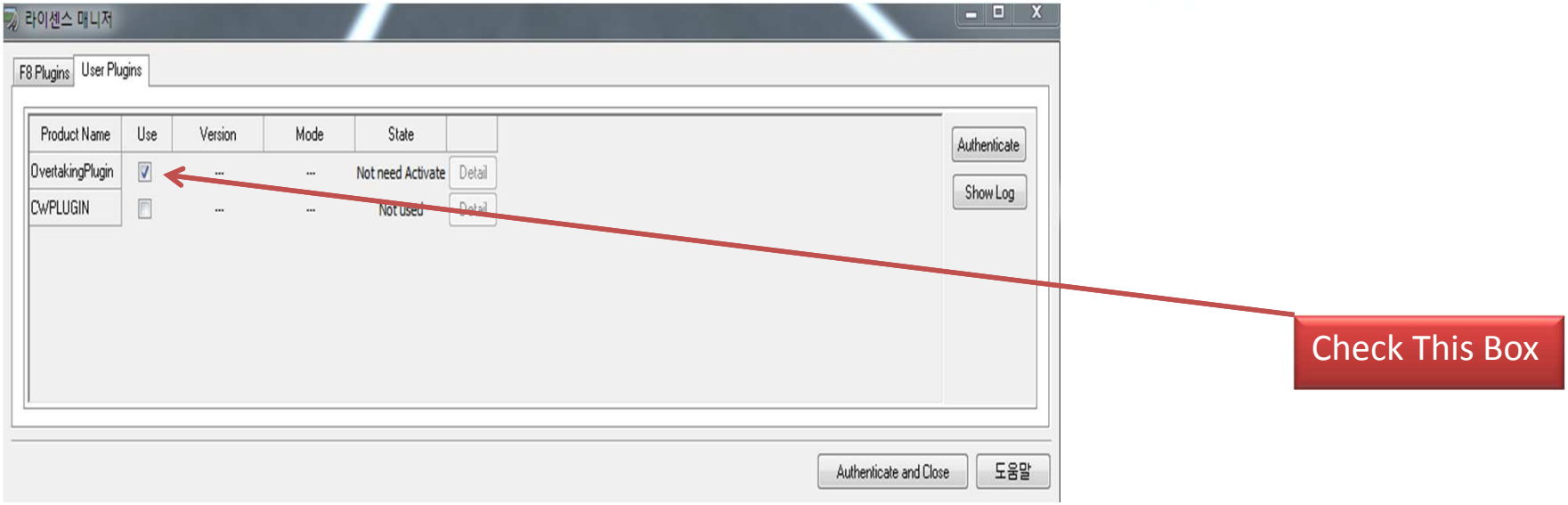
# 4. Use of Program

## HOW TO USE THIS PLUGIN?




**Use of This Plugin is very Easy, You just run UCwinRoad 10.1 and Open License manager and Check OvertakingPlugin Box.**
**And then make road , make traffic. Finally  drive any car.**
**You will meet this plugin.**

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# 4. Future Work

## FUTURE WORK IDEA

| Approximate Coefficients of Friction | | |
|---|---|---|
| | Kinetic | Static |
| Rubber on concrete (dry) | 0.68 | 0.90 |
| Rubber on concrete (wet) | 0.58 | |
| Rubber on asphalt (dry) | 0.67 | 0.85 |
| Rubber on asphalt (wet) | 0.53 | |
| Rubber on ice | 0.15 | |
| Waxed ski on snow | 0.05 | 0.14 |
| Wood on wood | 0.30 | 0.42 |
| Steel on steel | 0.57 | 0.74 |
| Copper on steel | 0.36 | 0.53 |
| Teflon on Teflon | 0.04 | |

**This Plugin provide some information limit.**

**According to the AASHTO green book.**

**Passing sight distance consist of 4 formula (d1,d2,d3,d4)**

**Acceleration parameters just fix 8.82 m/sec³**

**( a = f * g , f=0.9 , g=9.8m/sec²)**

**But Each Road situation have differ friction (f) value.**

**Refer to the left table, Friction 0.9 is Rubber on concrete.**

**Under various situations, We calculate the passing sight distance accurately**

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# THANK YOU !

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