

Service Technique des
Remontées Mécaniques
et des Transports Guidés
STRMTG

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STRMTG

**Besançon bridge :
tram/cyclists
interface solution**

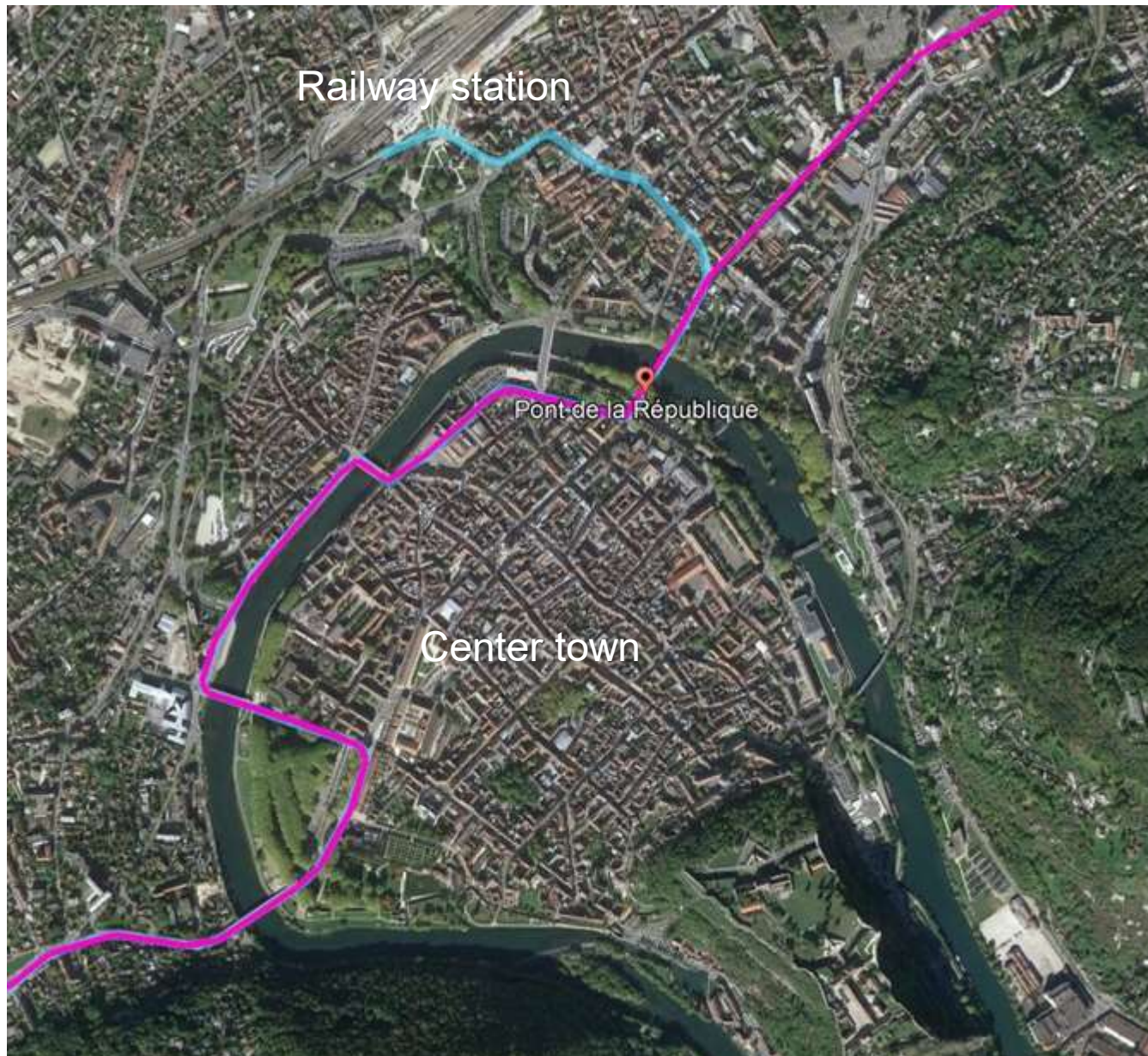
**UTF – Dublin
11/28/18**



Ministère de la Transition Ecologique
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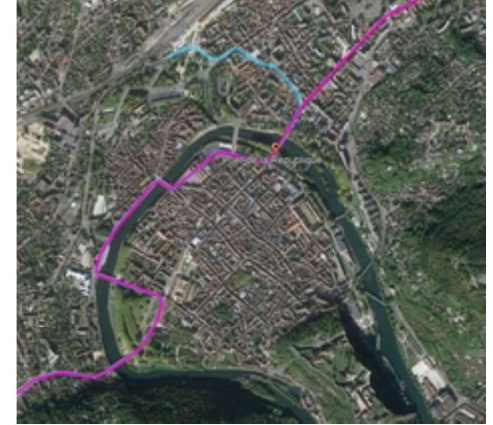
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Besançon – Republic bridge

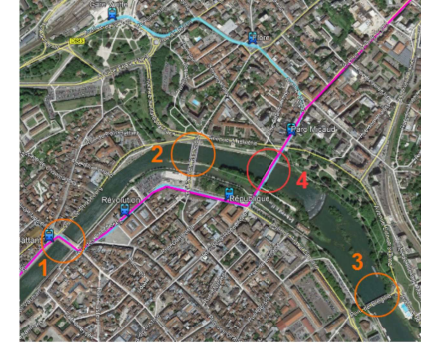


Besançon – Republic bridge

- Few bridges for crossing Doubs river



Views of other bridges



- N°1, 600 m from Republic bridge



- N°2, 200 m from Republic bridge

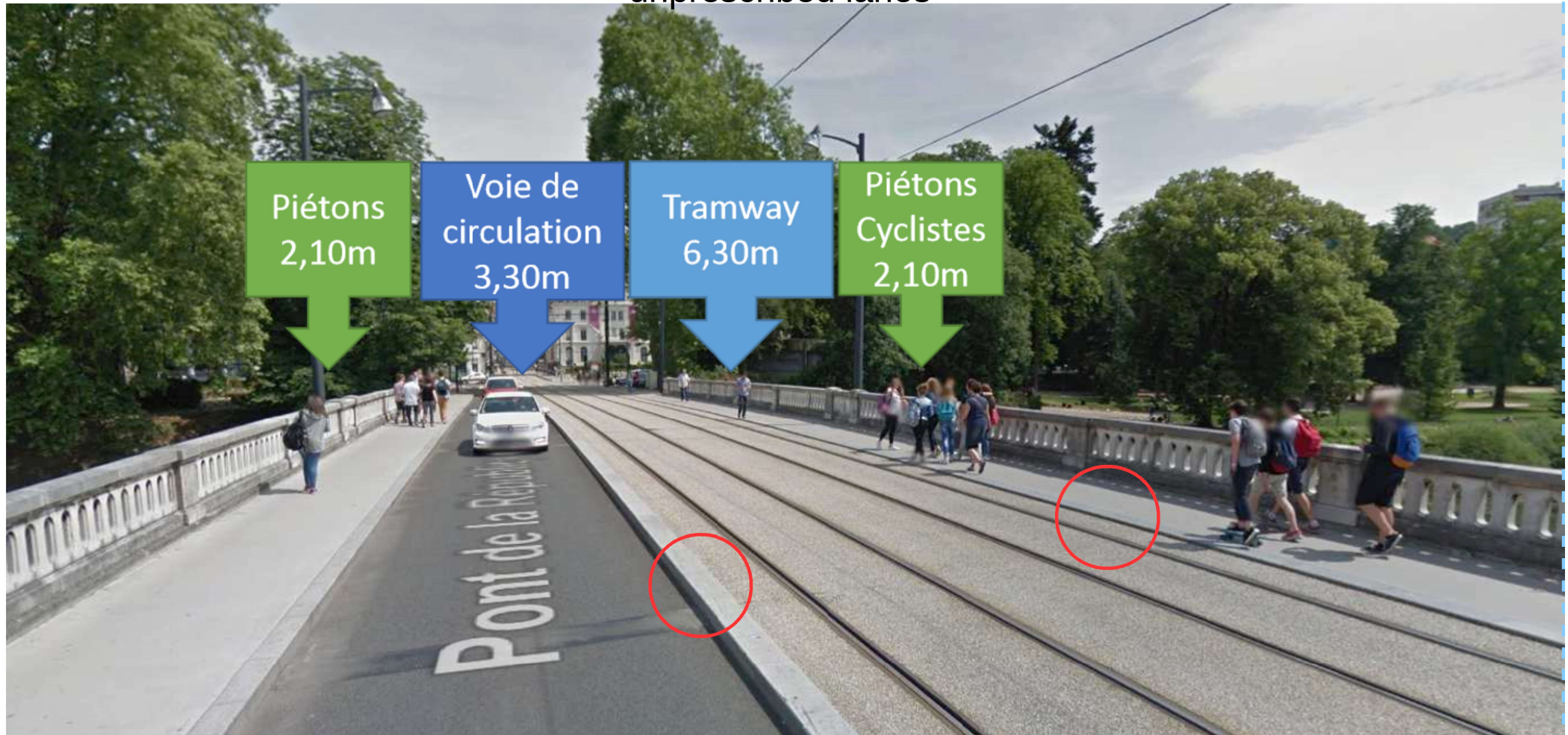


- N°3, 460 m from Republic bridge



Context

N°4 : A stressed structure with several modes of transport, and where some users cross on unprescribed lanes



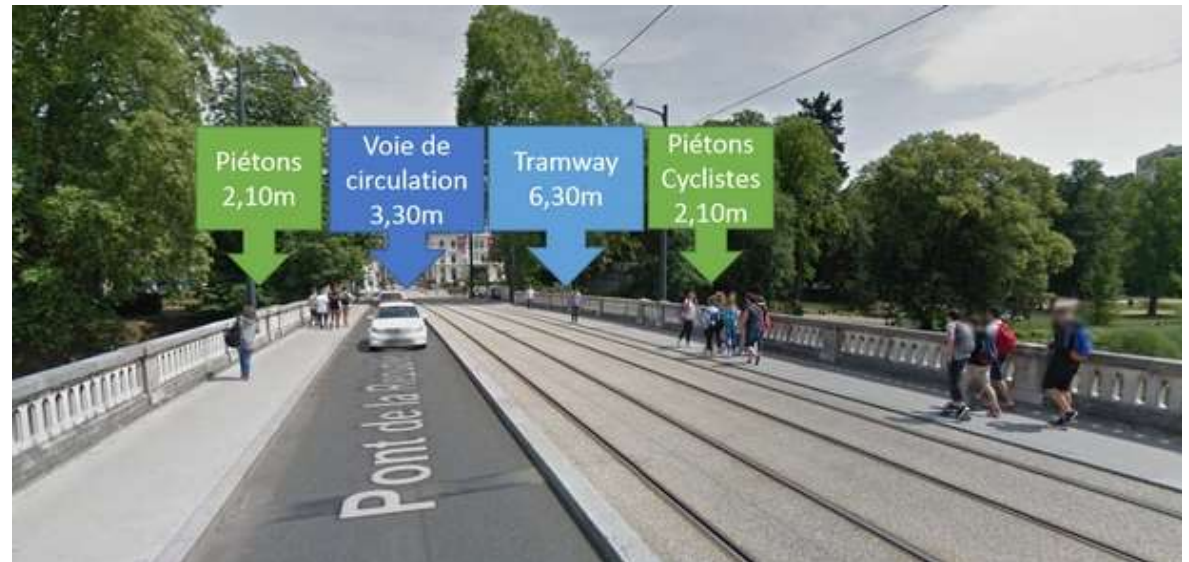
Besançon bridge

- View of the railway station side
- After junction, only trams allowed



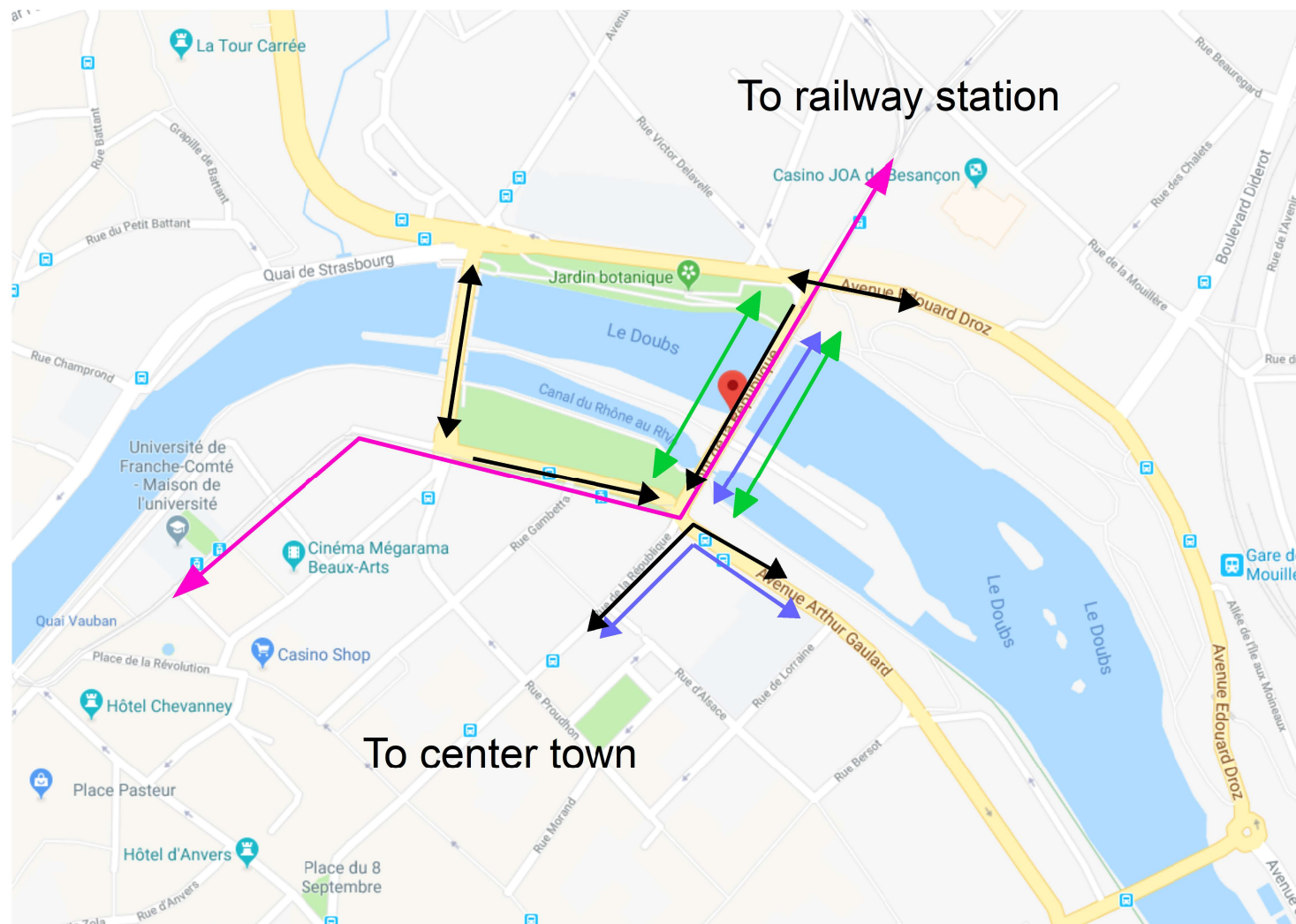
Bridge features

- Republic bridge in figures :
- Around 200 m length
- 13,8 m large
- A slow slope
- Tram-track : 2 lanes
- Car : one side
- Pedestrian : 2 pavements
- Cyclists : 1 pavement and car lane
- Tramway speed limit : 30 km/h



Bridge urban traffic plan

- Urban traffic directions
- TW (pink)
- Car (black)
- Cyclist (blue)
- Pedestrian (green)



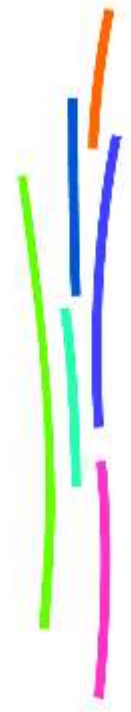
Interface tram/cyclists

- Currently not enough space for all types of users
- Initial demand was to share tram track for cyclists on the bridge
- In such case, new risks generated that modify the safety demonstration
- Main issues for this suggestion :
 - Manage entry and exit of cyclists on the tram track
 - Manage conflicts between users of tram track and close to tram track (how to deal when a cyclist is caught up by tram)
 - Manage junctions at each side of the bridge
 - Visibility (high point on bridge, when entering in junction)
 - Impacts on operating tram (speed, priority in junction)
 - Every type of cyclists could be attended : healthy persons, seniors, children
 - Continuity of cyclist path

Chronology of events

- December 2014 : Besancon city contacts CEREMA and STRMTG for experiments on sharing tram track with cyclists
 - February 2015 : because new risks are generated, STRMTG is waiting for a safety case for beginning instruction
- End of 2018 : diagnosis of CEREMA on the use of bridge by cyclists and tramway drivers, and their feelings

FIN



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