D21 is a 80 @.@ 1 @-@ kilometre @-@ long (49 @.@ 8 mi) , north ? south state road in Istria County , Croatia . A short section of D21 is a part of the European route E751 . The northern terminus of the route is located at the Croatia ? Slovenia border at the Dragonja River . There it connects to Koper , Slovenia , and Trieste , Italy , via the Slovene route G11 further north . D21 route is generally parallel to A9 motorway . The two form several junctions , either directly or via short connectors , at Buje , Bale and Vodnjan ? towns served directly by D21 . The southern terminus of the route is found in the city of Pula , at the southern tip of the Istrian Peninsula .

The road , as well as all other state roads in Croatia , is managed and maintained by Hrvatske ceste , a state @-@ owned company . The road carries an annual average daily traffic of about 2 @,@ 000 vehicles , and the traffic volume increases by up to 1 @,@ 000 vehicles in summer as the road is used by tourists in the region . The southernmost portion of the road is significantly more congested as it carries Pula suburban traffic .

In classical antiquity , the western Istria route was first used by Via Flavia in the classical antiquity , but the roads in the area declined in the Middle Ages and subsequent division of the Istrian Peninsula by the Republic of Venice and the Habsburg Empire was not conductive to development of a road system . In the 19th century , the First French Empire started road construction , including the Trieste ? Pula route now largely followed by D21 . The present @-@ day D21 route was a part of M2 Adriatic Highway route after the Second World War . It was made a separate state road and assigned its present route number in 1997 .

= = Route description = =

D21 is an 80 @.@ 1 @-@ kilometre (49 @.@ 8 mi) state road situated in Istria County following a general north? south alignment . Most of the route runs through predominantly agricultural land and small settlements , except the route segment between Bale and Baderna , where the road is predominantly surrounded by forests . The southernmost 2 @.@ 2 kilometres (1 @.@ 4 miles) of the route runs through suburbs of Pula? the largest city in the region . D21 extends south from the Ka?tel border crossing between Croatia and Slovenia situated at the Dragonja River . To the north of the D21 terminus , the route? a part of the European route E751? connects the cities of Koper , Slovenia , and Trieste , Italy , via G11 in Slovenia . The first section of the D21 route follows an overall eastern orientation . About 400 metres (1 @,@ 300 feet) away from the borderline , it reaches the Ka?tel border crossing , and after 800 metres (2 @,@ 600 feet) , there is an at @-@ grade intersection where the traffic defaults to D510 , which serves as a connector to the A9 motorway . D21 itself turns southwest towards the village of Ka?tel , approximately two kilometres (1 @.@ 2 mi) away .

Just to the north of Ka?tel , D21 turns south before proceeding to the city of Buje located about 3 @.@ 5 kilometres (2 @.@ 2 miles) down the road from Ka?tel . In Buje , D21 forms at @-@ grade intersections with D200 and D300 . D200 provides a route to the Plovanija border crossing with Slovenia and D300 to the town of Umag and Umag interchange of A9 motorway . There are also at @-@ grade intersections with the county roads ?5007 and ?5008 in the city . South of Buje , the route turns southeast across hilly terrain until it reaches Ponte Porton in the Mirna River valley approximately 11 kilometres (6 @.@ 8 miles) away from Buje . There D21 forms a roundabout junction at the north bank of the river . The roundabout connects D21 to D44 , which links the town of Buzet and D301 to Novigrad and another A9 interchange .

After the route crosses the Mirna River , it continues about six kilometres ($3\ @. @. ?$ mi) southeast to Vi?inada , where D21 forms an intersection with ?5041 road to Brnobi?i village . In Vi?inada , the route turns south once more as it reaches the ?5042 intersection connecting Vi?njan after another five kilometres ($3\ @. @. ?$ mi) , and the village of Baderna 20 @.@ 5 kilometres ($12\ @. @. ?$ miles) south of the Mirna River crossing . At Baderna , D21 connects with D302 extending to Pore? and the A9 motorway , located west of the road junction , as well as D48 leading to Pazin east of D21 . The intersection is built as a partial cloverleaf interchange .

Approximately four kilometres (2 @.@ 5 mi) south of Baderna , the route reaches the village of Sveti Lovre? and proceeds due south to the Medaki interchange of the A9 ? another partial cloverleaf interchange ? about three kilometres (1 @.@ 9 mi) south of Sveti Lovre? . D21 turns southwest at the Lim embayment of the Adriatic Sea after another two kilometres (1 @.@ 2 mi) . At that point , D21 forms an at @-@ grade intersection with ?5002 road to Vrsar situated further west . Following the ?5002 junction , D21 turns southeast to follow the contours of the Lim embayment valley . After approximately five kilometres (3 @.@ 1 mi) , the route reaches a grade separated intersection , a two @-@ ramp partial cloverleaf , with D303 . D303 , in turn , links to the Kanfanar interchange of the A9 motorway and the coastal city of Rovinj .

South of the D303 intersection , D21 runs south along a generally flat terrain and consists of relatively straight sections compared to the northern parts of the route . About six kilometres (3 @.@ 7 mi) south of the D303 junction , D21 forms an at @-@ grade intersection with ?5098 to Svetvin?enat . Three kilometres (1 @.@ 9 mi) from there , D21 enters the town of Bale and intersects the ?5095 road linking Rovinj . South of Bale , D21 turns southeast and approaches Vodnjan . It reaches a short connector to the Vodnjan @-@ sjever (north) interchange of the A9 motorway eight kilometres (5 @.@ 0 mi) down the road .

After another two kilometres (1 @.@ 2 mi) , D21 reaches the city of Vodnjan and the ?5192 road junction connecting to Fa?ana . There are two further significant junctions of D21 in the next 1 @.@ 5 kilometres (0 @.@ 93 miles) ? one with ?5190 to Svetvin?enat and the other with the Vodnjan @-@ jug (south) interchange of A9 . South of Vodnjan , D21 route proceeds another 5 @.@ 5 kilometres (3 @.@ 4 miles) due south to reach ?5117 connecting the village of Gali?ana , and reaches outskirts of Pula after another three kilometres (1 @.@ 9 mi) . Within Pula , D21 route forms an at @-@ grade junction with the ?5115 road to Fa?ana about 1 @.@ 5 kilometres (0 @.@ 93 miles) further along . The junction also serves the Brijuni National Park . The southern terminus of the route is found at a roundabout 500 metres (1 @,@ 600 feet) further south , where D21 connects to D400 .

= = History = =

In classical antiquity, the Via Flavia road built by the emperor Vespasian in 78 AD ran through the same area spanned by modern D21. The Via Flavia followed a north? south route in the western part of the Istrian Peninsula, connecting Tergeste, present @-@ day Trieste, to Pula via Pore?. In Pula, the Roman road extended further to the northeast to Nesactium and Tarsatica? modern @-@ day Trsat area of the city of Rijeka.

Following the decline of the Roman Empire , roads in the region deteriorated . Only the Via Sclavonica is known to have existed in the region by year 1030 . It was an east ? west route spanning from Pazin to Pore? . Road transport in the region lost significance after the peninsula was divided between the Habsburg Monarchy and the Republic of Venice . From 1809 ? 1813 , the Trieste ? Pula route was rebuilt by the First French Empire , after the French captured the entire region from Venice and the Habsburgs . Upgrades to the regional road network continued after the Austrian Empire acquired Istria at the 1814 ? 1815 Congress of Vienna . By 1830 , the road network in Istria had expanded to a degree that would not change for a century and a half . The only significant improvement of region 's roads was paving of the Trieste ? Pula road in 1930s .

During the Second World War all the roads in Istria sustained significant damage . After the war the road became a part of the Adriatic Highway? a trunk road tracing the Adriatic Sea coast within the SFR Yugoslavia, signposted as M2 route. The next major addition to the road network on the peninsula was completion of the first section of the Istrian Y expressway in 1981. The system was designed to replace M2 route as the main road route in Istria. The Yugoslav M2 designation was retained after the independence of Croatia, until 1997, when the part of the Adriatic Highway spanning the Slovene border and Pula was designated as state road D21. Since October 1991, Hrvatske ceste, a company owned by the Government of Croatia, has been tasked with maintenance of the road.

= = Traffic volume = =

Volume of traffic flowing along D21 road is measured by Hrvatske ceste at six traffic counting stations distributed along the route . Three of the traffic counting stations work continuously , while the rest of them are operated intermittently . By 2002 , the road lost a significant portion of its north ? south traffic as A9 motorway was gradually extended since 1991 , running parallel to the route . At the Ka?tel traffic counting site , the average summer traffic volume declined from 12 @,@ 564 vehicles per day recorded in 2002 , to just 2 @,@ 989 vehicles in 2011 .

= = Major intersections = =

The entire route is in Istria County.

Sources: Public roads classification and Regulation on motorway markings in Croatia