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WINNIPEG – THE PTV CITY

THE CITY OF WINNIPEG USES VISION TRAFFIC SOFTWARE INTER-DIVISIONALY.

If there were a PTV world championship, Winnipeg would come out on top. With PTV Visum, PTV Vissim and PTV Vistro, the Canadian city already uses three software products from the PTV Group, covering different aspects of transportation planning in the city.

In 2012, Winnipeg introduced a bus rapid transit system as part of its mobility plan. Public transport now accounts for about 13% modal split. 79% of people still travel in cars, while 6% walk and 2% cycle. According to Luis Escobar, this is set to change: "The city is changing and pedestrians and cyclists are taken into account to a much greater extent now", says the Manager of Transportation for the City of Winnipeg. "That's why in recent years we have extended the network for non-motorised transport by 200 kilometres." Further improvements are due to follow.

Outstanding results – only with PTV
The Winnipeg Transportation Division is made up of six branches. Three of those branches are: the Transportation Systems Planning Branch, which is responsible for strategic planning and is in charge of developing and maintaining the city's transportation forecasting model. The Traffic Management Branch is in charge of managing traffic on the city's major roads, and reviewing and eliminating operational and safety deficiencies. The Traffic Signals Branch designs, installs and maintains traffic control devices, primarily for traffic signalling and pedestrian areas. The city has been using software from the PTV Group at all of

these different planning levels since 2013. „One of the key reasons for using PTV software is to help facilitate the integration of data and information flowing back and forth between our operations and forecasting/modelling business units", says Luis Escobar. "The ability to forecast traffic volumes and then using that information to model the operation of the traffic signal system to eliminate potential deficiencies is a major advantage that can be realized with PTV software but not with any other software tools." The team migrated the existing traffic model to PTV Visum, uses PTV Vissim for microscopic traffic simulations and PTV Vistro to analyse and assess operational scenarios at key locations.

Clear representation
Luis Escobar describes the day-to-day cooperation between the three branches: "Say the Transportation Systems Planning Branch is asked to evaluate the effects of a road closure. The resulting diversion would cause traffic volumes to change", explains Luis Escobar. "Traffic volumes are forecast by the Transportation Systems Planning Branch and the data is passed to the Traffic Management Branch who use it to model the roadway and diagnose potential problems. These might include tailbacks at signalled

intersections or long delays to public transport services. In this case, the Traffic Signals team would then check the traffic signal changes and adjust the signals to the new circumstances."
PTV tools have become an integral part of the entire planning process in the City of Winnipeg, a part Luis Escobar would not want to do without. „One of the most valuable elements is the improved modeling of traffic activity in the transportation system. Other models are too simplistic and do not reflect accurately how traffic behaves." For him, the most valuable feature is 3D visualisation of traffic activity offered by PTV Vissim: "This functionality is particularly valuable for presenting information to the public or elected officials", he says.