

I-90/JANE ADDAMS TOLLWAY WIDENING AND RECONSTRUCTION PACE EXPRESS BUS ACCOMMODATIONS PHASE I ENGINEERING

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PROJECT PURPOSE:

- Evaluate Existing Toll Plaza Throughput
- Model Direct Express Bus to CTA Rosemont Station
- Establish Intermodal Passenger Access and Site Plan

DAMA Consultants, Inc., worked with HDR Engineering, Inc., to model the River Road Interchange from the I-90/Jane Addams Tollway and identify express bus access options between the Tollway and the CTA Rosemont Station.

DAMA built a model of the interchange and the CTA Rosemont Station in VISSIM to identify toll plaza usage and potential tollway throughput. Model allowed DAMA to locate express bus access lanes between the toll plaza and the CTA Rosemont Station and to limit the impact on general Tollway traffic.



 Evaluations
 Schlautions
 Alterative Ia - EB 1490 Existing Lanc Cor The existing traffic operations of traffic using Para 19 are evaluated world. The first evaluation uses the volume to-equesity ratio, vir ratio, as a performance messare of lane utilization for each of the test Para 19 lanes. The second evaluation examines traffic wavering operations between entering EB 109 and 1-294 traffic, and exiting Lane 76 and Lane 77, i.e., INT hans.



To derive vic ratios, some assumptions are made. To expressly, 60 H trans, 100 June and system rung huse traffic have a free drop sequel of 60 mil hus dyrathes are having for the MLT func traffic, as free drow speed of 20 mil hus during roadway operation are assumed, i.e., c = 2300 pcb as per 2010 Highway Capacity Mannal (IICM), p.11-4. For MLT func traffic, a free drow speed of 20 mil h and rung roadway operation are assumed, is a contrast drop stand shown in Figure 1 are converted to peak pauserger-car flow rates assuming a peak hour factor, PHF – 0.94, a heavy which epreventing. For "95% for what mass; and a communit drop respublish factor, $d_1 = -0.94$, a heavy peak 20 mil traffic, $d_1 = -0.95$ for what mass reposented in Appendix A.5.0. Lane utilization of the tom hous is shown in Figure 5.

An collector of the ten mass is shown in Figure 3: A collector distribution we average segment is formed between entering 1-90 and 1-294 traffic and the point where the lanes begin to diverge to Plaza 19. This segment abort length, Le, is 50 fort. The two rule rules is shown of the point param part of the 2-94 twolane system rungs. The two destinations are two IPO lanes, i.e., Lane 76 and Lane 77, and free ULI Imos, i.e. (Lane 71, Ha 75, paid by cash). Thus, 230 vehicles through Plaza 198 the peak hour used the five MLT lanes. Assuming that 75 of 1-90 vehicles, i.e., 200 vehicles the other were apprecised on the peak of the tensor of the 100 vehicles, i.e., 200 vehicles thereasystem the top the distribution of the 100 vehicles, i.e., 200 vehicles through Plaza 1981 the peak hour used the five MLT lanes. Assuming that 75 of 1-90 vehicles, i.e., 200 vehicles the distribution of the distribution of the tensor of the 100 vehicles of the 100 vehicles of the 100 vehicles thereasystem the distribution of the tensor of the 100 vehicles of the 100 vehicles of the 100 vehicles of the 100 vehicles of the 112 vehicles of the 11

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Step 2 - Compute demand flow rate in Larse 1 and 2 immediatel uptrame of the range influence area to be a start of the start of the start LDP = 4674 fort LDP = 4674 feat LDP if = 645 feat LDP if = 645 feat viz= 2244 pr/h

