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MEMORANDUM

TRANSIT SERVICE IMPROVEMENTS BETWEEN MILWAUKEE AND RACINE COUNTIES

At the request of the Chairman of the Milwaukee County Board of Supervisors, Commission staff have developed a potential transit service that would improve connections between Milwaukee, Racine, and the future Foxconn manufacturing campus. This service would target the manufacturing and assembly shift changes at Foxconn, providing service from downtown Milwaukee and downtown Racine to the Foxconn campus.

If this service is to be efficient and effective at connecting workers from Milwaukee and Racine to jobs at Foxconn, close coordination with Foxconn regarding shift times, expected demand, and level of service will be required. Coordination would also be required with Racine County and the affected municipalities, as large portions of this potential service would operate outside of Milwaukee County. In addition, this service likely would not start until 2020, and a number of potential events could occur between now and the potential initiation of this service that could impact the County's existing transit services. With levels of support from the State and Federal governments continuing to decline or not keep pace with inflation, ridership on transit services across the nation declining (including in Milwaukee County), and the continued limitations by the State on the County's ability to generate additional local funds to support transit service, the County may want to prioritize any funds that would be available for this service on maintaining or enhancing the frequency or speed of its existing transit services.

If the County chooses to consider the provision of new transit service, an option to connect Milwaukee to the Foxconn manufacturing campus is described in this memorandum. The remainder of this memorandum describes the potential transit service in more detail, and includes a table summarizing the estimated service characteristics and costs of operation.

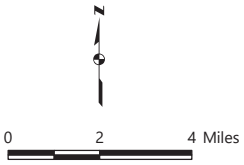
CONNECTING MILWAUKEE AND RACINE TO FOXCONN MANUFACTURING AND ASSEMBLY JOBS

Map 1 shows a route (labeled "Potential Foxconn Commuter Bus Route") connecting downtown Milwaukee, the Holt Avenue Park & Ride Lot, the College Avenue Park & Ride Lot, and the future Foxconn facility in Mount Pleasant. Through the portion of this alternative service on Wisconsin Avenue in the City of Milwaukee, multiple neighborhoods in Milwaukee County would be able to access jobs at Foxconn through transfers from existing Milwaukee County Transit System (MCTS) routes. The route also connects the Corinne Reid-Owens Transit Center, downtown Racine, and Gateway Technical College's Racine Campus to the future Foxconn Facility. Neighborhoods throughout the Racine area would be able to access jobs at Foxconn through transfers from existing RYDE (the Racine transit system) routes at the Transit Center.

MAP 1
MILWAUKEE-FOXCONN-RACINE COMMUTER BUS ROUTE

TRANSIT SERVICES

- EXPRESS BUS ROUTE
- COMMUTER BUS ROUTE & PARK-RIDE
- INTERCITY RAIL LINE & STATION
- POTENTIAL FOXCONN COMMUTER BUS ROUTE & PARK-RIDE
- LOCAL TRANSIT SERVICE AREA



Source: SEWRPC

Based on information provided to Commission staff, it appears that current plans for the manufacturing and assembly positions at the Foxconn site are for two, 12-hour shifts, with one shift beginning at the same time as the next one ends. It is also assumed that manufacturing and assembly operations would operate seven days a week. If the final shift schedule reflects this preliminary information, it may make sense to provide a service limited to targeting these shift change times. This could take the form of buses traveling south twice a day with passengers who are about to begin their shifts, dropping those passengers off at the Foxconn facility, and then the same buses waiting briefly for workers from the previous shift to leave the facility and board the bus before traveling north to Milwaukee County with those workers as passengers. If this operating scenario is pursued, the portion of the route serving Racine may largely operate as a separate route, given the need for buses from Racine and Milwaukee to arrive at and depart from the Foxconn campus at roughly the same times. In addition, operating the portion of the route serving Racine separately would allow for flexibility in tailoring the level of service on each portion of the route to the demand generated by each community.

Because the service is targeted to one business' specific shift times, and those shift change times are potentially very concentrated, this service would operate unlike other transit services in the Region. To provide a useful service to the potential passengers, the round trips described in the previous paragraph would be closely spaced to provide the needed capacity to adequately carry a large number of passengers at the same time to the Foxconn facility. As an example, if one shift ends and the other begins at 7 a.m., all trips should be timed to arrive at the Foxconn facility between 6:40 a.m. and 7:00 a.m., and leave between 7:00 a.m. and 7:20 a.m.

At this time, it is difficult to predict what the market for travel via transit might be for the potential service described here. Therefore, it is likely that the County may need to be prepared to be flexible regarding the amount of bus trips that would be provided as part of this service. To provide the County with some idea of the costs associated with different service levels, three alternatives are included in this memorandum. Alternative 1 assumes that two round-trips per shift change time are provided (two in the morning and two in the evening). Alternative 2 assumes that four round-trips per shift change time are provided, and Alternative 3 assumes that six round-trips per shift change time are provided. Each of these alternatives would provide differing levels of capacity, and ideally the level of service would be based on demand for the service.

If any of these alternatives were to be operated by the Milwaukee County Transit System (MCTS), they would likely require additional vehicles to be added to MCTS's bus fleet, at an average cost of $500,000 each. This is especially true if either of the shift change times occur during the morning or afternoon peak, which would result in likely needing the number of additional vehicles shown in Table 1 for each alternative.

Table 1

VEHICLES LIKELY REQUIRED TO BE PURCHASED TO OPERATE EACH ALTERNATIVE IF OPERATED BY THE MILWAUKEE COUNTY TRANSIT SYSTEM

Alternative	Buses Needed	Estimated Capital Costs (millions)
Alternative 1 (Four Round Trips per Day)	3 to 4	$1.5 to $2.0
Alternative 2 (Eight Round Trips per Day)	6 to 7	$3.0 to $3.5
Alternative 3 (Twelve Round Trips per Day)	9 to 11	$4.5 to $5.5

Alternatively, the County could choose to pursue a contract with a private transportation operator. There are a number of examples in the Region of local units of government contracting the operation of similar long-distance commuter routes to local companies that own and operate fleets of motor coaches. Although other contracts currently in force in the Region indicate that large motor coaches operated by a private company are likely to cost the County 10 to 40 percent more per revenue hour, the County would not need to spend the capital cost necessary to expand the MCTS fleet for such a limited service. Motor coaches would also provide more seating per vehicle

(approximately 50 to 55 seats, as opposed to 35 seats on an MCTS bus), increasing the number of passengers who could be comfortably seated per bus for the relatively long trip between Milwaukee and the Foxconn campus. Finally, a contract with a private operator could be structured such that the County could modify the number of daily bus trips to respond to the passenger demand for service, without waiting for a new bus to be ordered, manufactured, and delivered.

Similar to existing County policy regarding Freeway Flyer routes, it would make sense for riders on this route to pay a premium fare for higher-speed, longer-distance service. Existing transit services in the Region that travel the same distance as this service alternative charge adult cash fares between $3.50 and $4.00. Regardless of whether the service is operated directly by MCTS or through a contract with a private operator, it is important that transfers be discounted, requiring a passenger transferring from an existing MCTS route to only pay the difference in fares between the two services.

Table 2 shows the estimated operating characteristics and costs associated with the three service alternatives in 2020 (the first full year after the expected opening of the first significant facility on the Foxconn site). Because the schedules related to Foxconn are still being refined, it should be understood that any potential transit service specifically targeted to connecting workers to Foxconn may need to initiate service before or after January 1, 2020. Each table includes a range of costs and ridership that might be expected should the County pursue a contract with a private operator utilizing 50- to 55-seat motor coaches. To make the calculations necessary to provide the estimates included in the tables, Commission staff assumed the service would operate seven days a week, and charge a $4.00 adult cash fare with free transfers to existing MCTS and RYDE services. A trip is expected to take between 40 and 55 minutes from downtown Milwaukee to Foxconn and between 20 and 30 minutes from downtown Racine to Foxconn, depending on traffic congestion.

For each alternative, Table 2 includes a range of costs to account for the potential variation in operating costs that could result from a competitive bidding process by private motor coach operators. The table also includes a range of potential ridership levels to account for the unknown amount of demand for this type of service. The table also includes an “average” scenario for each alternative, representing an average cost per revenue hour of service being charged by the contractor and a ridership level midway between the low and high ridership scenarios. Achieving even the level of cost effectiveness represented by the average scenario would require this service to be closely coordinated with Foxconn to determine the appropriate level of capacity required. Implementing such a service effectively will require more information from Foxconn regarding their operations than is currently available. If close coordination is not achieved and demand is relatively low, the high cost and low ridership scenario is more likely to occur.

Depending on the contract rate negotiated with a potential private operator and how well service levels are able to match demand, operating assistance for this service is estimated to cost approximately $144,000 to $529,000 per year for Alternative 1, $288,000 to $1,059,000 per year for Alternative 2, and $433,000 to $1,588,000 per year for Alternative 3.

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Table 2

ANNUAL OPERATING CHARACTERISTICS AND COSTS ASSOCIATED WITH ALTERNATIVE 1 (FOUR ROUND-TRIPS PER DAY)

Characteristics	Projected (in 2020)								
	Alternative 1 (Four Round-Trips per Day)			Alternative 2 (Eight Round-Trips per Day)			Alternative 3 (Twelve Round-Trips per Day)		
	Low Cost and High Ridership	High Cost and Low Ridership	Average	Low Cost and High Ridership	High Cost and Low Ridership	Average	Low Cost and High Ridership	High Cost and Low Ridership	Average
Maximum Employees Carried per Day	220 from Milwaukee 220 from Racine			440 from Milwaukee 440 from Racine			660 from Milwaukee 660 from Racine		
Services Provided									
Revenue Vehicle Miles	123,000	123,000	123,000	245,000	245,000	245,000	368,000	368,000	368,000
Revenue Vehicle Hours	3,600	3,600	3,600	7,200	7,200	7,200	10,800	10,800	10,800
Revenue Passengers									
Total	201,000	49,000	125,000	402,000	98,000	250,000	603,000	146,000	375,000
Passengers per Revenue Vehicle Mile	1.64	0.59	1.12	1.64	0.59	1.12	1.64	0.59	1.12
Passengers per Revenue Vehicle Hour	55.8	13.6	34.7	55.8	13.6	34.7	55.8	13.6	34.7
Expenses and Revenues									
Operating Expenses	$506,000	$617,000	$562,000	$1,012,000	$1,235,000	$1,124,000	$1,519,000	$1,852,000	$1,686,000
Farebox Revenues	$362,000	$88,000	$225,000	$724,000	$176,000	$450,000	$1,086,000	$264,000	$675,000
Operating Assistance	**$144,000**	**$529,000**	**$337,000**	**$288,000**	**$1,059,000**	**$674,000**	**$433,000**	**$1,588,000**	**$1,011,000**
Percent of Expenses									
Recovered through Revenues	71.5	14.3	40.0	71.5	14.3	40.0	71.5	14.3	40.0
Per Trip Data									
Operating Expenses	$2.52	$12.70	$4.50	$2.52	$12.70	$4.50	$2.52	$12.70	$4.50
Farebox Revenue	$1.80	$1.80	$1.80	$1.80	$1.80	$1.80	$1.80	$1.80	$1.80
Operating Assistance	$0.72	$10.90	$2.70	$0.72	$10.90	$2.70	$0.72	$10.90	$2.70