

Creating Transit Connections to Foxconn



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Prepared for the City of Racine and Village of Mount Pleasant

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To: Amy Connelly, City of Racine Development Director; Samuel Schultz, Village of Mount Pleasant Community Development Director

Dear Ms. Connelly and Mr. Schultz,

Thank you for the opportunity to identify and evaluate transit alternatives and funding sources to connect City of Racine residents to the Foxconn Technology Group (Foxconn) campus in the Village of Mount Pleasant. We have examined four potential alternatives that were created to increase transportation options between Racine City (Racine) and Foxconn. The following policy analysis explains the four alternatives we explored.

Based on the results of this analysis, the recommended alternative calls for implementing a commuter vanpool program. This was selected as the recommended alternative because it provides Racine's residents with an affordable and flexible transit connection to Foxconn. The vanpool alternative increases overall connectivity in Eastern Racine County, and allows for the flexibility to adjust service based on need to serve low-income Racine's residents. This alternative qualifies for complete federal funding, so Racine will not need to invest financially or identify funding sources for this alternative. The low rates of carpooling and public transit ridership in Racine are indicators of vanpool demand according to a Carpentersville study we reviewed.

This policy analysis also considered three other potential alternatives. These alternatives were not selected because they did not pass all the evaluation criteria. The first alternative increases housing density within one half mile of the Foxconn campus. This medium to high density housing will be built by Foxconn and the new revenue generated would be used to fund regional public transit. The second alternative requires waiting to implement a transit alternative until Foxconn provides more concrete information, specifically an official site plan. This alternative continues any existing planning efforts but waits for more clarity concerning workforce projections. The third alternative considered the implementation of the East-West bus transit recommendations by the Eastern Racine County Transportation Task Force (ERCTTF), funded by a 0.1% county sales tax.

The vanpool will connect Racine-based Foxconn employees to the site and will likely have applications beyond Foxconn. Racine can apply for the CMAQ grant to begin piloting a commuter vanpool program. A pilot program can be scaled up or down depending on Foxconn's final employment projections.

Thank you again for giving us the opportunity to help the City of Racine and the Village of Mount Pleasant.

Best,

Sadie Baile, Karen Blanco, Joshua Schwalbe, and Josie Willman

EXECUTIVE SUMMARY

With Foxconn Technology Group's (Foxconn) first production line slated to start operation by October 2020, the City of Racine (Racine), Village of Mount Pleasant, and neighboring municipalities are feeling the pressure to prepare for the challenges posed by this development. An issue that remains to be solved involves creating a transportation solution that improves the East-West connection between Racine and Foxconn in Mount Pleasant. Mass transit service currently does not provide an adequate East-West connection, and there is also a lack of funding available to support or enhance this connection. Racine has double the unemployment rate of Mount Pleasant, which underscores the need to provide connections for Racine residents traveling to and from Foxconn.¹

The following report details and evaluates four alternatives that can help increase East-West connectivity between Racine and Foxconn's development in Mount Pleasant via transit modes and identifies potential funding sources for transit. The four alternatives for consideration are: increasing housing density near the Foxconn campus, maintaining the status quo, implementing an East-West bus transit option supported by the Eastern Racine County Transportation Task Force (ERCTTF) and funded by a county sales tax, and creating a commuter vanpool program. The four evaluation criteria are: (efficiency) the alternative must provide a public transportation option to Foxconn that serves at least 15% of Racine-based Foxconn employees by October 2020, (cost) the alternative must be cost-neutral for Racine while not negatively impacting RYDE's current service, (equity) the alternative must be affordable for all Racine-based Foxconn employees, and (political feasibility) the alternative must be adopted by the municipalities that contract with RYDE.

The recommended alternative is the commuter vanpool program which passed all four evaluation criteria. A commuter vanpool program provides commuters an affordable and flexible transit option that is also financially feasible for cities or transit agencies to supplement current fixed-route services. Vanpool programs can mitigate transportation barriers faced by many individuals assisting Foxconn in achieving their vision of reducing single-occupancy commuting to and from the development. Racine County is eligible for Congestion Mitigation and Air Quality (CMAQ) grants to cover initial capital costs (i.e. van purchases), and rider fees are projected to cover annual operational expenses.

Vanpools allow public transportation to efficiently serve much lower density areas during second and third shifts in place of operating a full-size bus where demand may not be sufficient to warrant service.² Many transit agencies have already implemented vanpool programs to complement their existing services and expand alternative transit options serving new developments. The vanpool program can be modeled after successful operating programs such as PACE (Chicago's suburban public transportation agency) and the Northern Arizona Intergovernmental Public Transportation Authority. This alternative is a flexible, affordable, and dynamic transit option that can help provide a cost-efficient and accessible commute mode for Racine-based Foxconn employees.

¹ American Community Survey. Five-year estimates, 2012-2016.

² Baruchman, Michelle. "Stuck in traffic? These folks found a solution by joining a vanpool". *The Seattle Times*. April 28, 2018. <https://www.seattletimes.com/seattle-news/transportation/stuck-in-traffic-these-folks-found-a-solution-by-joining-a-vanpool/>

PROBLEM STATEMENT

In July 2017, Foxconn Technology Group (Foxconn) announced plans to build one of the largest manufacturing campuses in the world in Racine County, Wisconsin, within the Village of Mount Pleasant.³ Located on former agricultural land adjacent to Interstate 94, the site is 20 miles south of Milwaukee and 5 miles west of Racine. With employment projections of 13,000 jobs with an average salary of \$53,000 at Foxconn, 7,800 additional jobs throughout Racine County, and billions of dollars in additional annual Racine County Gross Domestic Product (GDP), Foxconn has the potential to positively impact the economy of Southeastern Wisconsin long-term.⁴ The short-term outlook reveals significant challenges to meeting those projections.

Without concrete information on employment projections or detailed site plans, officials in Mount Pleasant and Racine struggle to accurately forecast demands on housing and transportation. One substantial challenge stems from a lack of detail concerning the construction and development of Foxconn's manufacturing campus. Initially, Foxconn's employment projections showed 75% low-skill manufacturing workers and 25% knowledge workers.⁵ Foxconn has since changed the type of manufacturing they will perform, which changed the workforce profile to 90% knowledge-based and only 10% low-skill manufacturing.⁶ The most current projections indicate initial employment is expected to be 3,000 workers at the plant by October 2020, with final employment estimates attained years after.⁷

Eastern Racine County Transportation Task Force (ERCTTF) has partnered with the Southeastern Wisconsin Regional Planning Commission (SEWRPC) to make detailed transportation recommendations "to improve East-West travel times and help move workers to jobs."⁸ The majority of ERCTTF's recommendations focus on an East-West connection from Racine to Foxconn but cannot be implemented due to lack of funding. Regional Transit Authorities are not authorized to operate in Wisconsin, creating barriers to the region's economic success through connecting Racine and Foxconn.

Racine's current revenues cannot support funding for quality transit services to efficiently and effectively connect its low-income residents to job opportunities. Wisconsin municipalities rely on property tax to fund the majority of their services including transit. Racine currently contracts a private transit firm to provide a bus service called RYDE throughout Racine with extensions to Mount Pleasant and the Village of Caledonia. Racine provides the majority of RYDE's funding, and

3 Marley, P. and J. Stein. "Foxconn announces \$10 billion investment in Wisconsin and up to 13,000 jobs," *Milwaukee Journal Sentinel*, <https://www.jsonline.com/story/news/2017/07/26/scott-walker-heads-d-c-trump-prepares-wisconsin-foxconn-announcement/512077001/>, July 26, 2017.

4 Racine County Welcomes Foxconn. "The Size of the Prize," <https://www.foxconnracinecounty.com/about-the-project>, 2018.

5 "Foxconn Considers Bringing Chinese Workers to Wisconsin as U.S. Labor Market Tightens". The Wall Street Journal. Jie, Yang, Raice, Shayndi, Morath Eric. Nov. 6, 2018 <https://www.wsj.com/articles/foxconn-considers-bringing-chinese-personnel-to-wisconsin-as-u-s-labor-market-tightens-1541505600>

6 McMullan, Matthew. "The Plans for Wisconsin's Foxconn Factory Keep Changing." *Alliance for American Manufacturing*, <http://americanmanufacturing.org/blog/entry/the-plans-for-wisconsins-foxconn-factory-keep-changing>, Oct. 31, 2018.

7 Paquette, Danielle. "Foxconn deal to build massive factory in Wisconsin could cost the state \$230,700 per worker." *The Washington Post*, https://www.washingtonpost.com/news/wonk/wp/2017/07/27/foxconn-deal-would-cost-wisconsin-230700-per-worker/?utm_term=.90772aac4c29, July 27, 2017.

8 Eastern Racine County Transportation Task Force. "Eastern Racine County Sub area Multi-modal Transportation Plan". August 16, 2018. https://projects.511wi.gov/fdr/wp-content/uploads/sites/407/ERCTTF_081618digital.pdf

Mount Pleasant and Caledonia pay a proportionate share of the total ridership.⁹ As RYDE struggles to maintain currently-offered services, expanding the system to connect Racine to Foxconn is not possible without an additional funding source or dramatic fare increases.⁹

This policy analysis is focused on providing a public transportation connection to Foxconn for Racine, and uses the most current employment projection of 3,000 workers by 2020,⁷ and a long term projection of 13,000 workers.⁴ Mount Pleasant's residents tend to be more economically secure, have fewer mobility challenges than residents living in Racine, and have more access to Foxconn than those living in Racine due to the location of Foxconn. With a considerably older housing stock and little land for new construction, Racine's property values are typically lower than Mount Pleasant's and Caledonia's.¹⁰ Racine residents' median household income is about \$20,000 less than that of Mount Pleasant residents, 22% of City residents live in poverty, 13% of households have no vehicle, and the City's unemployment rate is more than double that of Mount Pleasant.¹¹ Providing a transit connection for Racine residents in the short-term is critical to ensuring they have an opportunity to enjoy the economic benefits available.

⁹ Maierle, Mike. Class lecture at the University of Wisconsin-Milwaukee. Nov 10, 2018.

¹⁰ Connolly, Amy. Class lecture at the University of Wisconsin-Milwaukee. Nov 8, 2018.

¹¹ All data from tables B19013, S0802, and DP03, 2012-2016 American Community Survey 5 Year Estimates.

CRITERIA

Effectiveness: The preferred alternative will provide a public transportation option to Foxconn that serves at least 15% of Racine-based Foxconn employees by October 2020.

Rationale: Foxconn set a goal to have at least 30% of Foxconn employees commuting to work in modes other than single-occupancy vehicles⁹ once the facility has reached its long-term employment projection of 13,000 employees.⁴ Cutting that goal in half to at least 15% is more reasonable given the current lack of transportation options to Foxconn from Racine while still ensuring an increase in Racine's alternative transportation mode choices.¹² Foxconn's latest timeline projection has the first production line slated to start operation by October 2020.¹³

Cost: The preferred alternative must be cost-neutral for Racine without negatively impacting RYDE's current service.

Rationale: Based on Racine's current budget and the fiscal challenges to sustain current transit services (RYDE), a solution that requires additional financial investment is not feasible.⁹ Maintaining current service levels is critical for residents with transportation barriers who should be served by the preferred alternative.

Equity: The preferred alternative will be affordable for all Racine-based Foxconn employees.

Rationale: One of ERCTTF's transportation improvement objectives is to "ensure transit is affordable for users and non-users."⁸ Affordability will be measured by ensuring the lowest paid Foxconn employee from Racine will pay no more than 10% of their income when served by the preferred alternative. Personal finance budget estimates recommend spending no more than 10% of monthly income on transportation-related expenditures.¹⁴

Political Feasibility: The preferred alternative must be approved by municipalities that contract with RYDE.

Rationale: Racine, Mount Pleasant, and Caledonia all contract RYDE to serve their municipalities and must support the preferred alternative. These municipalities have historically had opposing political agendas, and reaching consensus is not guaranteed,¹⁵ but is vital to the success of the preferred alternative.

¹² Racine City carpooling rate is 11% and transit ridership rate is 2.8%. Means of Transportation to Work by Selected Characteristics, 2012-2016 American Community Survey 5-Year Estimates, https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS_16_5YR_S0802&prodType=table

¹³ Thomas, Arthur. "One-third of Foxconn site prepped, but training challenge remains". *Biz Times*, August 20, 2018. <https://www.biztimes.com/2018/industries/construction/one-third-of-foxconn-site-prepped-but-training-challenge-remains/>

¹⁴ "Home Budget: Cost-of-Living Reality Check." <https://www.quicken.com/home-budget-cost-living-reality-check>, 2018.

¹⁵ Jung, Trevor. Class Presentation at University of Wisconsin-Milwaukee, Nov. 15, 2018.

ALTERNATIVES

Alternative #1: Increase Housing Density Near Foxconn Campus

This alternative suggests Foxconn build medium to high density housing units incorporating New Urbanist or Traditional Neighborhood Design (TND) principles within walking or biking distance of the Foxconn campus (within one half mile) to prevent spatial mismatch. Spatial mismatch occurs when employment is located a long distance from housing units the average employee can afford according to their employment wages. This results in long commute times, added highway congestion, and increased travel expenses. This alternative will reduce the need and expense of transporting employees from neighboring municipalities allowing current budgets and funding to service future efforts more efficiently.

Foxconn's rendering concepts support on campus housing (Appendix A), but the current B-P Business Park zoning ordinance Sec. 90-651.(c)(2) specifically prohibits residential uses.¹⁶ These housing units should vary in size and generally reflect the projected income of Foxconn employees which is said to average \$53,000+ annually.¹⁷ The housing units should be for rent/lease/sale exclusively to new Foxconn employees at a subsidized rate encouraging employees to reinvest their earnings locally, and furthering development in the local economy. The advantages of building medium to high density type units are seen in the reduced municipal cost in supplying infrastructure for the developments and additional revenues from increasing property value taxes. This could allow resources to be invested in mass transit servicing the surrounding areas of Racine County.

Current plans are being explored to increase new housing options for the estimated 10,500 new housing units needed to accommodate the increased workforce.¹⁸ The current number of skilled workers in the area is not sufficient to fill the projected employment needs the Foxconn development demands according to recent reports from top Foxconn officials. This reinforces the need for additional housing for workers moving to the area.^{19,20} Locating a portion of these new housing units near the Foxconn development reduces the need for additional transportation and reduces the strains on surrounding transportation infrastructure and investment towards transportation improvements.

Mount Pleasant has a vacancy rate of 5.7% for rentals and 1.7% for homeowners showing current housing stock is inadequate to accommodate the increase in population associated with the Foxconn development.²¹ Additionally, most of the housing stock is low density with 64.55% of single family detached homes and 35.45% townhomes or multi-family units. New medium to high density housing options should start construction as soon as possible to accommodate the growing need for new workers moving into the area. The average time to construct a 20+ unit building from

16 "Comprehensive Plan of Redevelopment". *Village Department of Economic Development*, February 2018.
https://docs.wixstatic.com/ugd/6ff5fd_1d40f5b56ff646a1b8a37910895f8d4e.pdf

17 "Racine Count Welcomes Foxconn". *Foxconn Racine County*.
https://docs.wixstatic.com/ugd/6ff5fd_5b050802668a40c3a161e20c0dfa853.pdf

18 "Housing: Impacts and Opportunities of the Foxconn Development". *Foxconn Racine County*.
https://docs.wixstatic.com/ugd/6ff5fd_c0a918db797e4c6b913e265c8347239e.pdf

19 Romell, Rick. "Report says Foxconn thinking about using Chinese workers...". *The Journal Sentinel*. Nov 6, 2018.
<https://www.jsonline.com/story/money/business/2018/11/06/report-foxconn-thinking-using-chinese-workers-company-denies/1904579002/>

20 Romell, Rick. "Foxconn will need engineers from Asia...". *The Journal Sentinel*. Nov 9, 2018.
<https://www.jsonline.com/story/money/business/2018/11/09/foxconn-need-engineers-asia-wisconsin-consultants-say/1934260002/>

21 Town of Mount Pleasant Demographic Report, 2017. <https://www.tompsc.com/DocumentCenter/View/9819/Annual-Demographics-Report---2017?bidId=>

permitting application to completion in 2014 was 14.9 months with smaller projects taking just under a year.²² To keep this development sustainable, prevent excessive spatial mismatch, and reduce the overall cost associated with commuting, this alternative provides Foxconn employees housing that can substantially reduce commute times and encourage the use of non-automobile commute modes.

Alternative #2: Maintain Status Quo

Given the uncertainty of the workforce needs at Foxconn, the “maintain status quo” alternative recommends waiting until more information is available. Original projections from July 2017 estimated Foxconn would directly create 13,000 jobs-- 75% assembly and 25% knowledge workers.²³ By October, Wisconsin Economic Development Corporation (WEDC) estimated only 38% would be assembly workers,²⁴ which Foxconn estimated to be as low as 10% in August 2018.²⁵ This means two-thirds of workers will need higher education and technical skills,²⁶ which will likely change the geographic source and demographic profile of the workforce.²⁷ Knowledge workers will likely have different transit needs than assembly workers.⁹ Maintaining the status quo avoids implementing an alternative if the workforce needs continue to change dramatically.

Uncertainties about the Foxconn building also make transit planning near the campus difficult. In the summer of 2018, Foxconn changed from a “Gen 10.5” facility to a smaller, less expensive “Gen 6,” which changed the building’s physical footprint, machinery, and labor needs.²⁴ Additionally, no site plan exists, further limiting the city’s ability to plan physical stops and routes.⁹ Foxconn’s Director of Strategic Initiatives has added uncertainty by saying that although Racine County will get most of the jobs as specified in the contract, “a great deal” will go outside of the county and that “the plans...have been modified, updated, and some...we don’t actually know whether they are true anymore”.²⁴

With so much speculation, transit solutions are at risk of being modified at the cost of any time, money, or resources invested. Maintaining the status quo encourages waiting to implement new transit until more information is available. Furthermore, the lack of information makes it difficult to evaluate the impact new transit may have on existing transit. For example, bus fares are a critical source of RYDE funding and account for nearly 25% of their operating budget.⁹ New public transit and increased connectivity could impact bus ridership, fare revenue, and routes -- positively

22 Shao, Na. “How Long Does It Take to Build an Apartment Building?” *National Association of Home Builders Discusses Economics and Housing Policy*, Aug 26, 2015. <http://eyeonhousing.org/2015/08/how-long-does-it-take-to-build-an-apartment-building/>

23 “Foxconn Considers Bringing Chinese Workers to Wisconsin as U.S. Labor Market Tightens”. *The Wall Street Journal*. Jie, Yang, Raice, Shayndi, Morath Eric. Nov. 6, 2018 <https://www.wsj.com/articles/foxconn-considers-bringing-chinese-personnel-to-wisconsin-as-u-s-labor-market-tightens-1541505600>

24 Romell, Rick. “Foxconn will need thousands of workers...”. *Milwaukee Journal Sentinel*. May 2018. <https://www.jsonline.com/story/money/business/2018/05/04/foxconn-need-thousands-workers-entry-level-skills/578022002/>

25 Burke, Michael. “Foxconn Exec: 13k jobs ‘absolutely attainable’”. *The Journal Times*. August 22, 2018. https://journaltimes.com/business/local/foxconn-exec-k-jobs-absolutely-attainable/article_49bb4c42-ecdd-5a10-a453-b30363e95c72.html

26 Schmid, John. “Foxconn forces Wisconsin to confront acute shortage of automation-age tech workers”. *Milwaukee Journal Sentinel*, July 27, 2017. <https://www.jsonline.com/story/money/business/2017/07/09/foxconn-forces-wisconsin-confront-lack-modern-tech-workers/452102001/>

27 Muhs, Kevin. Class Presentation at University of Wisconsin-Milwaukee, Nov. 6, 2018.

or negatively.²⁸ Without more information, it is difficult to accurately evaluate the impact of new transit alternatives.

Initially, Foxconn showed support for public transit options and announced a company goal of 30% of workers commuting by non-single occupancy vehicles.⁹ While this has not been mentioned again, this alternative can observe and encourage Foxconn to take more ownership of transportation to their facility. Maintaining the status quo could free up time and personnel. This could provide the city time to explore current transit issues, like connecting residents west to existing job centers, using actual, current data.²⁸

This alternative is considered given that transportation to Foxconn is, to a degree, being addressed by the state and region. For example, Foxconn requires \$126 million of road expansion.²⁸ To fund and manage construction, Racine County transferred jurisdiction to the state until work is complete. Extensive transit recommendations have also been completed by the Wisconsin Department of Transportation (WisDOT), Southeastern Wisconsin Regional Planning Commission (SEWRPC,) and Eastern Racine County Transit Task Force (ERCTTF).²⁷

Both SEWRPC and ERCTTF developed regional transit recommendations for Foxconn, with the input of multiple Racine County municipalities.⁸ The existing recommendations are diverse and thorough but require substantial political support and funding.^{8,29} SEWRPC notes that many of the recommendations are currently excessive because Foxconn is only set to employ 3,000 workers by 2020.²⁷ This alternative recommends that the city waits for more information about Foxconn and observes the response of WisDOT, SEWRPC, and ERCTTF to better position the city's recommendations. In the interim, however, the city should continue to engage with these existing planning efforts and advocate for the transit needs in Racine.

Alternative #3: Bus Transit Funded by a County Sales Tax

A county sales tax could be levied to fund the bus transit alternatives recommended by ERCTTF (some based on SEWRPC's suggestions) for better transit connectivity between Racine, surrounding municipalities, and Foxconn. Some of the different bus options proposed include regional and local solutions like commuter and local bus routes that run East-West from Racine to Foxconn. These options could help increase the number of Racine residents and other potential Foxconn employees who commute to Foxconn using a more sustainable and affordable transportation mode than single-occupant vehicles.

Racine county residents have been paying a special sales tax for the Miller Park baseball stadium (the baseball stadium tax) since 1996. This 0.1% sales tax district is comprised of five counties³⁰ and is used to pay off the debt incurred by building the stadium.³¹ The tax is collected in addition to the 5% statewide sales tax, meaning that purchases in Racine County are taxed at 5.1%. When the stadium tax is retired in 2019 or 2020, the total sales tax in Racine County will drop from 5.1% to 5% state sales tax.³² Racine County is among the few counties statewide that does not have a

28 Delagrave, Johnathon. Class Presentation at University of Wisconsin-Milwaukee, Nov. 8, 2018.

29 Southeastern Wisconsin Regional Planning Commission. *Vision 2050 Summary*. December 2016 <http://www.sewrpc.org/SEWRPCFiles/Vision2050/PlanSummaryDec2016.pdf>

30 Milwaukee, Ozaukee, Waukesha, Racine, and Kenosha counties.

31 Nelson, James B. "Miller Park sales tax generated nearly \$31 million last year and could be retired in 2019 or 2020". *Milwaukee Journal Sentinel*. <https://www.jsonline.com/story/news/local/milwaukee/2018/03/15/miller-park-sales-tax-generated-nearly-31-million-2017-3-increase/425308002/>, March 15, 2018.

county sales tax despite other neighboring and more conservative counties, like Washington County, who collect an even higher county sales tax (0.5%).³¹

This alternative recommends that Racine County continues the 0.1% special stadium sales tax after its sunset date and levy the same percentage as a county tax for transportation. Ensuring Racine County residents do not incur any additional tax burden is essential for elected officials representing conservative constituents. The continuation of a county sales tax for transportation with the same percentage as the special stadium tax (0.1%) limits increased tax burdens. The new revenue could then be reallocated towards funding the ERCTTF supported transit recommendations that connect residents to Foxconn's development. Foxconn is expected to positively impact Racine County including individual cities and towns, so funding transit to connect residents to Foxconn would be in the best interest for all, including Racine.²⁸ Based on sale tax revenues from previous years, we estimate Racine County could receive about \$2.36M annually from continuing this 0.1% county sales tax for its own use.³³ This revenue could help fund ERCTTF-supported transit options to improve the East-West connection for Racine City residents to Foxconn, as well as other corridors connecting residents from neighboring municipalities. The estimated cost of bus transit options ranges from \$392,000-\$720,100 annually for local bus routes and \$715,000 for express routes (with an initial capital cost of \$1.5M).²⁷

Other counties of similar size, land use distribution, and demographic composition have implemented a county sales tax for transportation. For example, Scott County, MN approved a 0.5% sales tax increase in 2015 that is solely for the use of funding transportation improvement projects. Scott County's recent increase in economic activity and changing demographics has highlighted a need to enhance their transit system within the County, particularly for improved suburban fixed route service and for more transit options to employment centers.³⁴ Scott County neighbors Hennepin County which is where Minneapolis is located and is comparable to Racine County's situation (i.e. composition, geographical proximity to a larger city). Racine can look to similar counties like Scott County as an example to help persuade Racine County and its residents to support the continuation and reallocation of the 0.1% countywide sales tax for transit improvements.

Alternative #4: Commuter Vanpool Program

This alternative proposes a commuter vanpool to connect Racine City residents to the Foxconn development. A vanpool transports employees who live near one another and share similar schedules to form a group using a van provided by a transit agency, municipality, or employer for commuting to and from work.³⁵ Many transit agencies are implementing vanpools to complement their existing services and expand services to new developments.

Vanpools provide transit connections for commuters living in areas that are not financially feasible to serve through fixed-route transit. Employees enjoy a travel time comparable to driving alone and significant cost savings over single-occupancy vehicle commutes. Employers appreciate

32 Schaaf, Mark. "New projection issued for end of Miller Park tax". *The Journal Times*. https://journaltimes.com/news/local/new-projection-issued-for-end-of-miller-park-tax/article_e224f910-f023-5c64-8e66-67491c068cb4.html, March 8, 2017.

33 Schaaf, Mark. "Stadium impact unclear: Miller Park's economic benefit for Racine County small, at best". *The Journal Times*. https://journaltimes.com/news/local/stadium-impact-unclear-miller-park-s-economic-benefit-for-racine/article_f9828aea-f9c0-11e3-be2a-0019bb2963f4.html, June 21, 2014.

34 Scott County, Minnesota. "Transportation Tax Implementation Plan" <https://www.scottcountymn.gov/DocumentCenter/View/6321/Final-Transportation-Tax-Plan>, May 12, 2015.

35 Regional Transportation Authority. "How to Your Community Transit Ready." https://www.rtachicago.org/sites/default/files/documents/plansandprograms/landusetod/TransitGuide_Interactive.pdf, Aug. 2012.

that vanpools help eliminate barriers to consistent work attendance, such as car trouble. Many employers give preferred parking spots for vanpools, further incentivizing employee participation. Municipalities and transit agencies choose to use vanpools as a flexible and cost-effective way to provide specific transportation connections for hard-to-serve riders.³⁶ Given that Foxconn has yet to determine final employment projections, a vanpool would allow the City to test for transit demand to Foxconn without the significant financial investment fixed-routes require.³⁷

PACE transit system in Chicago, IL has been successfully using vanpools since 1991 to connect commuters in six suburban Chicago counties from their homes to employment centers.³⁸ To form a vanpool, a group of 5-13 employees with similar schedules register with PACE as a vanpool.³⁹ One vanpool member is designated as the driver and rides for free. Drivers park the vans at their homes and may use the van for personal trips up to 300 miles per month. Riders pay a monthly fee based on commuting mileage and the number of riders in the pool; back-up drivers receive a \$10 monthly discount. Fees cover all the costs of the vanpool, including fuel, maintenance, insurance, tolls, roadside assistance, and van washes. Riders can be reimbursed for travel costs associated with needing to leave work early due to a personal emergency for up to \$125 per year. The driver pays a \$250 deposit (or provides a credit card number) and riders pay \$75 deposits, which are refundable depending on vehicle condition. PACE provides a free vanpool matching service for riders with over 5,000 registered participants.

Based on PACE's vanpool fares, riders coming from Racine to Foxconn would likely pay between \$73 to \$117 a month, depending on the number of vanpool riders.³⁹ As the monthly cost of commuting the same distance alone is approximately \$270 per month (not including insurance and car payments)⁴⁰, vanpool riders could expect to dramatically cut monthly commuting costs anywhere from 57% to 73%. Vanpool riders stand to save even more through the Commuter Choice program⁴¹ which allows employees to set aside part of their pre-tax income for employer-provided vanpool vouchers.

The Village of Carpentersville, IL explored utilizing PACE's vanpool program to help provide an East-West connection for residents to job centers on opposite sides of the Village.⁴² Similar to the situation in Racine, the Village struggled to provide their residents, many with more barriers to mobility than those in surrounding municipalities, with reliable and timely commute options. The Village noted their relatively high carpooling rate of 12% and low transit ridership rate of 2.1% as potential demand for vanpool services. Ultimately, the Village found that a vanpool could provide connections to work more efficiently and effectively than fixed-route services could. Given

36 Community Transportation Association of America. "How to Create a Vanpool Program." http://web1.ctaa.org/webmodules/webarticles/articlefiles/How_To_Vanpool.pdf, Summer 2016.

37 Obodzinski, Charlotte. Long-range Planner with PACE. Phone interview on Oct. 8. 2018.

38 McLary, James J. "PACE (Northern Illinois)." <https://www.apta.com/resources/mobility/profiles/Pages/Pace.aspx>, Jan. 24, 2011.

39 PACE. "Vanpool Programs". http://www.pacebus.com/sub/vanpool/traditional_vanpool.asp, 2018.

40 Commute Solutions. <http://www.commutesolutions.com/commute-cost-calculator/> using an average round trip commute of 22 miles from downtown Racine to the Foxconn development site.

41 Internal Revenue Code [(26 USC 132(f))], <https://www.irs.gov/pub/irs-pdf/p15b.pdf>, 2018

42 Village of Carpentersville. "Transit Improvement Plan." <https://www.cville.org/Services/Community-Development/Planning-and-Zoning/Transit-Improvement-Plan.aspx>, Dec. 2014.

that Racine has similar rates of carpooling (11%) and transit ridership (2.8%), demand for vanpool services likely exists.⁴³

PACE utilized federal funds from a Congestion Mitigation and Air Quality (CMAQ) grant to pay for their vans with rider fees covering the rest of the costs. Vanpooling is one of the few activities eligible for full funding with a CMAQ grant with no required match. As Racine County is currently designated a maintenance area by the EPA⁴⁴, RYDE would be eligible for this grant. To help administer the program, RYDE could partner with WisDOT's RIDESHARE program which helps connects those looking for a carpool.⁴⁵ WisDOT may be able to assist RYDE in creating a matching system at little additional cost.

Another option would be to partner with the vehicle rental company Enterprise. The Northern Arizona Intergovernmental Public Transportation Authority (NAIPTA) did exactly this when piloting its vanpool program.⁴⁶ By doing so they did not have to invest capital costs into vans. Instead, they paid \$400 per vanpool to Enterprise, a fee they were able to recoup from the riders. Kate Morerly from NAIPTA found that the partnership with Enterprise allowed for experimentation with their vanpool without the investment in vehicles or additional staff.

Partnering with Foxconn to promote and administer the vanpool program would further reduce future costs for RYDE. Foxconn has a vested interest in ensuring worker access and is ideally poised to help connect employees to form vanpools.

A vanpool would specifically help Racine residents who may not have the opportunity to work at Foxconn due to the high costs of vehicle ownership and single-occupancy commuting. Furthermore, Racine would risk far less capital and be able to model potential demand for a future fixed-route service by utilizing a vanpool.

EVALUATION

Alternative #1: Increase Housing Density Near Foxconn Campus

Effectiveness: This alternative does not meet this criterion. The concept behind locating housing a half mile from the Foxconn campus does not accommodate any of the Racine-based Foxconn employees. However, this alternative could bolster funding alternatives that pass this criterion through savings due to a reduced need for commuting from Racine to Foxconn and increase Racine's alternative transportation mode choices.

Cost: This alternative meets this criterion. Foxconn will provide the funding investment for the housing development and does not seek funding from Racine or current transit services (RYDE).

Equity: This alternative does not meet this criterion. The concept behind locating housing one half mile from the Foxconn campus does not accommodate any of the Racine-based Foxconn employees.

43 Means of Transportation to Work by Selected Characteristics, 2012-2016 American Community Survey 5-Year Estimates, https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS_16_5YR_S0802&prodType=table

44 EPA. Counties Designated "Nonattainment" or "Maintenance." <https://www3.epa.gov/airquality/greenbook/map/mapnmpoll.pdf>, Oct. 31, 2018.

45 WisDOT RIDESHARE program, <https://wisconsindot.gov/Pages/travel/road/rideshare/default.aspx>, 2018.

46 Community Transportation Association of America.

Political Feasibility: This alternative meets this criterion. Based on several expert opinions, Racine County municipalities have shown intergovernmental support related to the changes the Foxconn development brings to the region. The local nature of this alternative is projected to be accepted by Racine, the Village of Mount Pleasant, and the Village of Caledonia.

Alternative #2: Maintain Status Quo

Effectiveness: This alternative does not meet this criterion. No fixed route or commuter public transit options currently connect Racine residents to the future Foxconn campus. In the short-term, Foxconn intends to employ 3,000 workers by October 2020.⁷ Waiting for concrete information to implement public transit will not ensure 15% of Racine-based Foxconn employees have an affordable transportation option.

Cost: This alternative meets this criterion. Assuming RYDE's operational budget does not change, doing nothing means the city is not spending any additional dollars on bus transit, thus remaining cost-neutral. This allows RYDE to reallocate resources to best serve the community in its current state rather than guessing Foxconn's ever-changing needs.

Equity: This alternative does not meet this criterion. While current bus service (transit) is more affordable than individual automobile ownership, it still may be financially inaccessible for some individuals, especially since the system does not effectively connect Racine to Foxconn's site.

Political Feasibility: This alternative meets this criterion. Conflicting interests between the municipalities in Racine County can lead to a political stalemate. This can prevent any transit alternatives from being evaluated or implemented. Waiting on more concrete information is politically feasible by default, because consensus may not be achieved.

Alternative #3: Bus Transit Funded by a County Sales Tax

Effectiveness: This alternative meets this criterion. ERCTTF's East-West bus transit options are likely to provide at least 15% of Racine-based Foxconn employees with public transportation to Foxconn. Many regional transit authorities who use a sales tax to support transit provide sufficient enough service to have continued ridership hinting that 15% is a feasible target to reach.

Cost: This alternative does not meet this criterion. According to some estimates, the baseball stadium tax may sunset later than the 2020 projection due to lower than expected sales tax revenues.⁴⁷ In that event, this alternative would not be able to be funded by October 2020 without increasing Racine County's tax burden despite the tax's ability to raise enough revenue to support bus transit annually.

Equity: This alternative meets this criterion. Based on a \$25,000/year income estimate for typically low-wage positions such as a janitor or a cafeteria worker, the transportation budget for these employees would be \$2,500/year or \$208.33 a month. This is \$143 more than the regular cost of a 30-day RYDE bus pass (\$65 per month).⁴⁸

⁴⁷ Murphy, Bruce. Miller Park Tax Ends in 2020. Not⁴⁷. *Urban Milwaukee*, March 20th, 2018.
⁴⁸<https://urbanmilwaukee.com/2018/03/20/murphys-law-miller-park-tax-ends-in-2020-not/>

Political Feasibility: This alternative does not meet this criterion. Based on several expert opinions, Racine County municipalities have indicated support for transit solutions that connect workers to Foxconn⁴⁹; however, consensus for a county sales tax would need support from more than just the three municipalities that contract RYDE may still be hard to reach with more conservative municipalities throughout the County (i.e. Yorkville).

Alternative #4: Commuter Vanpool Program

Effectiveness: This alternative meets this criterion. Based on the success of other vanpool programs in municipalities facing similar challenges, and the current high rate of carpooling in Racine, this alternative would likely be utilized by at least 15% of Racine-based Foxconn employees. High rates of carpooling in conjunction with low transit ridership is considered a good indication of latent demand for vanpooling services.⁵⁰

Cost: This alternative meets this criterion. The costs of the vans can be paid fully through CMAQ grants and the operational costs are fully paid by rider fees.

Equity: This alternative meets this criterion. Based on a \$25,000/year income estimate for typically low-wage positions such as a janitor or a cafeteria worker, the transportation budget for these employees would be \$2,500/year or \$208.33 a month. This is \$93 more than the highest estimated cost per month for a vanpool rider (\$117 per month).⁵¹

Political Feasibility: This alternative meets this criterion. Vanpools are generally perceived to be similar to employee shuttles, which do not have the stigma associated with bus transit.⁵² Therefore, more conservative municipalities who would not be as supportive of bus transit will likely be supportive of vanpooling.

EVALUATION MATRIX

48 Racine Transit Fares. <https://cityofracine.org/Fares/>, 2018.

49 Class Lectures at University of Wisconsin-Milwaukee by Million, Laura (Nov 15, 2018) Jung, Trevor (Nov 15, 2018), Delagrave, Jonathan (Nov 8, 2018).

50 Village of Carpentersville. "Transit Improvement Plan." <https://www.cville.org/Services/Community-Development/Planning-and-Zoning/Transit-Improvement-Plan.aspx>, Dec. 2014.

51 www.glassdoor.com. Retrieved November 15, 2018.

52 Obodzinski, Charlotte. Long-range Planner with PACE. Phone interview on Oct. 8. 2018.

	Effectiveness	Cost	Equity	Political Feasibility
	serve >= 15% Racine-based Foxconn employees by October 2020	Cost-neutral for Racine City & not negatively impact RYDE's current service	Affordable for all Racine-based Foxconn employees	Approved by municipalities that contract with RYDE
Alternative #1	NO	YES	NO	YES
Increase Housing Density Near Foxconn Campus	Does not include Racine-based Foxconn employees	Requires no additional funding from existing resources	Does not include Racine-based Foxconn employees	Likely to be supported
Alternative #2	NO	YES	NO	YES
Maintain Status Quo	No current transit connects Racine to the Foxconn site	Requires no additional expenditure & freedom to reallocate existing resources	Current transit provides cost and connectivity barriers for residents	Consensus for other transit alternatives may not be reached
Alternative #3	YES	NO	YES	NO
Bus Transit Funded by County Sales Tax	Likely to serve 15% of Racine-based Foxconn employees	Current stadium sales tax may not end by 2020	Bus costs < 10% of low-wage salaries	Consensus for a county sales tax may not be reached
Alternative #4	YES	YES	YES	YES
Commuter Vanpool Program	Likely serve 15% given current commute mode distribution	Costs covered by CMAQ grant and rider fees	Rider fees < automobile ownership/commuting	Likely to be supported

RECOMMENDATION

Based on our research and evaluation of the four alternatives, we recommend implementing Alternative #4, the commuter vanpool program. This alternative is centered on affordability for Racine and for residents at all income levels. As an EPA designated maintenance area, Racine qualifies to apply for the Congestion Mitigation and Air Quality (CMAQ) grant which can cover 100% of the capital costs while operations can be funded through ridership. The commuter vanpool program does not require capital from Racine and avoids significant investments in infrastructure.

Based on the experiences of other municipalities and current ridership rates in Racine, we estimate that at least 15% of Racine-based Foxconn residents will use the vanpool services. This alternative provides a flexible transit option that can gauge transit demand by Foxconn employees before additional permanent solutions are implemented. The vanpool program can also be adjusted based on the actual Foxconn facility and workforce size. Service can be readily increased or decreased without incurring additional expenses.

A commuter vanpool program has the leading combination of affordability and flexibility, making it more attractive to diverse political parties and interests. A vanpool program was identified as an alternative for East-West connectivity by ERCTTF, which represents leadership from the municipalities that support RYDE, as well as Sturtevant, and already has a degree of buy-in. As transit funding is a top regional concern, we advise concentrating on the CMAQ grant, and emphasizing to other municipalities, that no match is required. We recommend pursuing the CMAQ grant prior to publicly announcing this alternative. This allows Racine to become well-versed in the grant terms and more confident in whether they will be awarded the grant. Finally, to generate more political support for this alternative, we also recommend marketing the vanpool as an employee

shuttle. Employee shuttles do not have the same negative stigma as other public transit options such as bus transportation.

MONITORING

To enroll in the vanpool, each rider must submit a ridership agreement to RYDE that includes their contact information, including address. The data from the ridership agreement can be reviewed quarterly by the RYDE Parking and Transit Manager to monitor if the vanpool is serving 15% of Racine-based Foxconn employees. For equity, RYDE can verify that the Commuter Vanpool Program costs no more than 10% of the gross monthly salary of the lowest-paid Foxconn worker from Racine. To access this information, RYDE can partner with Foxconn to receive updated, anonymous salary information for the lowest paid workers from Racine. To monitor and evaluate the vanpool more broadly, RYDE can collect information and feedback from the vanpool driver and riders, such as absences, trip delays, safety, overall experience, etc. This information can be requested and submitted through simple email surveys sent to the driver/riders. Small monthly discounts can also be used as incentives for feedback.

Appendix A

