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**Community Economic Impact Study of the Proposed
Kenosha-Racine-Milwaukee (KRM) Commuter Rail**

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Executive Summary

This study, undertaken on behalf of the Greater Milwaukee Committee, Kenosha-Racine-Milwaukee (KRM) Leadership Committee, and the Southeastern Wisconsin Regional Planning Commission, examined the economic impact of the proposed Kenosha-Racine-Milwaukee (KRM) commuter rail system on the Southeastern Wisconsin regional economy. The estimated direct and indirect impacts were computed using the Regional Input-Output Modeling System (RIMS II) developed by the Bureau of Economic Analysis of the US Department of Commerce. Final demand multipliers were applied to estimate output, earnings, and employment effects. The impacts on housing values, business development, tourism, local, and state revenue were also analyzed.

The economic impacts of the proposed KRM commuter rail are substantial:

- The proposed project will have a significant impact on the economy, including 4,700 jobs created during construction with a \$560 million impact on the area economy, and 126 jobs during project operations/maintenance with a \$24 million annual impact on economy.
- The proposed project may be expected to expand area tourism from Northeastern Illinois residents. Northeastern Illinois is a significant market for Wisconsin and southeastern Wisconsin tourism. KRM commuter rail provides direct connection to Northeastern Illinois with 12 stations in Lake County and 13 in Cook County (reaching a population of 1.4 million within a 3 mile radius). A mere 1% increase in tourism in the three KRM counties will generate annually: \$20 million expenditures; \$12 million wages; 500 jobs; and \$3 million state and local government revenue.
- The proposed project will have a significant impact on property value. Based on experience across the nation, existing development along the commuter rail line may be expected to experience a 4 to 20 percent and even higher premium in property value. An intermediate 10 percent premium for a one mile corridor along the KRM rail line would represent a \$2.1 billion increase in property value in the three KRM counties.
- The proposed project will support, and bring about significant development and redevelopment around its nine stations. Based on experience across the nation and an in-

depth review of the area around each of the nine KRM stations including existing land use and real estate market, estimates of potential development/redevelopment and land use plans have been developed and endorsed by each station's community. The estimated development/redevelopment within one-half mile of the nine KRM stations includes:

- 23,000 residential units
- 7.6 million square feet of retail space
- 4.7 million square feet of office space
- 71,000 jobs
- \$7.9 billion increase in property value

Without KRM commuter rail, 20 to 50 percent of this potential development would not be expected to take place.

- The proposed project may be expected to have the potential to increase Northeastern Illinois passenger traffic at General Mitchell International Airport (GMIA). Lake County, Illinois currently contributes more passengers to GMIA than any other county, except Milwaukee, Waukesha, Racine, and Dane Counties. KRM commuter rail will have 12 stations in the heart of Lake County communities with frequent (14 round trips) service and a convenient shuttle. Increasing passenger traffic at GMIA will result in more and improved airline service with benefits to maintaining and expanding the southeastern Wisconsin economy.
- The proposed KRM commuter rail will more closely connect southeastern Wisconsin to the Chicago mega-metropolitan area with attendant significant economic impacts. This is one of the few principal economic development priorities being considered by the Milwaukee 7 to drive future area economic growth. KRM commuter rail will more closely link southeastern Wisconsin with the Chicago mega-metropolitan area. Companies such as S.C. Johnson—one of the largest employers in southeastern Wisconsin and the State of Wisconsin—and others have already cited the need for this KRM commuter rail link to northeastern Illinois to retaining and attracting qualified employees, and maintaining and expanding its presence in southeastern Wisconsin.

Economic Impacts of the Proposed Kenosha-Racine-Milwaukee Commuter Rail

Introduction

The proposed Kenosha-Racine-Milwaukee (KRM) commuter rail system would operate 14 daily round trips in a 33-mile corridor with 9 stops and carry an estimated 1.7 million passengers per year. The KRM commuter rail, which will connect to the successful Chicago Metra commuter rail, represents a significant improvement to the public transit and transportation system in the Southeastern Wisconsin region. Total population in the three counties is projected to increase substantially during the next 25 years.

Table 1.

COUNTY	TOTAL POPULATION			TOTAL HOUSEHOLDS		
	2000 Census	2030 Projection	Percent Change	2000 Census	2030 Projection	Percent Change
KENOSHA	149,577	198,258	32.55	56,057	79,720	42.21
RACINE	188,831	214,902	13.81	70,819	85,436	20.64
MILWAUKEE	940,164	1,030,644	9.62	377,729	442,105	17.04
KRM TOTAL	1,278,572	1,443,804	12.92	504,605	607,261	20.34
STATE TOTAL	5,363,715	6,415,923	19.62	2,084,556	2,667,688	27.97

Source: U.S. Department of Commerce, Bureau of the Census

As shown in Table 1, the population of Kenosha County is expected to increase by 32.6 percent between 2000 and 2030. Over this same 30-year period, Racine and Milwaukee Counties are also expected to add 13.8 percent and 9.62 percent to their 2000 population. In total, the population in the three counties is projected to increase by 12.9 percent between 2000 and 2030. The numbers of households in the three counties are projected to increase by about 20.3 percent during the same period.

The three counties account for about 20 to 25 percent of the total population, employment, and workforce of the state, and about 65 percent of the population, employment, and workforce of the seven county Southeastern Wisconsin region.

The proposed KRM commuter rail connects the central business districts of the three counties which, along the 33 mile corridor, will be more accessible to the surrounding communities. The KRM commuter rail also connects the three central business districts and counties with northeastern Illinois, specifically, Lake and Cook Counties. The population, households, and employment of Lake County are about half that of the three counties, and of Cook County are about four times that of the three counties. This improved access will bring significant economic development in the three-county area in particular, and, as well, the southeastern Wisconsin region and the State of Wisconsin. The identification of these economic development impacts is the subject of this study. In the following sections, the distribution of employment by industry in the corridor counties is reviewed, the potential economic benefits of the proposed transit system are examined, and the effect of the project capital and operating expenditures on the regional economy is estimated.

Potential Economic Benefits

A transit project of the magnitude of the proposed KRM commuter rail will affect the surrounding areas in a variety of ways. Examination of the development of similar transit systems across the nation reveals that such projects have affected users, businesses, local and state government, land development and redevelopment, tourism, accessibility, and traffic congestion. Impact studies have concluded that the implementation of commuter rail systems affect regional economic growth. Examples from different regions will be drawn upon in this study to demonstrate this experience.

Users benefit from commuter rail systems because commuter rail provides them with a fast, safe, convenient, and reliable means of travel to/from work, shopping, and other recreational activities. This benefit is desirable to society because of improved access to jobs, healthcare, entertainment, arts and culture, especially for low-income populations.

Businesses along a transit corridor are exposed to a wider market with greater potential for expansion. Such expansion leads to improved job access and creation. Increased employment will benefit the three-county area in particular and the region in general. A Wisconsin Department of Transportation funded study concluded that “Every \$10 million invested in transit capital projects yields \$30 million in business sales and 300 jobs, and the same investment in transit operations generates \$32 million and 600 jobs”.¹ Increases in jobs and business sales translate to more revenue (in the form of taxes/fees) for **local and state governments**. Cities and/or counties benefit from increased revenues.

Land development accompanies major transit developments. The construction and operation of new train stations, besides creating a significant number of construction jobs will also lead to land development and redevelopment in the areas surrounding the stations and improvements in property value.

Tourism is one of the areas that benefit from transit improvements. This includes increased attendance at recreation and sports facilities. Population projections show that the KRM counties have the continued potential to support a significant expansion of the art, cultural, and entertainment centers along the commuter rail corridor. The area will influence and be influenced by the neighboring Northeastern Illinois counties. A boost in tourism in the KRM counties can have significant economic impacts on the southeastern Wisconsin region. Kenosha, Racine, and Milwaukee are among the largest counties in the State. Job growth in the restaurant and hotel business will be expected to increase. Since the proposed corridor extends from Milwaukee to areas of northeastern Illinois, the economic impact will be quite substantial as the area receives more out-of-state visitors.

One of the desirable outcomes of the proposed commuter transit system will be an **improvement in accessibility and reduction in vehicle traffic and congestion**, and attendant pollution as the general population relies more on the commuter trains. The HLB Economics Inc. report, referenced above, also concluded that “Transit availability can reduce the need for additional

¹ *The Socio-Economic Benefits of Transit in Wisconsin*, HLB Economics Inc., Final Report, December 2003.

cars”.² For the nearly 15 percent of population of the three KRM counties who do not own a car, the KRM commuter rail will provide high quality access to jobs, which otherwise could not be reached.

Each of the benefits categories described above will be discussed further in this report. Transit developments elsewhere in the nation have been associated with these improvements, especially an increase in housing demand and attendant development/redevelopment and property value increases in the areas in the immediate proximity of the stations and the rail lines. This study draws from studies completed on existing and proposed transit systems development across the nation.

The American Public Transportation Association in a report entitled *Public Transportation and the Nation's Economy*³ addressed the issues of job creation and business revenue impacts of investment in public transit. The study supported the findings of others that there is a “significant positive economic impact of transit investment on jobs and business revenues”⁴ as well as other indirect benefits. Investment in public transit, such as the KRM commuter rail produces changes in travel behavior, construction and building activity, and land use development. These changes lead to increases in gross regional product, income, business profits, and government revenues. The key findings of the APTA study can be summarized as follows:

- Each \$10 million investment in public transit capital investment will generate 314 jobs; \$30 million in business sales, and a \$15 million saving in transportation costs to users (including fuel and congestion costs).
- Each \$10 million investment in transit operations expenditure creates over 570 jobs, generates \$32 million in business sales, and produce positive fiscal impacts.
- For each \$10 million investment in transit capital, \$2 million in business output and \$0.8 million in personal income are generated in the short-run – during the first year. By the

² See footnote 1.

³ *Public Transportation and the Nation's Economy*, A study by Cambridge Systematics conducted on behalf of the Business Members of the American Public Transit Association, October 1999.

⁴ See footnote 7.

20th year, the same investment will generate \$32 million in business output, and \$18 million in personal income increases.

- Other benefits such as quality of life, land use changes, social welfare, and cost reductions due to congestion decreases, and all other environmental benefits are also significant.

The successful implementation of the proposed KRM commuter rail can contribute towards improvement of the business climate of the Southeastern Wisconsin region. This region has suffered severely from the recent economic downturn, especially in the manufacturing sector. Studies have shown that the region has had difficulties retaining qualified labor, and also attracting new businesses. A major transit development in this region, such as the KRM commuter rail, can begin to address some of these problems. The proposed transit system will assist in attracting and retaining workers in the region.

Most of the nation's metropolitan regions have made significant investments in transit systems because of the potential future benefits of increased jobs, revitalization of business and recreation centers, and the expansion of local and regional tax base. In St. Louis, for example, a 25-year transit modernization is expected to generate \$2.3 billion in business sales. In Chicago, a similar 20-year strategy is expected to produce \$4.6 billion.⁵ Businesses welcome transit development such as the proposed KRM commuter rail because it provides access to an expanded labor pool. Substantial gains can also be made by businesses as they save on employee time lost to delay, accident or injury on the road. Also, businesses may save on parking spaces as more employees use public transit.

The results outlined above depend on the characteristics of the area. Rural areas, for instance, do not benefit as much as urban areas in housing and land development. Land and housing values tend to increase significantly in urban areas. Another important factor is the demographics. The areas along and surrounding the transit corridor should have population density that can support demand for transit. The KRM commuter rail extension project is located within some of the most densely populated parts of the Southeastern region of Wisconsin. Kenosha, Racine, and

⁵ http://www.apta.com/research/info/online/ben_overview.cfm

Milwaukee counties account for about 65 percent of the total population of the seven county Southeastern Wisconsin region, and 23 percent of the state population.

The Commuter Rail Corridor

The proposed KRM expansion corridor will stretch for 33 miles connecting some of the fastest growing areas of the Southeastern Wisconsin region. Within one mile of the proposed route, the population distribution in the three-county area is as follows: 55,835 in Kenosha County, 168,446 in Milwaukee County, and 78,834 in Racine County according to the 2000 census. Total population, in 2000, along a one-mile area of the route is 303,115. Within a three-mile corridor along the proposed rail track, the population in Kenosha County, according to the 2000 decennial census, is 102,187; Racine County is 124,494; and Milwaukee County is 335,223 in the same area. Total population across the three-county area along a 3-mile stretch of the corridor is 561,904. In a five-mile area around the rail in the corridor the total population is 809,030 (see Table 2). Estimates for 2005 are based on the Census Bureau's estimates for population. These

Table 2
Population and Housing along the KRM Commuter Rail Corridor

Area and County	Total Population		Total Housing Units	
	2000	2005 [†]	2000	2005 [†]
One-Mile Corridor				
Kenosha	55,835	59,073	22,573	23,476
Racine	78,834	80,647	31,594	32,858
Milwaukee	168,446	166,762	79,217	80,009
	303,115	306,482	133,384	136,343
Three-Mile Corridor				
Kenosha	102,187	108,114	40,720	42,349
Racine	124,494	127,357	50,106	52,110
Milwaukee	335,223	331,871	145,258	146,711
	561,904	567,342	236,084	241,170
Five-Mile Corridor				
Kenosha	115,515	122,215	45,596	47,420
Racine	136,485	139,624	54,598	56,782
Milwaukee	557,030	551,460	237,075	239,446
	809,030	813,299	337,269	343,648

Source: U.S. Census Bureau, Wisconsin Dept. of Workforce Development, and ISPR estimates

[†] Estimate

are 306,482 along the 1-mile area, 567,342 along the 3-mile area, and 813,299 along the 5-mile area along the corridor.

Table 2 also shows the data for housing units along the one-mile, three-mile and five-mile corridors of the KRM counties. Total housing units within the one, three, and five-mile corridor in the counties of Kenosha, Racine, and Milwaukee are 133,384, 236, 084, and 337,269, respectively. The 2005 total housing estimates for the same counties (KRM) are 136,343, 241,170, and 343,648 units, respectively (see Table 2). Development of housing is expected to be more concentrated in areas around 3 miles within the rail line.

Table 3
Average Industrial Employment (2000 - 2005)

County	Industry	Period					
		2000	2001	2002	2003	2004	2005
	All Industries						
Kenosha		51,038	50,405	50,720	51,602	52,961	55,591
Racine		79,185	77,056	75,620	75,215	75,879	75,931
Milwaukee		528,923	521,349	506,872	499,055	491,924	490,157
	Construction						
Kenosha		2,146	2,141	2,197	2,298	2,314	2,526
Racine		3,569	3,717	3,861	3,741	3,915	3,528
Milwaukee		14,060	13,365	12,839	12,595	12,390	12,363
	Education & Health Services						
Kenosha		10,298	11,313	11,730	12,561	12,908	13,083
Racine		14,151	14,164	14,518	14,758	14,752	14,917
Milwaukee		116,315	120,403	122,000	121,226	121,270	121,429
	Manufacturing						
Kenosha		12,689	11,626	10,828	10,507	10,232	10,464
Racine		23,693	21,584	19,904	19,614	19,013	18,730
Milwaukee		81,820	75,744	69,570	66,215	64,448	62,851

Source: WI DWD, Bureau of Workforce Information, Quarterly Census of Employment & Wages, June 2006

Table 3 shows the average employment in the KRM corridor counties for selected industrial sectors – construction, education and health services, and manufacturing. Manufacturing is a very important sector in Southeastern Wisconsin. Employment in this sector declined

substantially during the last recession. However, there are signs of recovery in this sector. The proposed KRM commuter rail may help the effort by both government and business to improve manufacturing in the region. Other important sectors in this corridor include construction, education and health services. The latter accounts for a substantial proportion of average industrial employment in the three counties (see Table 3).

KRM – County Demographic, Social, and Economic Characteristics

In this section the general demographic, social and economic characteristics of the three counties are presented. For a successful implementation of a commuter rail transit system the target area must have the population density to support such development. The three counties that will be impacted by the proposed transit development represent some of the most densely populated areas of the state. Kenosha, Racine, and Milwaukee counties, together, account for 22.5 percent of the population of Wisconsin. Total population in Kenosha County increased from 149,577 in 2000 to 156,308 in 2005. In Racine County the total population increased from 188,831 in 2000 to 190,368 in 2005. In Milwaukee County the total population declined from 940,164 in 2000 to 897,972 in 2005, and the population of non-whites increased from 302,449 in 2000 to 323,058 in 2005. Some of the decline is as a result of out migration to neighboring suburban counties. The Hispanic or Latino population increased substantially in the three counties from 2000 to 2005 – an increase of 32.0 percent in Kenosha, 20.2 percent in Racine, and 19.7 percent in Milwaukee. The median age is slightly higher in Kenosha and Racine compared to Milwaukee (see Table 4).

Housing units increased substantially between 2000 and 2005 in the three counties – Kenosha, Racine and Milwaukee. Similarly the median housing value increased in the three counties during the same period (see Table 4). The median household income in 2005 was higher in Kenosha County (\$53,035), followed by Racine County (\$50,465). Milwaukee County, at \$37,808, recorded the lowest median household income in 2005. The demographic social and economic characteristics of these three counties are summarized in Table 4 below. In later sections some of these variables will be used in analyzing the economic impact of the proposed transit development on the region.

Table 4
Demographic, Social and Economic Characteristics
Regional Economic Impacts of the KRM Commuter Rail

	Kenosha		Racine		Milwaukee	
	2000	2005	2000	2005	2000	2005
Total population	149,577	156,308	188,831	190,368	940,164	897,972
Male	74,149	77,165	93,457	93,357	450,574	431,230
Female	75,428	79,143	95,374	97,011	489,590	466,742
Median age (years)	34.8	36.8	36.1	37.6	33.7	35.2
White	132,193	135,993	156,796	159,917	616,973	557,062
Non-White	14,526	17,677	28,876	27,289	302,449	323,058
Hispanic or Latino	10,757	14,202	14,990	18,022	82,406	98,623
Household population	145,553	156,308	183,360	190,368	916,054	897,972
Average household size	2.6	2.7	2.6	2.5	2.4	2.4
Total housing units	59,989	65,568	74,718	79,121	400,093	404,974
Occupied housing units	56,057	58,715	70,819	74,839	377,729	378,056
Owner-occupied housing units	38,716	42,197	50,004	53,674	198,752	209,504
Vacant housing units	3,932	6,853	3,899	4,282	22,364	26,918
Median value (dollars)	120,900	165,500	111,000	157,800	103,200	145,700
Population 25 years and over	95,038	101,868	122,356	125,020	594,387	574,014
Disability status (population 5 years and over)	23,695	18,673	28,218	24,003	169,939	128,539
In labor force (population 16 years and over)	77,980	84,683	96,933	102,245	469,688	448,486
Mean travel time to work in minutes (workers 16 years and over)	25.3	26.0	22.0	21.0	21.9	21.0
Median household income (in 2005 inflation-adjusted dollars)	46,970	53,035	48,059	50,465	38,100	37,808
Per capita income (in 2005 inflation-adjusted dollars)	21,207	23,465	21,772	25,230	19,939	22,530

Source: U.S. Census Bureau, 2000 and 2005 American Community Surveys.

Direct Regional Impacts

The capital expenditures planned for the proposed KRM transit system represent a significant infusion of capital into the economies of the counties along the corridor. In the analysis that follows, expenditures are treated as changes in demand for goods and services in the relevant industrial sectors. The expenditures will have impact, primarily, on two sectors – construction

and transit and ground transportation. Appropriate multipliers for output, earnings, and employment are applied to individual components of the total planned capital expenditures.

Table 5
Direct and Total Regional Economic Impacts

Industry	Cost (\$ millions)	Economic Impact	
		Output/Earnings (\$ millions)	Employment
Transportation			
Vehicles	\$47.9		
Multipliers			
Output	2.1505	\$103.0	
Earnings	0.7119	\$34.1	
Employment	32.1184 ⁶		1,538
Construction			
Stations	14.9		
Track and signals	126.5		
Storage and servicing	9.1		
Total Construction	\$150.5		
Multipliers			
Output	2.1481	\$323.3	
Earnings	0.6724	\$101.2	
Employment	20.9908 ³		3,159
Totals	\$198.4	\$561.6	4,697

Source: Southeastern Wisconsin Regional Planning Commission and ISPR

The data used for the regional economic impact analysis is based on the latest estimates of KRM commuter rail capital and operation costs. The total capital cost of \$198.4 million is divided into two industrial sectors for the purpose of applying the appropriate multipliers (see Table 5). The Bureau of Economic Analysis RIMS II final demand multipliers for the region are applied to the construction and transportation industries.

⁶ Number of jobs per \$1 million spent on the project.

The total economic impacts for the Region are \$561.6 million and 4,697 additional full-time equivalent jobs (see Table 5), as a result of the capital costs of \$198.4 million of the proposed KRM commuter rail. The economic impacts of the expenditure of \$47.9 million in the purchase of transit vehicles are \$103.0 in output, \$34.1 million in earnings, and 1,538 jobs. The economic impacts of constructing stations, track and signals, and storage for a total of \$150.5 million are \$323.3 million in output, \$101.2 million in earnings, and 3,159 full-time jobs.

Indirect and Induced Impacts

The estimated annual operating costs for the KRM commuter rail are \$11.1 million. This includes train operation and maintenance and repairs of the vehicles, track, and stations along the commuter transit route. The economic impact of the operation of the KRM commuter rail is an estimated \$24 million in output and earnings, and 126 additional full-time jobs. Output in this case represents the value added to the gross state product due to changes in the regional goods and services resulting from the transit operating expenditure.

Table 6
Indirect Economic Impacts

	Operating Costs (\$ millions)	Economic Impacts	
		Output/Earnings (\$ millions)	Employment
Operating expense	\$10.9		
Direct Effect			
Output	1.7639	\$19.2	
Earnings	0.4318	\$4.7	
Employment	11.5294		126
Totals	\$10.9	\$23.9	126

Source: Southeastern Wisconsin Regional Planning Commission and ISPR

The economic impacts were estimated using the BEA’s RIMS II multipliers to project the impacts on the output of goods and services, earnings, and employment as shown in Table 6. The

impact of the annual operating expenditure of \$10.9 million is estimated at \$19.2 million in output, \$4.7 million in earnings, and 126 jobs (see Table 6).

Both the direct and indirect effects as analyzed above result in substantial earnings in the economy. Most of the induced effects from these expenditures will be in the form of increased revenues to the state and local governments as the relevant taxes are paid from the generated earnings. There is also the spillover effects of spending by the additional workers added to the regional economy.

Impact on Tourism

A survey conducted as part of a study by HLB Decision Economics, Inc.⁷ determined that most, or about 48 percent, of Wisconsin transit riders' trips were made for the purpose of going to work; 23 percent of the trips were for education purposes; 11 percent were for medical purposes; and 18 percent were for shopping, tourism, or recreation. In the same survey, the respondents were asked to state their choices if public transportation was not available. The summary of their responses is presented in Table 7 below.

Table 7

Work Purpose Rider's Choices in the Absence of Transit

Not be able to work	18.8 %
Look for another job (closer to home)	22.2 %
Adjust working hours	4.9 %
Work at home	3.4 %
Use another means of transportation	48.0 %
Other	3.0 %
Total	100.0 %

Source: HLB Decision Economics Inc, Final Report 2003

The result of this survey supports the findings of others that more people will work, and travel to and from work, with the availability of frequent and reliable transit service, such as the proposed

⁷ The Socio-Economic Benefits of Transit in Wisconsin, Final Report by HLB Decision Economics Inc, 2003

KRM commuter rail. Similarly, more people may be expected to travel to and from arts, culture, and entertainment venues. The proposed KRM project connects three major economic centers in Southeastern Wisconsin. The extension will improve access to centers for the arts, culture and entertainment, especially in the Milwaukee downtown. The three counties account for a significant amount of tourism in Southeastern Wisconsin, and tourism may be expected to continue to increase. The amount of increase in tourism depends on a number of factors, and the KRM commuter rail may be expected to affect the amount of increased tourism.

The proposed transit system is expected to impact the corridor counties, and the whole region, by providing:

- Improved access to sports facilities, museums, art and movie theatres, restaurants, and sports bars.
- Major boost to tourism as traveler spending increases due to accessibility.
- Opportunity to develop more tourist attractions in other areas along the corridor.

According to the Wisconsin Department of Tourism, in Southeastern urban Wisconsin, during 2005, travelers spent a total of \$891 million in the summer, \$658 million in the fall, \$504 million in the winter, and \$573 million in the spring. Southeastern urban Wisconsin is made up of Kenosha, Milwaukee, Racine, and Waukesha. In total, travelers spent \$2.6 billion in Southeastern urban Wisconsin in 2005. Table 8 shows the distribution of tourism in Kenosha, Milwaukee, and Racine counties from 2000 to 2005.

Table 8

Tourism in Wisconsin

Traveler Expenditure – 2000 - 2005 (\$ millions)

County	2000	2001	2002	2003	2004	2005
Kenosha	198.1	208.2	199.0	202.4	205.2	211.4
Milwaukee	1,531.4	1,616.4	1,593.5	1,585.9	1,550.2	1,545.0
Racine	229.3	230.0	229.9	231.5	237.3	250.1
KRM Total	1,958.8	2,054.6	2,022.4	2,019.8	1,992.7	2,006.5
State Total	11,046.5	11,446.5	11,565.8	11,709.9	11,781.2	11,950.1

Source: Wisconsin Department of Tourism

The three corridor counties account for approximately 18 percent of total tourism expenditures in the state. Tourism in these counties is expected to get a major boost by the development of KRM commuter rail system. The experience of other parts of the country, for example, the San Diego commuter rail corridor, supports this expectation. Studies conducted by the Wisconsin Department of Tourism shed some light on the magnitude of the impact of tourist dollars to the regional economy. In Table 9 below the impact of traveler expenditure in the corridor counties is shown.

Table 9
TOURISM IN THE CORRIDOR COUNTIES - 2005

County	Population	Traveler Expenditure	Wages Generated from Tourism	Full-time Jobs Supported	Local Revenue from Tourism	State Revenue from Tourism	Rank in State
Kenosha	158,219	\$211m	\$87m	4,958	\$9.5m	\$23m	16th
Racine	193,239	\$250m	\$154m	6,413	\$11m	\$31m	11th
Milwaukee	938,995	\$1.5b	\$914m	38,673	\$69m	\$181m	1st

Source: Wisconsin Department of Tourism

From the above table, it can be seen that tourist dollars have a very substantial impact on the economy of the area. For each million dollars spent by travelers in Kenosha, for example, \$412,322 is generated in wages, local governments realize \$45,024 in revenue, state revenue is increased by \$109,000, and 23 jobs are created in the area. Similarly, a million dollars spent by travelers in Racine results in \$616,000 in additional wages, \$44,000 in local revenue, \$124,000 in state revenue, and 26 full-time jobs. In Milwaukee, a million dollars of traveler spending supports 26 full-time jobs, generates \$609,333 in wages, \$46,000 in local revenue, and \$120,667 in state revenue (see Table 10a).

Table 10 a
Economic Impact of Tourism

County	2005 Traveler Expenditure (\$ millions)	Impact of \$1 million of Traveler Expenditure			
		Wages	Full-time Jobs	Local Revenue	State Revenue
KENOSHA	211	\$412,322	23	\$45,024	\$109,005
RACINE	250	\$616,000	26	\$44,000	\$124,000
MILWAUKEE	1,500	\$609,333	26	\$46,000	\$120,667

Source: Wisconsin Department of Tourism and ISPR

Below, the potential economic impact of the KRM commuter rail is examined under three scenarios. Table 10b depicts what the impacts will be if the KRM commuter rail development increases tourism by 1 percent, 5 percent, and 10 percent, respectively.

**Table 10b
Impact of Potential Traveler Expenditure Under Different Scenarios**

Corridor Counties	1 Percent	5 Percent	10 Percent
Additional Traveler Expenditure (\$ thousands)			
KENOSHA	\$2,110	\$10,550	\$21,100
RACINE	\$2,500	\$12,500	\$25,000
MILWAUKEE	\$15,000	\$75,000	\$150,000
Total	\$19,610	\$98,050	\$196,100
Additional Wages Generated (\$ thousands)			
KENOSHA	\$870	\$4,350	\$8,700
RACINE	\$1,540	\$7,700	\$15,400
MILWAUKEE	\$9,140	\$45,700	\$91,400
Total	\$11,550	\$57,750	\$115,500
Additional Full-time Jobs Supported			
KENOSHA	50	248	496
RACINE	64	321	641
MILWAUKEE	387	1,934	3,867
Total	501	2,503	5,004
Local Revenue Generated (\$ thousands)			
KENOSHA	\$95	\$475	\$950
RACINE	\$110	\$550	\$1,100
MILWAUKEE	\$690	\$3,450	\$6,900
Total	\$895	\$4,475	\$8,950
Additional State Revenue Generated (\$ thousands)			
KENOSHA	\$230	\$1,150	\$2,300
RACINE	\$310	\$1,550	\$3,100
MILWAUKEE	\$1,810	\$9,050	\$18,100
Total	\$2,350	\$11,750	\$23,500

Source: Wisconsin Department of Tourism and ISPR

It is clear from the above analysis that the regional economic impact of a boost in tourism in the corridor counties will be quite substantial. For example, a 10 percent increase (\$196 million) in traveler expenditure due to the KRM commuter rail, will generate a total of \$115.5 million in additional wages, 5,004 additional full-time jobs, \$8.9 million in additional local revenue, and \$23.5 million in additional state revenue (see Table 10b). Tourism is just one economic impact that can be associated with the implementation of a commuter rail transit system. In the next section other components of economic impact attendant to transit oriented developments are examined.

Transit Oriented Development

Transportation is considered a very important factor driving not only economic growth but also patterns of development. According to the American Public Transportation Association (APTA) there is convincing evidence that light rail, heavy rail, and commuter rail have positive impacts on the values of surrounding residential and commercial properties. The Center for Transit-Oriented Development in its study entitled “Hidden in Plain Sight: Capturing the Demand for Housing Near Transit”⁸ concluded that:

- All regions that are expanding their fixed guideway transit systems (including commuter rail) have the potential for high rates of growth in housing demand.
- More than double the number of families currently within a half-mile of existing and planned rail systems will seek housing near transit by the year 2005.
- The emerging demand would require 2,100 additional residential units near each existing fixed guideway transit station in the nation.
- Tremendous opportunities exist for those communities with fixed guideway, transit systems.

Most of the observed improvements have been within a mile of the transit lines and stations. As shown in Table 2, the population within a one-mile corridor along the KRM commuter rail route is 303,115 – about 24 percent of the population of the three counties. The population within three miles of the KRM corridor counties is 563,452. The number of housing units within three miles of the corridor is 249,000. These areas of the corridor are most likely to be affected by the

⁸ The Center for Transit-Oriented Development, September 2004

proposed KRM commuter rail. It may be expected that the value of housing within this strip of the corridor will increase as people seek residence closer to the commuter rail stations. The estimated median housing value in Kenosha County is \$165,500 in 2005. For the same period, the median values for Racine and Milwaukee counties are \$157,800 and \$145,700, respectively. Evidence from studies of other commuter rail transit systems indicate that growth in housing values can reasonably be expected of between 3.8 percent (lower bound) and 20.0 percent (upper bound) over and above normal appreciation. Specifically, considering the experience with the San Diego Commuter rail, as the San Diego Commuter rail system has a lot of similarities to the proposed KRM system, the area near transit stations in San Diego experienced the following premiums in housing value according to the National Association of Realtors⁹:

- 46 percent premiums for condominiums
- 17 percent premiums for single-family homes
- 14 percent premiums for multi-family housing
- 91 percent premiums for parcels near downtown Coaster (commuter rail) stations

Using these results we can reasonably expect that housing values will increase an average of an additional 16.5 percent along the corridor, upon the completion of the KRM commuter rail. Benefits may also be expected for business investments and development, including retail establishments.

In Table 11, the median values of owner-occupied housing in the three counties are shown for one, three, and five mile corridors along the proposed transit route and for each county as a whole. At the county level, housing values tend to be higher in Kenosha. This is likely due to its proximity to Chicago, where housing prices are substantially higher than in southeastern Wisconsin. The KRM commuter rail will provide high quality transit access to Northeastern Illinois from Southeastern Wisconsin, and may be expected to attract persons from Illinois where housing prices are higher. This will be an additional influence on increasing housing value along the KRM commuter rail line in Kenosha, Racine, and Milwaukee Counties.

⁹ Robert Cervero and Michael Duncan, *Land Value Impacts of Rail Transit Services in San Diego County*, Report prepared for the National Association of Realtors, Urban Land Institute.

Table 11
Median Value of Owner-occupied Housing Units along
the KRM Commuter Rail Corridor

	2000	2005(Estimate)
County-Wide Values		
Kenosha	\$118,200	\$165,500
Milwaukee	\$100,500	\$145,700
Racine	\$110,200	\$157,800
Values Along a One-Mile Corridor		
Kenosha	\$104,233	\$134,023
Milwaukee	\$131,090	\$171,758
Racine	\$87,410	\$113,777
Values Along a Three-Mile Corridor		
Kenosha	\$103,394	\$132,945
Milwaukee	\$89,361	\$117,083
Racine	\$96,531	\$125,650
Values Along a Five-Mile Corridor		
Kenosha	\$103,479	\$133,053
Milwaukee	\$81,408	\$106,662
Racine	\$101,083	\$131,575

Source: U.S. Census Bureau and ISPR estimates

Most of the new development and redevelopment influenced by the KRM commuter rail, especially in housing, will be concentrated within a one-mile corridor along the proposed commuter rail route. In this area, housing value in Kenosha is \$134,023; \$171,758 in Milwaukee; and \$113,777 in Racine (see Table 11). The higher value for Milwaukee is largely due to the location of the line and value of lakeside properties, and the significant amount of downtown housing development. In Table 12, below, the estimated housing value premiums due to development of the KRM commuter rail are shown for the respective one, three, and five mile corridors. Studies of existing commuter rail housing value premiums showed that the areas with the least increase recorded a housing value premium of only 3.8 percent. On the upper bound some areas recorded 20.0 percent and greater increases. A mid level of 10.0 percent is presented as in intermediate or most likely estimate.

Table 12
Potential Impact of Transit Development on Median Housing Values along the KRM Transit Corridor

	Housing Units (2005)	Median Value (Dollars)	Value Before Transit Development (\$millions)	Premium Due to Transit Development (\$ millions)		
				Lower Bound	Mid-Level	Upper Bound
				3.8%	10%	20%
One-Mile Corridor						
Kenosha	23,476	\$134,023	\$3,146	\$120	\$315	\$629
Milwaukee	80,009	\$171,758	\$13,742	\$522	\$1,374	\$2,748
Racine	32,858	\$113,777	\$3,738	\$142	\$374	\$748
Total				\$784	\$2,063	\$4,125
Three-Mile Corridor						
Kenosha	42,349	\$132,945	\$5,630	\$214	\$563	\$1,126
Milwaukee	146,711	\$117,083	\$17,177	\$653	\$1,718	\$3,435
Racine	52,110	\$125,650	\$6,548	\$249	\$655	\$1,310
				\$1,116	\$2,936	\$5,871
Five-Mile Corridor						
Kenosha	47,420	\$133,053	\$6,309	\$240	\$631	\$1,262
Milwaukee	239,446	\$106,662	\$25,540	\$971	\$2,554	\$5,108
Racine	56,782	\$131,575	\$7,471	\$284	\$747	\$1,494
				\$1,495	\$3,932	\$7,864

Source: U.S. Census Bureau and ISPR estimates

Along the one-mile corridor, where most of the transit-oriented development and housing value premium is expected, total housing values in Kenosha County would increase from \$3.1 billion to between \$3.2 billion and \$3.8 billion at the completion of the construction of the KRM commuter rail. In Milwaukee County, the increase is from \$13.7 billion to between \$14.2 billion and \$16.5 billion. For Racine County, the increase is from \$3.7 billion to between \$3.9 billion and \$4.5 billion. Thus, with the KRM commuter transit system, total housing values in the KRM

counties are expected to increase between 3.8 percent and 20.0 percent. At 3.8 percent (the least growth potential), the total housing values in the one-mile corridor along the 3-county transit route would increase by \$784 million. At 20.0 percent this increase would be \$4.1 billion (see Table 12).

In addition to increases in property value, the KRM commuter rail will have a significant impact on supporting land development and redevelopment in the area surrounding its nine stations. Under the KRM Corridor Study/Draft Environmental Impact Statement¹⁰, the land uses in the areas surrounding each of the proposed commuter rail stations for a one-half mile radius were evaluated to identify the potential for land use development and redevelopment. The analysis determined that commuter rail will have the potential to result in more efficient higher density land development and redevelopment around stations in the corridor and help reduce urban sprawl. It would encourage desirable needed and planned development in the central cities of Milwaukee, Racine, and Kenosha and in the inner, older suburbs of Cudahy, St. Francis, and South Milwaukee; and it would encourage higher density more efficient development in the developing communities of Oak Creek, Caledonia, and Somers. Commuter rail may be expected to support, and assist in bringing about, planned development around its 9 stations of up to 23,000 residential units, 71,000 jobs, 7.6 million square feet of retail space, and 4.7 million square feet of office space. An estimated 12,800—or about 55 percent—of the residential units; and an estimated 17,100—or nearly a quarter—of the jobs would be expected to occur only if commuter rail development went ahead. The economic impact of commuter rail around the stations in the KRM corridor would represent an increase in assessed valuation of about \$7.9 billion and an increase in retail sales of about \$750 million. This does not include the increase in property value of existing development around the commuter rail stations and line as discussed previously, or the spillover of development and redevelopment, and increased land and property values which will occur in neighborhoods beyond a one-half mile radius of the stations.

Benefits of Increased Use of GMIA

As development along the corridor progresses, General Mitchell International Airport (GMIA) may be expected to become increasingly significant as a regional transportation hub. Almost 50

¹⁰ Southeastern Wisconsin Regional Planning Commission, *Transit-Oriented Land Use Technical Report*, 2006

percent of passengers who use the GMIA reside in the three KRM counties. Another 5 percent reside in neighboring Illinois counties; including 3 percent from Lake County alone (see Table 13). Another 23 percent reside in the other four counties of the southeastern Wisconsin Region, and the remaining 22 percent from the remainder of the State of Wisconsin. GMIA is developing into a major regional airport for both southeastern Wisconsin and the Chicago regions.

Table 13

GMIA Passenger Residence by County - 2005

Southeastern Wisconsin Counties	
<i>KRM Counties</i>	
Kenosha	1.8%
Milwaukee	42.9%
Racine	4.9%
<i>KRM Counties Total</i>	49.6%
<i>Other SE WI Counties</i>	
Ozaukee	3.1%
Walworth	2.6%
Washington	3.1%
Waukesha	14.7%
<i>Other SE WI Counties Total</i>	23.5%
SE WI Counties Total	73.0%
Other Wisconsin Counties	
Brown	1.3%
Dane	3.9%
Dodge	1.0%
Fon du Lac	1.5%
Outagamie	2.8%
Rock	1.0%
Sheboygan	2.3%
Other	7.7%
Total	21.6%
Illinois Counties	
Cook	1.0%
Lake	3.3%
Other	1.0%
Total	5.4%

Source: Milwaukee County's General Mitchell International Airport

As the economy of the three county KRM areas expands due to the new KRM commuter rail, air travel and flight schedules at the General Mitchell International Airport will increase. The anticipated increase will result from a boost in demand by both business travelers and tourism.

Table 14, below, shows the number of enplanements – number of passengers boarding a plane at airports in Wisconsin with control towers. Total passenger traffic would be approximately two times the number of persons boarding planes at each airport.

Table 14
Air Carrier Passenger Enplanements

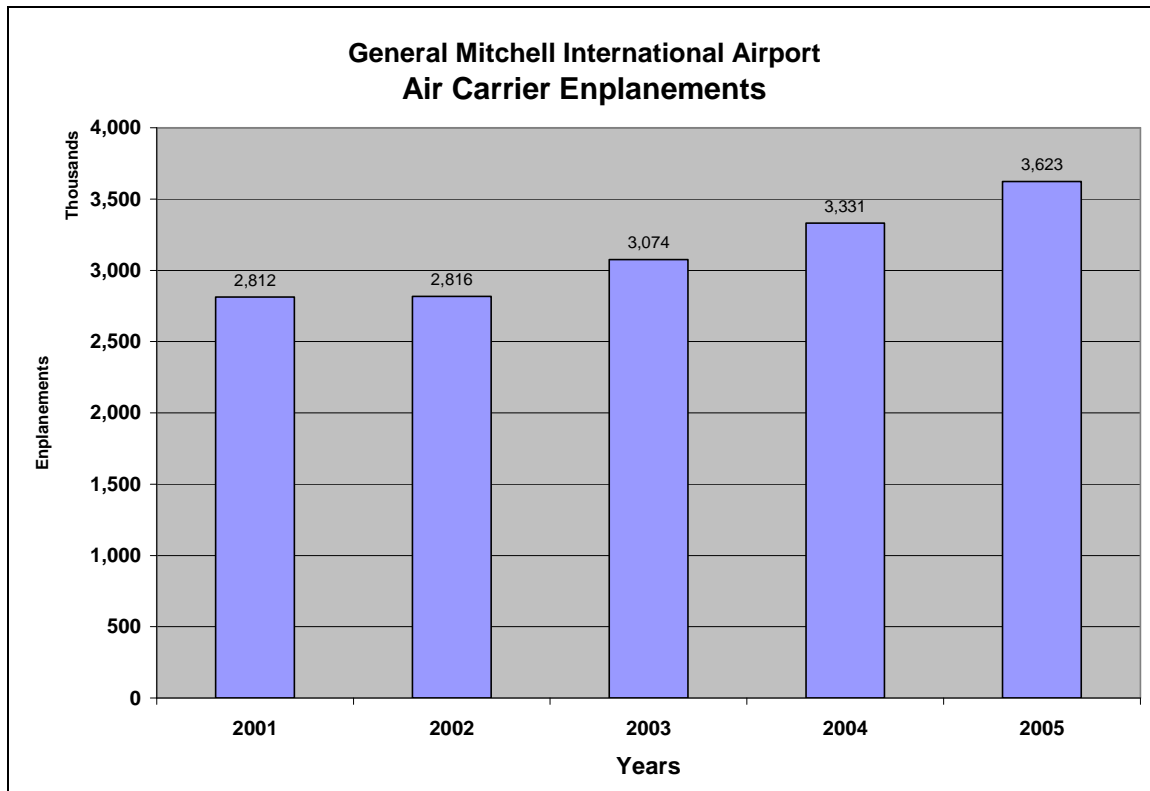
Location/Airport	2001	2002	2003	2004	2005	% Change (04-05)
Milwaukee - General Mitchell International	2,811,954	2,815,984	3,074,422	3,331,255	3,623,106	8.8
Madison - Dane County Regional	674,700	768,475	806,546	847,341	808,606	-4.6
Green Bay - Austin Straubel International	348,086	373,696	393,777	413,312	433,183	4.8
Appleton - Outagamie County Regional	261,395	271,535	261,947	304,504	313,478	2.9
Mosinee - Central Wisconsin	130,897	142,538	150,599	162,883	165,597	1.7
La Crosse - La Crosse Municipal	107,247	110,043	111,033	122,126	123,681	1.3
Eau Claire - Chippewa Valley Regional	21,399	20,229	20,696	24,534	23,812	2.9
Rhineland - Rhineland - Oneida County	27,967	27,701	31,032	38,925	40,706	4.6
Total	4,386,021	4,531,810	4,850,196	5,244,880	5,532,169	5.5

Source: WI Dept. of Transportation, Bureau of Aeronautics, *Wisconsin Aviation Activity 2005*.

Milwaukee County’s General Mitchell International Airport accounted for 65.5 percent of all air carrier passenger enplanements in the State in 2005. Between 2004 and 2005, passenger traffic at the GMIA increased by 8.8 percent (see Table 14). In comparison, the other major airports in the

state experienced only minor increases. Dane County Regional Airport experienced a decline in passenger traffic. From 2001 to 2005 the data on enplanements indicate that passenger traffic at GMIA has increased substantially, especially between 2003 and 2005 (see Chart 1). This trend is expected to continue and may be enhanced with the completion of the KRM commuter rail system.

Chart 1



Source: Wisconsin Department of Transportation

Evidence from studies of other transit systems across the nation suggests a strong correlation between new transit development and increases in business revenues and profits. Revitalization of the KRM counties' businesses as a result of transit development, coupled with other economic impacts on the region will impact GMIA through increased demands for business travel. The role of the GMIA as a major regional airport in Southeastern Wisconsin will be greatly enhanced as the proposed KRM commuter rail begins to link the region to the neighboring areas of Illinois. Thus, passenger travel demand and the attendant schedule of flights at GMIA may be expected to

increase with KRM commuter rail, as a result of increased housing and business growth in the three KRM counties, and improved linkage with Northeastern Illinois, particularly Lake County.

Concluding Remarks

This study, undertaken on behalf of the Greater Milwaukee Committee, Kenosha-Racine-Milwaukee (KRM) Leadership Committee, and the Southeastern Wisconsin Regional Planning Commission, examined the economic impact of the proposed Kenosha-Racine-Milwaukee (KRM) commuter rail system on the Southeastern Wisconsin regional economy. The estimated direct and indirect impacts were computed using the Regional Input-Output Modeling System (RIMS II) developed by the Bureau of Economic Analysis of the US Department of Commerce. Final demand multipliers were applied to estimate output, earnings, and employment effects. The impacts on housing values, business development, tourism, local, and state revenue were also analyzed.

The economic impacts of the proposed KRM commuter rail are substantial:

- The proposed project will have a significant impact on the economy, including 4,700 jobs created during construction with a \$560 million impact on the area economy, and 126 jobs during project operations/maintenance with a \$24 million annual impact on economy.
- The proposed project may be expected to expand area tourism from Northeastern Illinois residents. Northeastern Illinois is a significant market for Wisconsin and southeastern Wisconsin tourism. KRM commuter rail provides direct connection to Northeastern Illinois with 12 stations in Lake County and 13 in Cook County (reaching a population of 1.4 million within a 3 mile radius). A mere 1% increase in tourism in the three KRM counties will generate annually: \$20 million expenditures; \$12 million wages; 500 jobs; and \$3 million state and local government revenue.
- The proposed project will have a significant impact on property value. Based on experience across the nation, existing development along the commuter rail line may be expected to experience a 4 to 20 percent and even higher premium in property value. An intermediate 10 percent premium for a one mile corridor along the KRM rail line would represent a \$2.1 billion increase in property value in the three KRM counties.

- The proposed project will support, and bring about significant development and redevelopment around its nine stations. Based on experience across the nation and an in-depth review of the area around each of the nine KRM stations including existing land use and real estate market, estimates of potential development/redevelopment and land use plans have been developed and endorsed by each station's community. The estimated development/redevelopment within one-half mile of the nine KRM stations includes:
 - 23,000 residential units
 - 7.6 million square feet of retail space
 - 4.7 million square feet of office space
 - 71,000 jobs
 - \$7.9 billion increase in property value

Without KRM commuter rail, 20 to 50 percent of this potential development would not be expected to take place.

- The proposed project may be expected to have the potential to increase Northeastern Illinois passenger traffic at General Mitchell International Airport (GMIA). Lake County, Illinois currently contributes more passengers to GMIA than any other county, except Milwaukee, Waukesha, Racine, and Dane Counties. KRM commuter rail will have 12 stations in the heart of Lake County communities with frequent (14 round trips) service and a convenient shuttle. Increasing passenger traffic at GMIA will result in more and improved airline service with benefits to maintaining and expanding the southeastern Wisconsin economy.
- The proposed KRM commuter rail will more closely connect southeastern Wisconsin to the Chicago mega-metropolitan area with attendant significant economic impacts. This is one of the few principal economic development priorities being considered by the Milwaukee 7 to drive future area economic growth. KRM commuter rail will more closely link southeastern Wisconsin with the Chicago mega-metropolitan area. Companies such as S.C. Johnson—one of the largest employers in southeastern Wisconsin and the State of Wisconsin—and others have already cited the need for this

KRM commuter rail link to northeastern Illinois to retaining and attracting qualified employees, and maintaining and expanding its presence in southeastern Wisconsin.