



# K R M

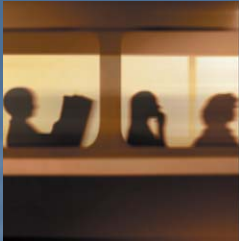
THE KENOSHA-RACINE-MILWAUKEE COMMUTER LINK



## Southeastern Wisconsin Regional Transit Authority

November 20th, 2006

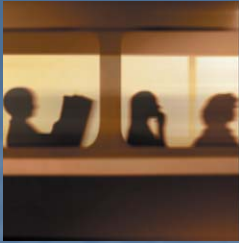
Sponsored by an Intergovernmental Partnership of the Cities and Counties of Kenosha, Racine and Milwaukee, the Wisconsin Department of Transportation and the Southeastern Wisconsin Regional Planning Commission



## *Why Consider a Major Public Transit Improvement in the KRM Corridor?*

- To provide a necessary and desirable alternative to the automobile in a heavily traveled corridor and areas
- To provide a high quality alternative to the automobile during freeway system reconstruction over the next 20 years
- To support and promote higher density infill development and redevelopment, which results in efficiencies for public infrastructure and services, including transportation
- To contribute to efficiency in the transportation system, including reduced highway traffic and congestion, air pollution and energy consumption

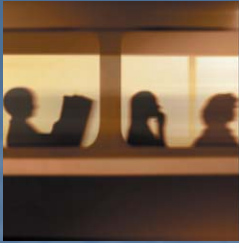




## *Why Consider a Major Public Transit Improvement in the KRM Corridor? (cont.)*

- To meet the travel needs – access to jobs, education, and other – of the significant portion of the population (15% of households) without an automobile
- To enhance economic development by providing improved labor force accessibility
- To enhance quality of life by providing choice of travel mode and to permit the reduction in household expenditures on transportation, permitting greater savings, other expenditures, and a higher standard of living

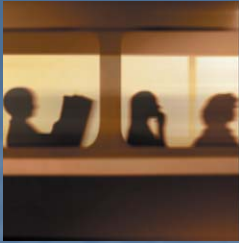




## *Why Consider a Major Public Transit Improvement in the KRM Corridor? (cont.)*

- To better connect southeastern Wisconsin with northeastern Illinois
  - Improved connection should promote economic and population growth in the KRM corridor and southeastern Wisconsin
  - Improved job and labor force accessibility
  - Improve accessibility to and enhance GMIA; arts, culture, and entertainment venues; and colleges and universities



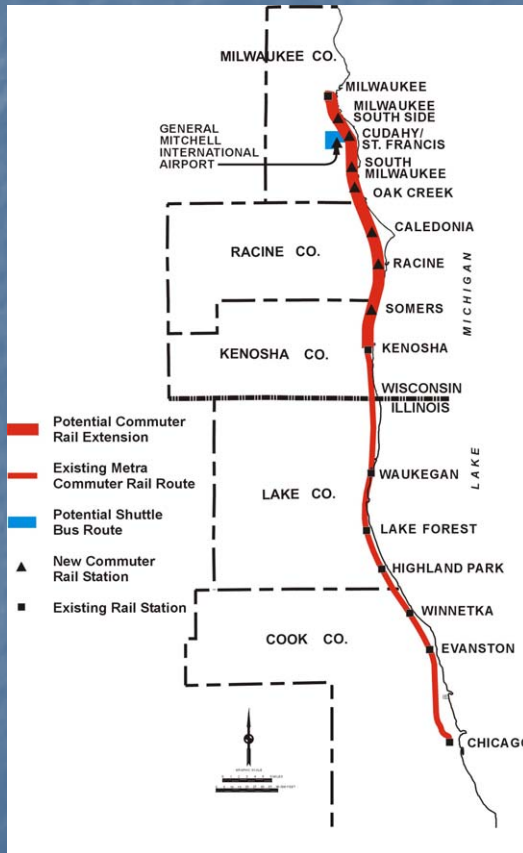


## *Public Transit Alternatives in the KRM Corridor*

- A wide range of alternatives has been considered and has been progressively screened to two potential alternatives
  - Commuter rail
  - Improved bus service over existing streets and highways

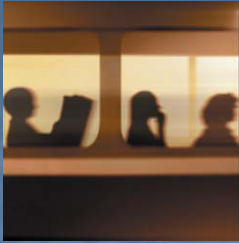


# Proposed KRM Commuter Rail Service



- Connect Milwaukee and Racine to existing Chicago-Kenosha commuter rail
- 33-mile extension using existing Union Pacific Railroad (UP) and Canadian Pacific Railway (CP) freight lines
- 9 stations
  - Existing stations at Kenosha and Milwaukee
  - New Stations at Somers, Racine, Caledonia, Oak Creek, South Milwaukee, Cudahy-St. Francis, and Milwaukee South Side





## *Proposed KRM Commuter Rail Service (cont.)*

- Level of service
  - Service provided in both directions along corridor during all time periods
  - 14 weekday trains in each direction
  - Operating speed – up to 59 mph
  - Average speed – 38 mph
- Shuttle bus service
  - Dedicated service between Amtrak station and Milwaukee central business district
  - Dedicated service between General Mitchell International Airport and Cudahy-St. Francis station

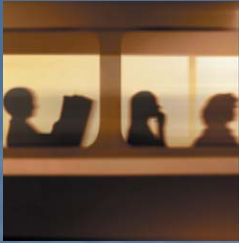




# *Proposed KRM Commuter Rail Service (cont.)*

- Train operation
  - Service provided by meeting existing Metra trains at either Kenosha or Waukegan
    - Two new trains between Milwaukee and Chicago (to Milwaukee in A.M. and to Chicago in P.M.)
    - Contract with UP Railroad and provide timed-transfer (6 minutes) at Kenosha and Waukegan to Metra
  - Diesel-multiple-unit cars (“DMUs” or self-propelled coaches)

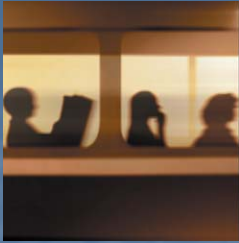




# *Proposed Bus Service Alternative*

- The bus alternative is an improved and expanded bus service
  - The best that can be done with improved and expanded bus service over existing streets and highways to provide a similar service as commuter rail, while maintaining the unique advantages of bus service
  - Expansion and enhancement of the existing Wisconsin Coach Lines service and the MCTS Freeway Flyer Route 48 service
- South of Oak Creek, service routed primarily along STH 32
- North of Oak Creek, service splits into two routes
  - Via South Milwaukee, Cudahy, St. Francis and Milwaukee's South Side along Packard Avenue and Lake Parkway
  - Via Oak Creek and General Mitchell International Airport along STH 100 and IH 94

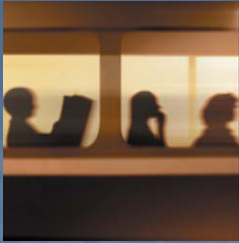




# *Proposed Bus Service Alternative (cont.)*

- 29 stations or stops
  - Existing transit stations at Kenosha and Racine
  - New transit stations at Oak Creek and Cudahy-St. Francis
  - Passenger information systems at selected stations
- Level of Service
  - Service provided in both directions along corridor during all time periods
  - 14-17 weekday buses in each direction
  - Traffic signal prioritization
  - Operating speed – same as street or highway being used
  - Average speed – 20 to 29 mph

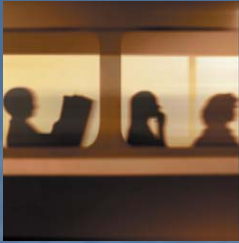




## *Proposed Bus Service Alternative (cont.)*

- Local area service
  - All buses travel the length of the Milwaukee central business district to provide local distribution and collection
  - Direct service to and from General Mitchell International Airport for buses that do not serve South Milwaukee and Cudahy-St. Francis stations
- Coordinated with Metra commuter train service
  - Service provided by meeting existing Metra trains at either Kenosha or Waukegan
    - One new train between Kenosha and Chicago (to Kenosha in A.M. and to Chicago in P.M.)
    - Timed-transfer connections at Kenosha and Waukegan with Metra
- Higher-capacity articulated vehicles

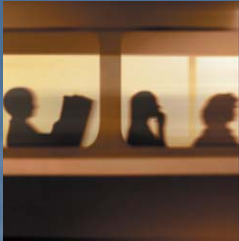




# *Evaluation and Comparison of Commuter Rail and Bus Alternatives*

- Principal differences
  - Travel time and speed
  - Travel reliability, comfort, and convenience
  - Transit ridership
  - Impact on highway system
  - Alternative during IH 94 freeway reconstruction
  - Air pollutant emissions and energy impacts
  - Promoting more efficient development and redevelopment
  - Providing increased accessibility to jobs
  - Encouraging corridor economic development by more closely linking southeastern Wisconsin and northeastern Illinois
  - Providing improved accessibility to General Mitchell International Airport
  - Providing improved accessibility to arts, culture, and entertainment
  - Providing improved accessibility to colleges and universities
  - Capital and operating costs



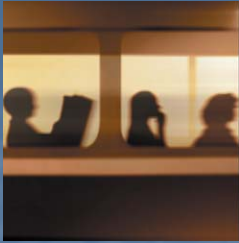


## *Evaluation and Comparison: Travel Time*

- Commuter rail will be much faster than bus in connecting the Kenosha, Milwaukee, and Racine areas to each other and with Northeastern Illinois

	Milwaukee to Kenosha	
	<u>Average Speed</u>	<u>Average travel time</u>
Commuter Rail	38 mph	52 minutes
Bus	20 to 29 mph	83 to 108 minutes

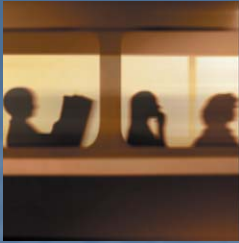




## *Evaluation and Comparison: Travel Reliability*

- Commuter rail would provide the highest level of reliability
  - Operating over a separate non-highway right-of-way, it would not be affected by the unpredictable nature of rush-hour automobile and truck traffic
  - It would have priority over street and highway traffic at crossings and over freight traffic on railroads
  - Inclement weather would have little impact, this being especially important during the winter season

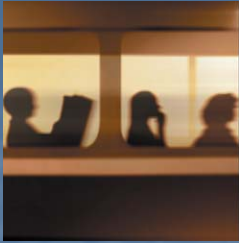




## *Evaluation and Comparison: Comfort and Convenience*

- Commuter rail would provide the highest level of comfort, convenience, and overall attractiveness
  - It can provide a smoother and more consistent ride due to the vehicles operating on a dedicated route alignment that doesn't have interference from other traffic
  - Its route simplicity, dedicated route, and larger stations and equipment make it more visible and therefore easier to use

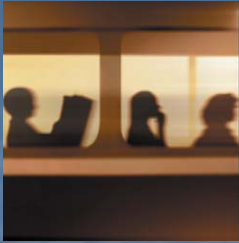




## *Evaluation and Comparison: Ridership*

- Commuter rail may be expected to attract more than twice the ridership than bus
  - On an average weekday, commuter rail will attract 5,600 trips vs. 2,400 for bus
  - Annually, commuter rail will attract 1.43 million trips vs. 0.61 million for bus
  - Commuter rail will attract about twice as many new trips to transit on an average weekday as would bus: 2,200 vs. 1,200

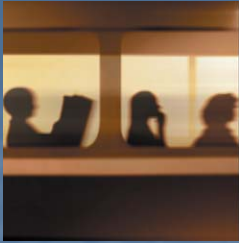




## *Evaluation and Comparison: Passenger-Miles*

- Passenger-miles from commuter rail ridership represent four times the passenger-miles from bus (as a result of attracting longer trips)
  - On an average weekday, commuter rail will attract 90,000 passenger-miles vs. 22,300 for bus
  - Annually, commuter rail will generate 22.9 million passenger-miles vs. 5.7 million for bus

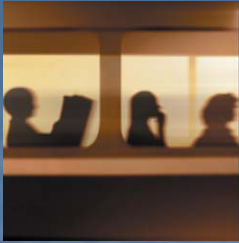




## *Evaluation and Comparison: Impact on Highway System*

- Commuter rail will have a substantially greater impact on highway system traffic and traffic congestion
  - Commuter rail ridership will be 2.3 times that of bus, and passenger-miles will be 4.0 times that of bus
  - “New” trips on transit will be nearly twice as much under commuter rail compared to bus

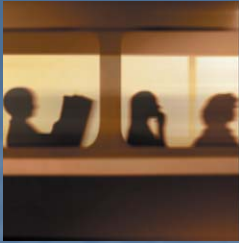




## *Evaluation and Comparison: Alternative During IH 94 Reconstruction*

- Commuter rail will provide a far superior alternative mode of travel during IH 94 reconstruction over the next 20 years compared to a bus alternative
  - Commuter rail will be able to attract significantly more traffic from IH 94 which will be limited in capacity over 10 to 15 years
  - Commuter rail will offer an alternative which will be competitive with automobile travel time and will be unaffected by increased IH 94 freeway and corridor congestion

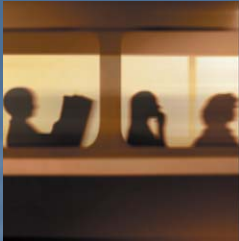




## *Evaluation and Comparison: Air Pollutant Emissions and Energy Consumption*

- Commuter rail would contribute to a greater reduction in vehicle generated air pollutant emissions and vehicle energy consumption in proportion to its potential to attract greater transit ridership, longer trips by transit, and new transit trips
  - Additional reductions in air pollutant emissions and energy consumption may be expected due to commuter rail's potential to encourage more efficient higher density infill development and redevelopment

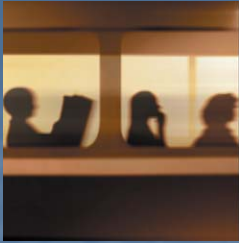




## *Evaluation and Comparison: More Efficient Development and Redevelopment*

- Commuter rail will have the potential to result in more efficient higher density land development and redevelopment around its stations in the corridor and reduce urban sprawl
  - Encourage desirable needed and planned development in central cities of Milwaukee, Racine, and Kenosha and inner, older suburbs of Cudahy, St. Francis, and South Milwaukee
  - Encourage higher density more efficient development in developing communities of Oak Creek, Caledonia, and Somers

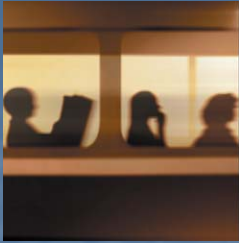




## *Evaluation and Comparison: More Efficient Development and Redevelopment (cont.)*

- Commuter rail may be expected to support, and assist in bringing about, planned development around its 9 stations of up to:
  - 21,100 residential units
  - 71,000 jobs
  - 7.64 million square feet of retail space
  - 4.66 million square feet of office space
- Some of the above development and redevelopment may be specifically attributed to the implementation of commuter rail:
  - 12,800 residential units
  - 17,100 jobs

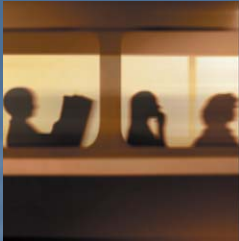




## *Evaluation and Comparison: Economic Impact of Development and Redevelopment*

- Economic impact of potential development around the 9 commuter rail stations totals:
  - Increase in assessed valuation of \$7.8 billion
  - Increase in retail sales of \$750 million
  - This does not include the spillover of development and redevelopment, and increased land and property values which will occur in neighborhoods adjacent to the immediate station areas





## *Evaluation and Comparison: Accessibility to Jobs*

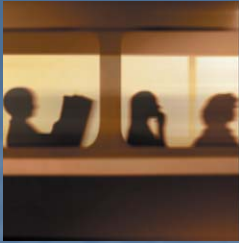
- Due to its higher average speeds and resulting lower travel times, commuter rail will provide greater accessibility to the significant number of jobs in the KRM / northeastern Illinois corridor

### Corridor Jobs (1 mile station radius—Year 2000)

▪ Downtown Milwaukee	110,300
▪ Milwaukee County	21,600
▪ Kenosha and Racine Counties	28,200
▪ Chicago North Shore Suburbs	95,100
▪ Chicago North Side	58,500
▪ Downtown Chicago	599,400

- This corridor provides access to far more jobs than any other potential transit corridor, for example, compared to a Milwaukee – Oconomowoc commuter rail or Milwaukee – Waukesha express bus corridor:
  - More than 4 times more jobs
  - More than 50 percent more jobs (if Downtown Chicago jobs not included)

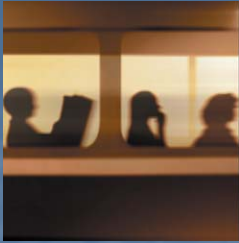




## *Evaluation and Comparison: Accessibility to Jobs (cont.)*

- The KRM commuter rail provides this job access to central city residents, and in particular minority populations, low income populations, and those without an automobile and dependent upon public transit
  - For example, an estimated 245,900, or 41 percent, of City of Milwaukee residents reside within 3 miles of the two proposed KRM train stations in the City of Milwaukee, some within walking distance and others within a short connecting bus or shuttle ride or drive or drop-off by automobile. Of these City residents, 59 %, or 145,400, are minorities (slightly higher than the City as a whole), including 72,100 Black/African Americans and 57,900 Hispanics.
  - The number of jobs accessible to these City of Milwaukee residents (not including downtown Milwaukee) by KRM commuter rail totals over 800,000 jobs in total, 200,000 jobs not including downtown Chicago, and 140,000 jobs not including the Downtown and North Side of Chicago. This can be compared to Milwaukee - Oconomowoc commuter rail and Milwaukee - Waukesha express bus at 80,000 and 100,000 jobs, respectively (also not including downtown Milwaukee).

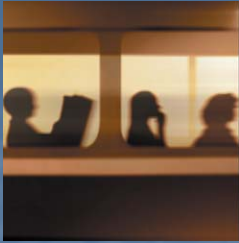




## *Evaluation and Comparison: Corridor Economic Development and Growth*

- Due to its much higher average speeds and shorter travel times, commuter rail will do a significantly better job of more closely connecting Kenosha, Racine, and Milwaukee to each other and to northeastern Illinois and Chicago
  - This improved linkage between southeastern Wisconsin and the mega-metropolitan area of northeastern Illinois may be expected to result in more economic and population growth in the KRM corridor and in southeastern Wisconsin.
  - The potential for future economic growth of southeastern Wisconsin through more closely linking to Northeastern Illinois is one of a few major economic development themes being advanced for southeastern Wisconsin by the Milwaukee 7.
    - Companies such as S.C. Johnson have cited the importance of this link to Northeastern Illinois to retaining and attracting qualified employees, and maintaining and expanding its presence in southeastern Wisconsin.

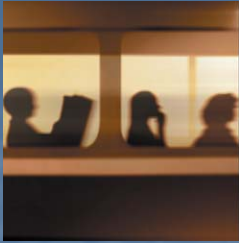




## *Evaluation and Comparison: Benefits for General Mitchell International Airport (GMIA)*

- Commuter rail through its faster speeds and shorter travel times should have greater potential to increase use of GMIA by northeastern Illinois residents
  - A schedule of 14 round trip trains per day will well connect GMIA and northeastern Illinois, and connecting train stations exist in the heart of every North Shore suburb of Chicago as well as the Chicago north side and downtown
  - Increased use of GMIA will ultimately result in improved airline service, including more cities served, more non-stop flights, and improved service frequency, all important factors in promoting southeastern Wisconsin economic development

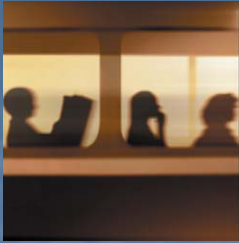




## *Evaluation and Comparison: Accessibility to Arts, Culture, and Entertainment*

- Commuter rail through its faster speeds and shorter travel times should have greater potential to increase accessibility to arts, culture, and entertainment
  - More northeastern Illinois visitors can be expected at Kenosha, Milwaukee, and Racine attractions
  - Southeastern Wisconsin residents will have improved accessibility to northeastern Illinois attractions

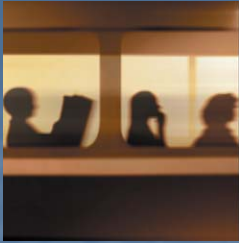




## *Evaluation and Comparison: Accessibility to Colleges and Universities*

- Commuter rail through its faster speeds and shorter travel times should have greater potential to increase accessibility to colleges and universities
  - Southeastern Wisconsin – University of Wisconsin – Parkside, Marquette University, University of Wisconsin – Milwaukee, and Carthage College
  - Northeastern Illinois – Northwestern University, University of Chicago, University of Illinois – Chicago Circle, Loyola University, and De Paul University among others



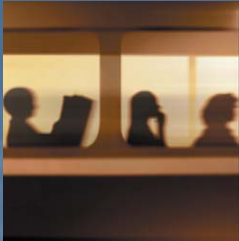


## *Evaluation and Comparison: Capital and Operating Costs*

- Commuter rail would have higher capital costs and annual operating and maintenance (O&M) costs than bus \*
- Capital cost -- \$237 million for commuter rail compared to \$24 million for bus
- Annual O&M cost -- \$14.7 million total and \$10.9 million net (less passenger fares) for commuter rail compared to \$3.5 million total and \$2.3 net for bus
- Annualized combined capital and total O&M cost -- \$33.9 million for commuter rail compared to \$5.8 for bus

\* Under the previous study, commuter rail with 15 round trips had an estimated \$225 million capital cost and a \$27 million annual total O&M cost.

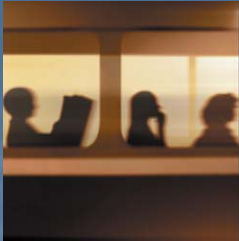




## *Conclusions of Intergovernmental Partnership Steering Committee and Commission Staff*

- Substantial benefits of commuter rail outweigh its increased costs
  - Faster average speeds and shorter travel times
  - Higher reliability, comfort, and convenience
  - Significantly higher ridership – total and new trips and trip length
  - Greater impact on highway traffic and congestion
  - Higher quality and more effective alternative during freeway reconstruction
  - Greater reduction in air pollutant emissions and energy consumption

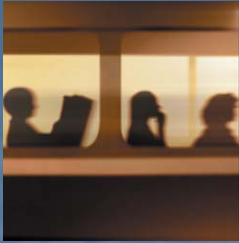




## *Conclusions of Intergovernmental Partnership Steering Committee and Commission Staff (cont.)*

- Potential to support and encourage more efficient high density infill land development and redevelopment representing significant new housing, jobs, tax base, and retail sales
- Provide accessibility to significant number of jobs in southeastern Wisconsin and northeastern Illinois – significantly more jobs than any other potential transit corridor
- Provides accessibility to a significant population and labor force, particularly minority and low income populations, and those without an automobile and dependent on public transit
- Can contribute significantly to southeastern Wisconsin economic growth and development by more closely connecting northeastern Illinois with southeastern Wisconsin

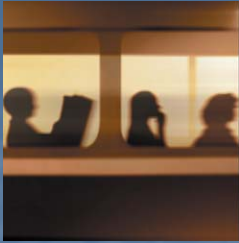




## *Conclusions of Intergovernmental Partnership Steering Committee and Commission Staff (cont.)*

- By better connecting and attracting northeastern Illinois residents to GMIA, could improve GMIA airline flight service and promote southeastern Wisconsin economic growth
- May be expected to assist in attracting more northeastern Illinois visitors to southeastern Wisconsin arts, culture, and entertainment, and make attractions in northeastern Illinois more accessible to southeastern Wisconsin residents
- Will increase accessibility to both southeastern Wisconsin and northeastern Illinois colleges and universities





## *Conclusions of Intergovernmental Partnership Steering Committee and Commission Staff (cont.)*

- Recommend that commuter rail be considered for implementation and be advanced to the U.S. Department of Transportation, Federal Transit Administration as the locally preferred alternative.
  - Public meetings to be held in December 2006/January 2007
  - Consideration by Intergovernmental Partnership and RTA
  - Completion of Draft EIS and conduct Draft EIS public hearing in February 2007
  - Submission to Federal Transit Administration for consideration of discretionary Federal funding in June 2007

