PURPOSE & NEED

Has IDOT or the FHWA approved the project?

On November 4, 2009 the Illinois Department of Transportation (IDOT) and the Federal Highway Administration (FHWA) approved the Environmental Assessment and Section 4(f) Evaluation for release for public review and comment.

Lack of Purpose and Need – Is the Bridge Needed?

When developing a transportation project, such as a new river crossing, two sets of data are used: a base, or existing, year traffic data set and a forecast year data set, which is typically 20 years in the future. From these data, both existing and potential future transportation operations are assessed. To determine the design characteristics of a new or improved facility, the future traffic data is used.

The analysis for the Red Gate Bridge used regionally endorsed socioeconomic forecasts for the year 2030. Within a 20-year period, it is reasonable to expect that the economy may expand and contract. The 2030 traffic projections for the Red Gate project were generated using a travel demand model. The model uses as its base the long-range traffic and socioeconomic data for the year 2030 that was developed by the regional Metropolitan Planning Organization (CMAP). Using this data to determine future needs is consistent with the regional planning process. This is the most current data available for the region.

The existing year analysis is based on the assessment of the capacity of the current roadway and on the level of service (LOS) of the intersections of IL 64 with IL 25 and IL 31. "Existing" year data is gathered at the beginning of a study, which in this case was 2005. The City of St. Charles has monitored travel times on the IL 64 corridor since before the Red Gate Bridge study began. These times fluctuate from year to year, but have generally increased over time.

Additionally, the purpose and need does not solely rest on relieving traffic congestion on IL 64. Network connectivity and improvements to emergency vehicle access are also components of the purpose and need.

Is the study still valid or has the time frame from inception to public display exceeded the legal limit?

There is no federal regulation designating a legal time limit on the project's inception to public display. The release of the Environmental Assessment for public review and comment is required by the National Environmental Policy Act (NEPA) regulations and informs the public of the effects the project will have on the environment and provides the public and agencies an opportunity to provide input on those effects.

What is the primary purpose of the bridge if not solely to alleviate Route 64 traffic?

The purpose and need of the project is to serve existing and future growth and improve community connections between the east and west sides of northern St. Charles; to reduce traffic volumes and congestion on IL 64/Main Street; improve emergency vehicle access for emergency vehicles in northern St. Charles and the surrounding area; and improve system continuity and operations.

Why should this bridge be built when the Stearns Road Bridge will be built a few miles north of this one?

Illinois Route 64 is both a state-marked route and a Strategic Regional Arterial, and as such, is intended to carry longer distance trips in addition to local trips within St. Charles. At any given point in the day, including during peak hours, the traffic on IL 64 is a mix of shorter, local trips and longer trips that are traveling through, rather than within, St. Charles. Peak hours are typically used in traffic studies because they represent the worst case in terms of traffic volumes. The Red Gate Bridge project is, in part, intended to draw some of the local trips off IL 64, allowing it to better serve longer through trips and the local trips that have origins or destinations proximate to IL 64.

The new Stearns Road Bridge was considered as part of the study and is included as a link within the travel demand model that was used to assess 2030 traffic. A new bridge at Stearns Road will draw roughly 10% of the traffic from IL 64. A new crossing at Red Gate Road will draw another 10%.

The traffic creating congestion on IL 64 is both local and long-distance. By placing the local trips on a facility that is intended for local circulation, the problem is helped. The Stearns Road Bridge is approximately 3 miles north of Red Gate Road traveling along IL 31, and approximately 5.5 miles north of IL 64. While the Stearns crossing may attract some trips with longer destinations, it will not attract trips that originate and will stay within the St. Charles area. The overall travel path for a local trip will be greater than just 3 miles to access Stearns Road (or 5.5 miles if originating near IL 64) considering the need to trace back south to the access their respective destinations once across the river.

Why disrupt and/or destroy forest preserves, open land and our recreational river unless absolutely necessary?

The alternatives process included a detailed analysis of the environmental effects of each alternative. This process resulted in the selection of an alternative that minimized impacts to wetlands, forest preserves, sensitive areas, and socio-economic factors.

The repetition during the audio/visual presentation of the hardship that would be placed upon the Q Center's ability to expand its private development wholly discounts the negative public impact put upon the Village of Wayne, the ultimate casualty of this bridge. Does tax revenue drive this short-sighted thinking?

Many factors including key engineering and environmental considerations were studied for all the proposed alternatives. Alternatives were dismissed from further consideration based on whether the alternative could satisfy a need for the project or it resulted in unacceptable impacts. All but two Red Gate Road alternatives were dismissed from further consideration because they would not serve the purpose of and need for the project or because they would have unacceptable impacts.

The fire protection district recently voted not to build a fire station at the intersection of Route 31 and Red Gate Road. Are the criteria for increasing response times still a factor?

The purpose and need for a river crossing in northern St. Charles includes improving emergency vehicle access for emergency vehicles in northern St. Charles and the surrounding areas. This emergency vehicle access includes the demand for fire, ambulance and police/sheriff.

BRIDGE & ROADWAY DESIGN

Will the bridge have piers in the river?

Yes, the bridge will have piers in the river. There will be three (3) piers in the river spaced 150 feet apart. The river is about 500 feet wide at the bridge location. The bridge must span the river and also 500 feet over the floodplain on the east bank. Preliminary Type, Size and Location (TS&L) drawings have been completed and are located on the project website at www.redgatebridge.org.

What is the bridge height or clearance over the river? Will the bridge be a hazard to boating? Will a no-wake zone be considered at the bridge site?

Just north of the proposed location, the river becomes too shallow for large motorized watercraft; however, the river is suitable for canoes and small boats at this location. The piers will be spaced 150 feet apart in the river. The clearance will be a minimum of 9 feet over normal water level near the east bank and a minimum of 21 feet over normal water elevation near the west bank. This design follows the standards for bridge design as directed by the Illinois Department of Transportation and would allow current boating uses to continue.

At this time no-wake zones are not being considered..

Would the bridge affect the natural flow of the river or change the depth to make it impassable by boaters?

No, the bridge will not affect the flow characteristics of the river or change the depth to make it impassible by boaters.

Why are "bicyclists" needs taking precedence over "boaters" needs?

Both the needs of boaters and bicyclists/pedestrians were taken into account in the development of the Environmental Assessment and Section 4(f) Evaluation. Safety was a concern in developing the geometry of the proposed bridge. By providing a trail underneath the bridge, it effectively eliminated the potential for collisions between pedestrian/bicyclists and vehicles while at the same time provides pedestrians and bicycle enthusiasts a chance to enjoy the same features of the river and environment that boaters enjoy. In addition, the number of piers in the river has been reduced from five (5) to three (3) to minimize the impact to the river and enhance the safety of boaters.

Will there be an exit from Red Gate Road to Weber Drive? This would increase traffic on Weber Drive and be unacceptable. Weber is connected to the bike path and increased traffic would be a hazard to cyclists and residents.

There are no plans to connect Weber Drive to Red Gate Road.

At the intersection of Illinois Route 25 and Pinelands Road, has the safety of motorists been adequately addressed due to the existing steep incline?

The design of this intersection was included in the Intersection Design Study approved by the Illinois Department of Transportation (IDOT). The proposed profile of Pinelands Road has been raised to accommodate access into the intersection. Further refinement of the design will be conducted during the design phase of the project.

TRAFFIC STUDIES

What impact will increased traffic on Army Trail Road and increased rail traffic on the EJ&E Railroad have on the Village of Wayne?

Traffic on Army Trail Road through the Village of Wayne will increase by 4,200 vehicles per day. Based on existing conditions, peak hour traffic in Kane County is observed to be between 8 to 10 percent of all day traffic (ADT). The roadway capacity for an urban minor arterial or collector ranges from 800 to 1000 vehicles per hour per lane. The 4,200 additional vehicles translate to approximately 350 vehicles in the peak hour, which is within acceptable capacity thresholds for a roadway such as Army Trail Road. It is important to note that even without Red Gate Bridge (No-Build condition), travel demand on Army Trail Road is expected to increase three-fold from existing conditions based on traffic modeling. This increase in the No-Build condition is attributable to the new access that the Stearns Road bridge provides, combined with general growth in the next 20 years in this area.

Impact of Elgin, Joliet & Eastern Railroad

The Red Gate Bridge is approximately 4 miles from the EJ&E Railroad crossing. Based on traffic modeling completed for the project, fewer than 5% of the trips that will use the Red Gate Bridge are through trips that will not have an origin or destination within 5 miles of the bridge. The further one travels from the project, the less impact that is attributable to the Red Gate Bridge project. Additionally, two major north-south roadways that serve to distribute traffic intersect with Army Trail Road between the Red Gate Bridge and the EJ&E crossing: IL 25, adjacent to the project, and Dunham Road, approximately 2 miles east of the study area. Dunham is a Strategic Regional Arterial, carries a high volume of traffic, and has an influence on traffic distribution within the Village of Wayne. Considering the low number of through trips traveling beyond 5 miles of the Red Gate Bridge, the small peak hour traffic contribution (350 vehicles per hour, as noted in the previous response), and the influence of both IL 25 and Dunham Road, the Red Gate Bridge project will not contribute significantly to the EJ&E crossing in the Village of Wayne.

Why not wait until Stearns Road is complete and reassess the traffic conditions?

The new Stearns Road Bridge was considered as part of the study. The Stearns Bridge is included as a link within the travel demand model that was used to assess 2030 traffic. Waiting to see the effect that the Stearns crossing will have on current traffic volumes would only be one part of the analysis for infrastructure planning. Transportation planning considers not only on current year data, but also on forecast year data that uses regionally endorsed socioeconomic projects as its basis. The forecast year traffic is used to determine the need for a transportation facility as well as to assist in determining design characteristics. The projected 2030 traffic shows that a new bridge at Stearns Road will draw roughly 10% of the traffic from IL 64. A new crossing at Red Gate Road will draw another 10%.

The description of the Stearns Road Bridge as a regional crossing is not related to its ability to carry heavy trucks. The Stearns crossing is considered regional due to its capacity and the types of facilities to which it would connect. The Red Gate Road Bridge is intended to primarily carry trips that are local to the St. Charles and Wayne area. Some of these trips may indeed use the new Stearns Bridge if the Red Gate Bridge is not constructed, but many will not. People traveling within St. Charles are less likely to travel the additional 2.2 miles further north from the Red Gate location to the Stearns bridge (along the west side of the river, the distance is 3 miles due to the bend in the river alignment).

It is also important to note that reducing congestion is just one of the reasons for this project. In addition to reducing traffic volumes and congestion on IL 64/Main Street, the purpose and need of the project includes serving existing and future growth and improving community connections between the east and west sides of northern St. Charles; improving emergency vehicle access for emergency vehicles in northern St. Charles and the surrounding area; and improving system continuity and operations.

With increased traffic congestion near the high school is the safety of children being compromised?

The City is very much aware of the traffic congestion along Red Gate Road in the immediate vicinity of St. Charles North High School at the beginning and end of the school day and when extra-curricular activities are taking place. The municipal police department works cooperatively with the High School administrators and District transit staff to address this matter. Additionally, the District recognizes the limited ingress and egress points to St. Charles North High School that also contribute to this congestion. As traffic will increase along Red Gate Road with the construction of the Red Gate Bridge the city will continue to work with the District to find a solution to address congestion.

How were the growth numbers for traffic increases calculated? Did your forecasts take into account closure of Army Trail Road? When was the study completed? Should it be updated to reflect current economic conditions?

The growth in traffic numbers was generated using a travel demand model that was developed for Kane County for the year 2030. As one of its primary inputs, the model uses the 2030 socioeconomic forecasts for the region that were created by the Chicago Metropolitan Agency for Planning, the region's metropolitan planning organization.

The traffic forecasts generated for the project did not consider a hypothetical closure of Army Trail Road. The forecasts considered projects that were programmed and included in the 5-year transportation improvement plans of transportation providers.

When developing a transportation project, such as a new river crossing, two sets of data are used: a base, or existing, year data set and a forecast year data set, which is typically 20 years in the future. From these data, both existing and potential future transportation operations are assessed. To determine the design characteristics of a new or improved facility, the future traffic data is used.

The traffic analysis for the Red Gate Bridge used regionally endorsed socioeconomic forecasts for the year 2030. Within a 20-year period, it is reasonable to expect that the economy may expand and contract. The travel demand model uses as its base the long-range traffic and socioeconomic data developed by the regional Metropolitan Planning Organization (CMAP) to determine future needs in order to be consistent with the regional planning process. This is the most current data available for the region.

The existing year analysis is based on the assessment of the capacity of the current roadway and on the level of service (LOS) of the intersections of IL 64 with IL 25 and IL 31. "Existing" year data is gathered at the beginning of a study, which in this case was 2005. The City of St. Charles has monitored travel times on the IL 64 corridor since before the Red Gate Bridge study began. These times fluctuate from year to year, but have generally increased over time.

If your main concern is to decrease traffic, then why build Red Gate Bridge? All the other bridge sites decrease the traffic by much more than 10%.

The other bridge locations evaluated as part of the EA caused impacts that were greater than the impacts caused by the preferred alternative. Traffic analyses were not completed for these locations.

Decreasing traffic on Main Street is only one of the concerns the project intends to address. The purpose and need of the project is to serve existing and future growth and improve community connections between the east and west sides of northern St. Charles; improve emergency vehicle access for emergency vehicles in northern St. Charles and the surrounding area; improve system continuity and operations; and to reduce traffic volumes and congestion on IL 64/Main Street.

Where does the traffic go when it crosses the bridge? Why would anyone going north or south on Route 25 or 31 want to cross the river to go north or south?

The traffic on the proposed Red Gate Bridge is not exclusively going north or south on IL 25 and IL 31, some of it will continue along Army Trail Road or Red Gate Road, depending on the whether it is crossing the bridge in an east or west-bound direction. As St. Charles has expanded, particularly to the northwest, the number and location of river crossings has not changed. Individuals living in the northwest or northeast of St Charles wishing to travel to the opposite side of the river must currently travel south on IL 25 or IL 31, cross the river at Main Street, then continue on to their destination. A new crossing in the northern area of St. Charles will provide another option and will reduce the total miles of travel in the St. Charles area.

ENGINEERING PROCESS

Is the value of a 10% reduction in traffic on Main Street worth the $25 to $30 Million that will be spent on this bridge?

The traffic studies indicate that each year the bridge would save local drivers more than 4,000,000 vehicle miles traveled. This savings amounts to nearly $2,000,000 per year in vehicle operating costs and nearly 135,000 hours behind the wheel by local drivers.

The City believes that a 10% reduction in traffic through downtown is worth moving ahead with the project. Furthermore, this project, in conjunction with the Stearns Road project, will reduce traffic on Main Street through downtown by approximately 20%. It is the collective impact of all river crossing locations that makes all projects worthy. It should be pointed out that the Illinois and Prairie Street Bridges in St. Charles presently divert 20,000 to 30,000 vehicles per day from the Main Street river crossing.

What effect will the project have on nearby property values?

The Uniform Relocation Assistance and Real Property Acquisition Policies Act and the IDOT Land Acquisition Procedures Manual will be followed for all property acquisition. These documents provide for payment of just compensation of private property acquired for a federal-aid project.

Has the construction phase been funded? Where are the engineering funds coming from?

The following funding is included in IDOT's FY 2010-2015 Proposed Highway Improvement Program:

- *$3 million for intersection improvements to IL. 31 north of IL. 64*
- *$3 million for intersection improvements to IL. 25 north of IL. 64*

The following funds have also been committed for engineering:

- *$300,000 County Funding*
- *$2.19 million Federal Funding*

At present, Phase I Engineering is federally funded while Phase II (design phase) and Phase III (construction phase) is not fully funded. One of the reasons for performing the Phase I Study is to determine if the project should go forward.

Would it be better to wait until Stearns Road is built and see how it performs before going forward with Red Gate?

There are many reasons to go ahead with the Red Gate project now rather than wait. To begin with, the project will be designed to accommodate the traffic that is projected for twenty years after the project is built. These projections are based on assumptions about patterns of growth within the area that influences the project. Waiting until after Stearns is built would not necessarily increase the accuracy of the projections because they would still be based on assumptions of future growth patterns (20 to 25 years ahead from the point in time of the analysis).

Cost is an important reason to build now. Inflation is currently averaging about 3% per year. For each year that the project is delayed, the cost will increase by nearly $1,000,000 due to inflation alone. Waiting until after Stearns is completed (Fall of 2010 at the earliest), waiting a few more years to see what the traffic is like, and then starting over with the engineering process would delay the Red Gate project by at least 10 years and increase the cost by more than $10,000,000.

In addition to rising construction costs is the cost that local drivers will pay because of extra distance traveled to cross the river. The traffic studies indicate that, each year, the bridge would save local drivers more than 4,000,000 miles traveled. This amounts to nearly $2,000,000 per year in vehicle operating costs. If the project is delayed by ten years, this amounts to nearly $20,000,000.

Traffic problems are here, now. Waiting another ten to twenty years to build this bridge would only postpone the clear benefits of the project and increase the cost.

Why did you plan the Public Hearing for the Proposed Red Gate Road on December 15, 2009? Who could make the meeting? If you did attend the Public Hearing you only had 15 days to reply with your concerns. Why not 30 days?

The Environmental Assessment and Section 4(f) Evaluation (EA) was approved for public review and comment on November 4, 2009. The EA was made available to the public on November 30, 2009 and the public hearing was held on December 15, 2009. The public comment period closed on December 31, 2009. The publication of the EA and holding the public hearing satisfied the Federal requirements for public involvement on an Environmental Assessment.

There is an existing bridge on Prairie Ave. that doesn't connect to Rt. 25...Why doesn't it?

In the early 1990's the City Council chose to extend the Prairie Street across the Fox River. This crossing connected Randall Road and IL Route 31 on the west side of river and IL Route 25 on the east side for the river with the intermediate connect for 4 blocks along the municipal collector street Riverside Avenue. The Prairie Street Bridge serves local traffic and has an annual daily traffic volume of approximately 10,000.

Why was there not a model of the Proposed Red Gate Bridge?

The exhibits provided at the Public Hearing were meant to be representations of the project and not detailed engineering drawings. Preliminary engineering drawings are available on the web site at www.redgatebridge.org.

Why was there no mention of the Village of Wayne's parkland / open space along the east side of the river?

Park information was gathered from public data bases, such as the Fox River EIS, Chicago Metropolitan Agency for Planning (CMAP), and Kane County GNIS; the Riverfront Park did not appear as a Village park within these resources. Additionally, site visits to the area did not identify this open space as there is no signage or access to the public. Zoning maps identify the parcel as open space/park, however, FHWA does not consider the parcel a resource protected by

Section 4(f). The area can only be accessed through easements on private property granted to the Village of Wayne for maintenance purposes and to previous owners. The general public cannot access this parcel. There will be no change in access to this parcel, no direct take of land from this parcel, and no impact to the existing uses of this open space parcel.

Bike Path

Are there plans to screen the sides of the pedestrian bridge to prevent people from jumping off into the water, similar to the existing bridge under the rail trestle?

There are no plans to screen the sides of the pedestrian bridge. The City has not reported any problems with people jumping off the sides into the water and the sides of that pedestrian bridge are not screened.

Environmental Studies

How are endangered species concerns being addressed? What about the wildlife that has come back to the area? What is the impact on wildlife?

Information regarding endangered species was provided by the Illinois Natural History Survey, U.S. Fish and Wildlife Service, and the Illinois Department of Natural Resources. No federally-listed species were identified in the project area. As described in Section 4.2.9.2 of the Environmental Assessment construction restrictions will protect sensitvie fish species in the Fox River.

Wildlife movement can continue to occur near the Fox River as the area will be bridged. The proposed project will take some areas of forest; however, sufficient areas remain in the corridor to support wildlife.

How much air pollution is produced?

At the project level, the air quality analysis completed for the Red Gate Bridge study followed a process developed by IDOT and FHWA for analyzing highway projects in Illinois. This process involved analyzing a worst case scenario using an air quality model. The model determined that the project will be below the 8-hour average National Ambient Air Quality Standard for carbon monoxide of 9.0 parts per million.

What are the water quality impacts? Will well and septic systems be affected?

Protection of the Fox River water quality was an important factor in the design of stormwater management practices associated with the proposed roadway and bridge. The specific pollutant loadings generated by the proposed roadway were evaluated after considering the reductions attributed to the detention basins and swales incorporated into the design. Water quality standards will be maintained for these constituents, such as chlorides and metals, during the operation of the proposed roadway. These results are discussed in Section 4.2.10 of the Environmental Assessment.

The proposed project would have no impact upon septic systems in the vicinity of the project. The proposed project will not create any new "routes" for groundwater movement or any new "sources" as defined in the Illinois Environmental Protection Act . Groundwater quality is not expected to be measurably affected by the project; however, wells within 200 feet of the roadway that are shallow, improperly cased, or hydraulically connected to highway runoff could show increased levels of deicing chemicals. The closest private wells are over 100 feet deep and this limits the potential for increased levels of deicing chemicals.

Did you consider the noise impacts to "established neighborhoods" on both sides of the Fox River? How much noise pollution is produced?

A noise analysis was completed for the project that examined the potential impact that projected traffic would have on residences near the project. The predicted noise levels were compared to the FHWA's Noise Abatement Criteria to determine where impacts may occur. Noise levels exceeding the noise abatement criteria were identified at four locations. Please see Section 4.2.7 of the Environmental Assessment (posted on the City of St. Charles website) for a discussion of the noise study.

Why is the farm located at 35W403 Pinelands Road not shown accurately on any of the diagrams?

It is not clear from the comment which diagrams are being referred too. In developing the Environmental Assessment and Section 4(f) Evaluation, the cooperative agreements between the Illinois Department of Agriculture (IDOA) and IDOT were reviewed and this property was not identified being in agricultural use. Since this project lies within the St. Charles corporate limit, coordination with the IDOA and the Natural Resource Conservation Service (NRCS) is not required.

What impact will the Magellan pipeline have on the construction of the piers in the river?

The Magellan Pipeline was identified and considered in developing alternatives for the bridge crossing. The pipeline is located outside the construction zone of the bridge, and no impact is anticipated during bridge construction. The pipeline eventually crosses IL Route 31 near the intersection of Red Gate Road and IL Route 31. Coordination with Magellan Pipeline will occur during construction to assure that the pipeline integrity is maintained. The pipeline was also investigated by the Illinois State Geological Survey (ISGS) as a potential source for soil contamination near IL 31; ISGS, as an independent agency, is responsible for characterizing any potential contamination from this pipeline. The 2009 ISGS report was referenced in Section 4.2.14, and, as mentioned on page 4-23 of the Environmental Assessment and Section 4(f) Evaluation, ISGS will be conducting follow up work regarding the pipeline at IL 31.

Where is the Army Corp of Engineers? Where is a truly independent study?

The U.S. Army Corps of Engineers has been a cooperating agency during the project and has participated in reviews of the project and its impacts throughout the process. Other agencies, including the U.S. Environmental Protection Agency, also participated in the review process.

GENERAL

Will the State plow the snow on Route 25 so people can make it to a stop light up a steep incline?

The State of Illinois, Department of Transportation is responsible for snow removal on Route 25. Any concerns regarding snow removal should be directed to the Department of Transportation.

Who is responsible for maintaining the bridge?

The City of St. Charles will be responsible for maintaining the extension of Red Gate Road between IL Route 31 and IL. Route 25.

What, if any, are the truck restrictions on the bridge? Will the bridge be 2 or 4 lanes?

Red Gate Road Extended shall be designed, constructed as and remain a two-lane (one eastbound and one westbound) bridge and all trucks in excess of 20,000 lbs. shall be prohibited except emergency vehicles.