City of Chicago Department of Transportation Surface Transportation Program Regional Projects for Federal Fiscal Years 2010, 2011 & 2012

As per the City of Chicago / Council of Mayors STP Funding Split Agreement





FFY 10/11: Madison Street Viaduct over Union Station

FFY 12: Wells Street Bridge over the Chicago River



CITY-SUBURBAN STP SPLIT

"The locally programmed STP allocations will be calculated as follows: the first 5% of STP allocations will be used on project(s) that are mutually beneficial to the City and Council and programmed by the City. The City will notify the Council of its selection of a mutually beneficial project(s) on an annual basis. Should the Council question the City's selection, the City and Council shall meet to discuss the project. The remaining locally programmed STP allocation will be calculated on the basis of a 45% distribution to the City and a 55% distribution to the Council."

MEMORANDUM OF AGREEMENT BETWEEN THE CITY OF CHICAGO AND THE CMAP COUNCIL OF MAYORS REGARDING THE DISTRIBUTION OF LOCALLY PROGRAMMED SURFACE TRANSPORTATION PROGRAM FUNDS UNDER THE SAFE, ACCOUNTABLE, FLEXIBLE, EFFICIENT TRANSPORTATION EQUITY ACT: A LEGACY FOR USERS

Federal Fiscal Year	Total STP Program for Region	5% for City- Based Regional Project	Remaining Regional Balance	City Balance 45%	Regional Project + City Balance	Suburban Balance 55%
FFY10	\$100,283,960	\$5,014,198	\$95,269,762	\$42,871,393	\$47,885,591	\$52,398,369
FFY 11	\$90,065,018	\$4,503,251	\$85,561,767	\$38,502,795	\$43,006,046	\$47,058,972
FFY10/11	\$190,348,978	\$9,517,449	\$180,831,529	\$81,374,188	\$90,891,637	\$99,857,341
FFY 12	\$130,626,245	\$6,531,312	\$124,094,933	\$55,842,720	\$62,374,032	\$68,252,213

Projects of regional importance include, but are not limited to:

- CREATE
- Lake Shore Drive
- Border streets
- Bridges linking the commuter rail stations to areas east of the Chicago River
- Other projects on a case-by-case basis





MADISON STREET VIADUCT OVER UNION STATION

The City of Chicago's FY 2010/11 Regional Surface Transportation Program Project (as per the 2008 City/Suburban Agreement Covering the Split of Federal STP Funding)



Aerial view of the Madison Street Viaduct



CDOT Biennial Bridge Inspections Madison Street - West of River

On September 29, and October 05, 2009, HBM Engineering Group, LLC conducted a visual inspection of the above referenced structure in accordance with NBIS and IDOT guidelines.

The bridge is a 10-span structure of concrete-encased steel stringer and multi-beam framing supported on concrete-encased steel column bents. The bridge has an overall length of 260 feet and an overall width of 83 feet.

The following was noted:

- The columns are in poor condition with spalled encasement, delaminated concrete and heavy corrosion with section loss. The columns of pier 6 have been shored.
- There is typical spalling and deterioration of the concrete encasement, exposed steel and heavy corrosion of the stringer and floorbeam flanges, webs and rivets with up to 50% section loss.
- The underside of deck beneath the south sidewalk in Span 1 and the north sidewalk in Spans 1 and 2 have deep spalls with exposed, corroded reinforcement. In Span 3, approximately 50% of the underside is spalled under the north sidewalk. The deck between Stringers 10 and 11 in Span 5 and between Stringers 1 and 2 and Stringers 2 and 3 in Span 9 is in serious condition.
- There are stalactites on the underside of structure in most Spans.

The following is recommended:

- Knock down unsound concrete and install netting above platforms, to prevent further concrete from falling on the walkways.
- Perform shoring of the following columns:
 - Pier 2 Column 3
 - Pier 5 Columns 1 and 2
 - Pier 7 Column 3
 - Pier 8 Columns 1 and 2
 - Pier 9 Column 3
 - o Pier10 Column 3
- Replace the deck in span 1 under the south sidewalk, spans 1, 2 and 3 under the north sidewalk, and the affected areas as described above.
- It is recommended to inspect the superstructure and substructure every 12 months until these deficiencies are addressed.



MADISON STREET VIADUCT PROJECT DESCRIPTION

Route:	FAU 1419
Federal Project #:	M-6000 (339)
TIP ID #:	01-99-0030

Chicago's Union Station is a bustling rail hub serving over 50,000 people a day through Metra commuter rail lines and Amtrak intercity trains. The station stands along the river in downtown Chicago. To the north and south of the station, several city streets are carried on viaducts that act both as roadway to vehicles above and roof to the commuter rail lines below. Madison Street from Canal Street to the bascule bridge over the Chicago River, is one of these viaducts. Spanning a passenger platform and Union Station railroad tracks, this viaduct is in poor structural condition and in need of complete replacement.

The Madison Street Viaduct over Chicago Union Station project consists of the reconstruction of the existing structure between the Madison Street Bascule Bridge and Canal Street, and improvements to the Madison Street and Canal Street intersection. The viaduct spans over 13 railroad tracks and 1 passenger platform of the North Concourse of Chicago Union Station. Project length is 316 feet.

The work includes demolition of the existing structure, construction of a new substructure from the grade beam up, construction of a new superstructure and deck, pavement resurfacing, and installation of new roadway lighting, traffic signals, ADA compliant sidewalk ramps, and drainage system. The project will be staged to maintain access to the Union Station concourse entrance along Madison Street and coordinated with Union Station, Amtrak, and Metra to minimize disruption to daily train traffic.

ESTIMATED CONSTRUCTION COST AND FUNDING SOURCES

2010/20111 STP for Construction	\$14,000,000
Non-Federal Match (TIF Funds)	\$ 3,500,000
Total Construction	\$17,500,000
2009 STP for Engineering Phase I	\$ 400,000
2011 STP for Engineering Phase II	\$1,280,000
Non-Federal Match	\$ 420,000
Total Engineering:	2,100,000
Total STP (construction & engineering)	\$15,680,000
Total Non-Federal Mach	\$ 3,920,000
Total Project Cost	\$19,600,000



SCHEDULE

The project is anticipated to begin construction in June of 2011 and be completed by Spring of 2012.

BRIDGE USE

The Madison Street viaduct provides access between Chicago's Union Station and Ogilvie Transportation Center across the Chicago River to the downtown area and points east. Upon arriving in Chicago, Metra riders from throughout the entire northeastern Illinois region depend on this viaduct to reach their final destination.

The importance of this structure is reflected in the high pedestrian, vehicular and transit use. Weekday pedestrian counts in 2007 reached 44,000 on Madison Street between Canal Street on the west and the Chicago River on the east for both the north and south side sidewalks combined. Additionally six CTA routes use the viaduct (#14, 20, 56, 60, 124 and 157) transporting thousands more across the River. The Annual Average Daily Traffic for this location is 17,100.

Pedestrian access to and from Union Station and Ogilvie Transportation Center will be maintained throughout construction. However, some pedestrian detours will be necessary for east bound pedestrian traffic until October.





WELLS STREET BRIDGE OVER THE CHICAGO RIVER

The City of Chicago's FY 2012 Regional Surface Transportation Program Project as per the 2008 City/Suburban Agreement Covering the Split of Federal STP Funding



Wells Street over the Main Branch of the Chicago River



CDOT Biennial Bridge Inspections Wells Street – Over Main Branch, Chicago River

On December 11, 2008, PB performed a visual, biennial inspection of this structure in accordance with NBIS, FHWA and IDOT guidelines. The underside of the movable leaves was inspected from a manlift on a barge. The remaining portions of the bridge were visually inspected from the ground and from a ladder where necessary. The findings from this visual biennial inspection indicate the following general ratings for this structure:

- Deck is in poor condition (overall condition rating = 4)
- Superstructure is in serious condition (overall condition rating = 3) •
- Substructure is in fair condition (overall condition rating = 5) •

These overall ratings correspond to the rating terminology defined by both NBIS and IDOT guidelines. According to the Illinois Highway Information System Structure Information and Procedure Manual, the structural evaluation of the bridge is generally coded no higher than the lower of the superstructure's overall condition rating or the substructure's overall condition rating. Consequently, this structure is in serious overall condition, which corresponds to an NBIS and IDOT general condition rating of 3.

Bridge:	Wells Street Bridge over the Main Branch of the Chicago River
Bridge No.:	016-6054
Inspection Date:	December 11, 2008
Bridge Description:	The structure is a two-level, double-leaf, riveted steel truss bascule
	bridge. The structure has an overall length of 345 feet, a bridge
	roadway width of 38 feet, and an out-to-out deck width of 72 feet.
	The bridge was operable at the time of inspection.
Bridge Status:	The bridge is open to traffic with weight restrictions (lower deck
	roadway posted to 10 tons)
Inspection Method:	The underside of the movable leaves was inspected from a manlift
	on a barge. The remaining portions of the bridge were visually
	inspected from the ground and from a ladder where necessary.
Location Man.	

Location wrap.





WELLS STREET VIADUCT PROJECT DESCRIPTION

Route:	FAU 2899
TIP ID #:	01-96-0001

The Wells Street Bascule Bridge over the Chicago River (Structure No. 016-6054) is an operable double leaf, double deck, Chicago Style trunnion style bascule bridge over the Chicago River with the elevated Chicago Transit Authority service above the roadway. The condition of the structure is serious. The overall length of the main span is approximately 345 feet and the overall width is approximately 72 feet.

- Rehabilitate bridge trusses with selective replacements and/or repairs
- Replace floorbeams, gusset connection plates, roadway stringers and grating
- Replace sidewalk support brackets, stringers, panels and railing
- Clean and paint structural steel and bridge machinery
- Replace all access walkways
- Repair and/or reconstruct river walls, abutments and backwalls and river dolphins
- Rehabilitate and/or replace electrical and mechanical systems
- Rehabilitate architectural elements of bridge houses including windows, doors, heating and plumbing systems, roofing and flashing, etc.

ESTIMATED CONSTRUCTION COST AND FUNDING SOURCES

2012 STP for Construction	\$20,000,000
Non-Federal Match	\$ 5,000,000

Total Construction		\$25,000,000	
2008 STP for Engineering Phase I	\$ 800,000		
2011 STP for Engineering Phase II	\$1,440,000		
Non-Federal Match	\$ 560,000		

Total Engineering:\$ 2,800,000

Total STP (construction & engineering)\$22,240,000Total Non-Federal Match\$5,560,000

Total Project Cost\$27,800,000



SCHEDULE

The project is anticipated to begin construction in spring/summer of 2012 and be completed by spring/summer of 2013.

BRIDGE USE

The Wells Street Bridge provides critical access across the Chicago River for pedestrians, motor vehicles and, most significantly, transit. The Chicago Transit Authority utilizes the Wells Street Bridge to cross the main branch of the Chicago River with its Brown and Purple lines. These two lines run 402 trains carrying 56,000 passengers every weekday and another 240 trains with 23,000 passengers per day on the weekend. This equates to over 125,000 trains and 16,000,000 passengers annually. The Purple Line begins its run in Wilmette and serves all stations in Evanston before running express service between the Evanston/Chicago border at Howard Street and the Belmont Avenue station in Chicago.

Additionally, two CTA bus lines, the 11 and the 125 make a combined 92 weekday River crossing using the Wells Street Bridge for an annual total of over 23,000 bus trips and over 317,000 passengers across the Chicago River.

The Annual Average Daily Traffic count for this location is 12,200.

The Bridge also accommodates pedestrians with a 2007 work day pedestrian use of 10,500 from 7:45 am - 5:45 pm.

