CITY OF URBANA, ILLINOIS
DEPARTMENT OF PUBLIC WORKS

ENGINEERING

M E M O R A N D U M

TO: Mayor Prussing and Members of the City Council

FROM: William R. Gray, Public Works Director
Jennifer J. Selby, Civil Engineer

DATE: April 10, 2008

SUBJECT: Main Street Bike Lanes and Pedestrian Improvements –
Illinois Transportation Enhancement Program Funds

Illinois Transportation Enhancement Program

The State of Illinois Department of Transportation, through the Illinois Transportation Enhancement Program (ITEP), is currently accepting applications for financial assistance for projects that enhance the transportation system. The enhancement program allows the scope of transportation projects to expand beyond the traditional accommodations for cars, trucks and transit. The goal of ITEP is to allocate resources to well-planned projects that provide and support alternate modes of transportation. Federal funds may provide reimbursement up to 80% of engineering and construction costs. Applications are due May 5, 2008.

Project Description

This project will provide bike lanes on Main Street from Cedar Street to Scottswood Drive through the center of the City of Urbana. This project also includes upgrading pedestrian ramps at many locations along the corridor and the installation of pedestrian countdown signals at Race Street and at Broadway Avenue in Downtown Urbana. A raised median is proposed at the mid-block crosswalk between Race Street and Broadway Avenue. In addition, the sidewalk along the south side of Main that currently ends at the west edge of Weaver Park will be extended east to provide a pedestrian connection to the park.

The bike lanes will provide approximately 2 miles of a continuous bicycle route between the High Cross Road Bike Path project on the east side of the City and the University of Illinois Campus on the west side of the City. The bike lanes will provide direct access to parks, Champaign County facilities, commercial establishments, Downtown Urbana, and residential subdivisions. The bike lanes will directly connect to 9 other proposed or existing bicycle facilities within the City's bicycle network. These facilities further connect to the over 40 miles of connected bicycle facilities throughout the City. The bike lanes will also connect to the proposed Rails-to-Trails project on the abandoned CSX railroad line.

The pedestrian sidewalk ramp improvements will provide safe locations for pedestrians to cross Main Street. The extension of the sidewalk at the east end of the project will provide a much needed pedestrian connection to Weaver Park and to a proposed trailhead for the future Rails-to-Trails project.

The proposed bike lanes are a part of the larger Urbana Bicycle Master Plan. The Main Street corridor was the most requested corridor at the two public workshops held during the development of the Master Plan. The City's 2002 Downtown Strategic Plan also identified the bike lanes on Main Street as part of a traffic calming effort to create a better pedestrian environment in the Downtown.

The section of Main Street from Cedar Street to Grove Street will undergo a "road diet" to provide 2 lanes of vehicle traffic, a bi-directional left-turn lane, and 2 bike lanes. The road diet through Downtown allows for the creation of left turn-lanes at Race Street and at Broadway Avenue. The left turns at these intersections are currently permissive and left-turn and rear-end collisions predominate at the intersections. In addition, the left/through lanes at Race Street are negatively offset, limiting view of opposing traffic. The conversion from a 4-lane cross-section to a 3-lane cross-section separates the left-turn and through traffic, provides for aligned left turn lanes, which will enhance the sight distance, and also allows for protected left-turns, which increases safety for vehicles and pedestrians. The road diet will decrease the number of vehicles lanes pedestrians must cross to go from one side of Main Street to the other, making it safer for pedestrians to cross. The road diet allows for the addition of a midblock pedestrian crosswalk with a raised median between Race Street and Broadway Avenue. The median will allow pedestrians to cross one half of the road at a time and be protected at the half-way point. The road diet also allows for a painted median at Walnut Street for pedestrians crossing from parking to the Champaign County Courthouse.

The existing parking on the north side of Main from Grove Street to Glover Avenue will be removed to allow the addition of the bike lanes. There is currently space to add bike lanes from Glover Avenue to Art Bartell Road. The section from Art Bartell Road to Scottswood Drive will also undergo a "road diet" similar to Downtown. East of Scottswood Drive the bike lanes will be dropped and Main Street will become a Bike Route.

The project, when completed, will provide a logical alternative to the automobile for access to local amenities. It will provide for the public health and well being offering walking and bicycling as alternate transportation choices, and will contribute to improved air quality by promoting increased walking and bicycling over driving. This project has very strong community support and will be a major improvement to walking and bicycling safely in the City of Urbana.

Fiscal Impacts

The estimated total cost of the project is $2,369,125 million in 2010 dollars. Because street maintenance is not eligible for funds, we have pulled the costs for street patching and milling and resurfacing (beyond the surface) out of the requested amount. Also, to make the project more attractive to the State, we have shown the City paying for all of the construction costs from Cedar Street to Grove Street. Therefore, out of the $2.3 million project, we are submitting an application for $1,275,425.

If the maximum enhancement grant is awarded - 80% - the City would receive $1,020,340. City out-of-pocket costs would then be estimated at $1,348,785. City funds, including TIF and A09, would be used for the balance. A copy of the project cost estimate and the projected break down of the enhancement cost share is attached.

Council Action

The City Council is asked to approve A Resolution of Support for an Application for Illinois Transportation Enhancement Funds (Main Street Bike Lanes and Pedestrian Improvements).

RESOLUTION NO. 2008-04-008R

A RESOLUTION OF SUPPORT FOR AN APPLICATION FOR ILLINOIS TRANSPORTATION ENHANCEMENT FUNDS

(Main Street Bike Lanes and Pedestrian Improvements)

WHEREAS, the City of Urbana has expressed its commitment to the establishment of bicycle facilities throughout the City, as illustrated by the recent adoption of the Bicycle Master Plan as an official element of the 2005 Urbana Comprehensive Plan; and

WHEREAS, the Main Street corridor was the most requested corridor for bicycle facilities based on public input; and

WHEREAS, there are funds available through the Illinois Transportation Enhancement Program for the provision of facilities for pedestrians and bicycles; and

WHEREAS, the City of Urbana has determined that it is in its best interest to apply for said funding to further extend the City's bicycle network.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF URBANA, ILLINOIS, as follows:

Section 1. The City Council finds and determines that the facts contained in the above recitations are true.

Section 2. That the Urbana City Council does hereby authorize the Mayor to submit a grant request on behalf of the City to the State of Illinois Department of Transportation's Enhancement Program for the purpose of financing part of the project costs of the proposed bike lanes and pedestrian improvements on Main Street and is authorized to execute any subsequent documents related to the submission of the grant application, and the subsequent receipt of funds through said grant.

PASSED by the City Council this _____ day of _____, 2008.

AYES:

NAYS:

ABSTAINS:

_____
Phyllis D. Clark, City Clerk

APPROVED by the Mayor this _____ day of _____, 2008.

_____
Laurel Lunt Prussing, Mayor

Main Street Bike Lanes and Pedestrian Improvements - Cost Estimate

Pay Item	Qty.	Unit	Unit Price	Total
Cedar Street to Vine Street				
Bike Lanes				
Hot-Mix Asphalt Surface Removal, 1 1/4"	10,000	Sq Yd	$3.00	$30,000
Polymerized Hot-Mix Asphalt Surface Course, Mix "D", N90	725	Ton	$120.00	$87,000
Prime Coat	1,000	Gal	$5.00	$5,000
Manholes to be Adjusted	15	Each	$1,500.00	$22,500
Utility Valves to be Adjusted	10	Each	$500.00	$5,000
Detector Loops Type 1	300	Foot	$20.00	$6,000
Median Removal	50	Sq Yd	$25.00	$1,250
Thermoplastic Pavement Marking Line, 4"	4,000	Foot	$0.75	$3,000
Thermoplastic Pavement Marking Line, 6"	3,500	Foot	$1.00	$3,500
Thermoplastic Pavement Marking Line, 12"	300	Foot	$1.75	$525
Thermoplastic Pavement Marking Line, 24"	200	Foot	$3.00	$600
Thermoplastic Turn Arrow	14	Sq Ft	$100.00	$1,400
Paint Bicycle Symbol and Arrow	15	Each	$25.00	$375
Sign: "Bike Lane"	6	Each	$50.00	$300
Sign: "Ahead"	1	Each	$25.00	$25
Sign: "Ends"	1	Each	$25.00	$25
Right: "Begin Right Turn Lane Yield to Bikes"	2	Each	$50.00	$100
Sign: "Right Lane Must Turn Right"	2	Each	$50.00	$100
			Subtotal Bike Lanes =	$166,700
Raised Median				
Combination Concrete Curb and Gutter B-6.12	80	Foot	$40.00	$3,200
PCC Median	250	Sq Ft	$50.00	$12,500
Detectable Warnings	40	Sq Ft	$35.00	$1,400
			Subtotal Raised Median =	$17,100
Sidewalk Ramps				
Pavement Removal	300	Sq Yd	$25.00	$7,500
Sidewalk Removal	3,500	Sq Ft	$3.00	$10,500
Curb and Gutter Removal	300	Foot	$15.00	$4,500
Combination Concrete Curb and Gutter B-6.12	300	Foot	$40.00	$12,000
PCC Sidewalk 6"	3,500	Sq Ft	$7.00	$24,500
Detectable Warnings	120	Sq Ft	$35.00	$4,200
Brick Pavers	350	Sq Ft	$45.00	$15,750
PCC Base Course, 8"	50	Sq Yd	$100.00	$5,000
Topsoil & Seeding	500	Sq Yd	$100.00	$50,000
Manhole w/ Type 11 Frame & Grate	8	Each	$2,500.00	$20,000
Storm Sewer, 12"	200	Foot	$150.00	$30,000
			Subtotal Sidewalk Ramps =	$183,950
Traffic Signals				
Removal of Existing Mast Arm Assembly and Pole	4	Each	$1,000.00	$4,000
Removal of Existing Foundations	4	Each	$500.00	$2,000
Combination Steel Mast Arm Assembly and Pole	4	Each	$8,000.00	$32,000
Signal Head, LED, 1-Face, 5-Section, Mast Arm Mounted	4	Each	$1,000.00	$4,000
Removal of Existing Pole	4	Each	$300.00	$1,200
Traffic Signal Post, 16'	4	Each	$1,000.00	$4,000
Signal Head, LED, 1-Face, 5-Section, Bracket Mounted	4	Each	$1,500.00	$6,000
Concrete Foundation, Type I, 30" Diameter	48	Foot	$25.00	$1,200
Pedestrian Push Button Post	8	Each	$1,200.00	$9,600
ADA Pedestrian Push Button	16	Each	$1,200.00	$19,200
Pedestrian Signal Head, LED, 2-Face, Bracket Mounted w/Countdown Timer	8	Each	$2,000.00	$16,000
Electric Cable in Conduit	3,000	Foot	$2.50	$7,500
Miscellaneous Sidewalk Removal & Replacement	1,500	Sq Ft	$10.00	$15,000
			Subtotal Traffic Signals =	$121,700
			Subtotal Bike Lanes	$166,700
			Subtotal Raised Median	$17,100
			Subtotal Sidewalk Ramps	$183,950
			Subtotal Traffic Signals	$121,700
			Traffic Control (3%)	$14,680
			Mobilization (5%)	$24,470
			Total Cost - Cedar Street to Vine Street	**$528,600**

Main Street Bike Lanes and Pedestrian Improvements - Cost Estimate

Pay Item	Qty.	Unit	Unit Price	Total
Vine Street to Grove Street				
Bike Lanes				
Hot-Mix Asphalt Surface Removal, 3"	6,200	Sq Yd	$4.00	$24,800
Polymerized Hot-Mix Asphalt Binder Course, IL19.0, N90	600	Ton	$100.00	$60,000
Polymerized Hot-Mix Asphalt Surface Course, Mix "D", N90	450	Ton	$120.00	$54,000
Prime Coat	620	Gal	$3.00	$1,860
Class B Patching, 8"	150	Sq Yd	$120.00	$18,000
Manholes to be Adjusted	15	Each	$1,500.00	$22,500
Utility Valves to be Adjusted	10	Each	$500.00	$5,000
Detector Loops Type 1	400	Foot	$20.00	$8,000
Thermoplastic Pavement Marking Line, 4"	2,100	Foot	$0.75	$1,575
Thermoplastic Pavement Marking Line, 6"	1,800	Foot	$1.00	$1,800
Thermoplastic Pavement Marking Line, 12"	250	Foot	$2.00	$500
Thermoplastic Pavement Marking Line, 24"	80	Foot	$3.00	$240
Thermoplastic Turn Arrow	18	Each	$100.00	$1,800
Paint Bicycle Symbol and Arrow	13	Each	$25.00	$325
Sign: "Bike Lane"	4	Each	$50.00	$200
Right: "Begin Right Turn Lane Yield to Bikes"	2	Each	$50.00	$100
Sign: "Right Lane Must Turn Right"	2	Each	$50.00	$100
			Subtotal Bike Lanes =	$200,800
Sidewalk Ramps				
Sidewalk Removal	3,000	Sq Ft	$3.00	$9,000
Curb and Gutter Removal	450	Foot	$15.00	$6,750
Combination Concrete Curb and Gutter B-6.12	450	Foot	$40.00	$18,000
PCC Sidewalk 6"	3,000	Sq Ft	$7.00	$21,000
Detectable Warnings	150	Sq Ft	$35.00	$5,250
			Subtotal Sidewalk Ramps =	$60,000
			Subtotal Bike Lanes	$200,800
			Subtotal Sidewalk Ramps	$60,000
			Traffic Control (3%)	$7,800
			Mobilization (5%)	$13,000
			Total Cost - Vine Street to Grove Street	**$281,600**

Pay Item	Qty.	Unit	Unit Price	Total
Grove Street to Cottage Grove Avenue				
Bike Lanes				
Hot-Mix Asphalt Surface Removal, 1-1/4"	7,000	Sq Yd	$3.00	$21,000
Polymerized Hot-Mix Asphalt Surface Course, Mix "D", N90	500	Ton	$120.00	$60,000
Prime Coat	700	Gal	$3.00	$2,100
Class B Patching, 8"	50	Sq Yd	$120.00	$6,000
Manholes to be Adjusted	5	Each	$1,500.00	$7,500
Utility Valves to be Adjusted	5	Each	$500.00	$2,500
Thermoplastic Pavement Marking Line, 4"	800	Foot	$0.75	$600
Thermoplastic Pavement Marking Line, 6"	4,000	Foot	$1.00	$4,000
Thermoplastic Pavement Marking Line, 12"	60	Foot	$2.00	$120
Thermoplastic Pavement Marking Line, 24"	30	Foot	$3.00	$90
Thermoplastic Turn Arrow	2	Each	$100.00	$200
Paint Bicycle Symbol and Arrow	14	Each	$25.00	$350
Sign: "Bike Lane"	4	Each	$50.00	$200
Right: "Begin Right Turn Lane Yield to Bikes"	1	Each	$50.00	$50
Sign: "Right Lane Must Turn Right"	1	Each	$50.00	$50
			Subtotal Bike Lanes =	$104,760
Sidewalk Ramps				
Sidewalk Removal	2,500	Sq Ft	$3.00	$7,500
Curb and Gutter Removal	300	Foot	$15.00	$4,500
Combination Concrete Curb and Gutter B-6.12	300	Foot	$40.00	$12,000
PCC Sidewalk 6"	2,500	Sq Ft	$7.00	$17,500
Detectable Warnings	150	Sq Ft	$35.00	$5,250
			Subtotal Sidewalk Ramps =	$46,750
			Subtotal Bike Lanes	$104,760
			Subtotal Sidewalk Ramps	$46,750
			Traffic Control (3%)	$4,540
			Mobilization (5%)	$7,550
			Total Cost - Grove Street to Cottage Grove Avenue	**$163,600**

Main Street Bike Lanes and Pedestrian Improvements - Cost Estimate

Pay Item	Qty.	Unit	Unit Price	Total
Cottage Grove Avenue to Dewey Street				
Bike Lanes				
Hot-Mix Asphalt Surface Removal, 3"	10,500	Sq Yd	$4.00	$42,000
Polymerized Hot-Mix Asphalt Binder Course, IL19.0, N90	750	Ton	$100.00	$75,000
Polymerized Hot-Mix Asphalt Surface Course, Mix "D", N90	550	Ton	$120.00	$66,000
Hot-Mix Asphalt Surface Removal, 1-1/4"	21,000	Sq Yd	$3.00	$63,000
Polymerized Hot-Mix Asphalt Surface Course, Mix "D", N90	1,700	Ton	$120.00	$204,000
Prime Coat	3,150	Gal	$3.00	$9,450
Class B Patching, 8"	1,600	Sq Yd	$120.00	$192,000
Hot-Mix Asphalt Surface Removal, 2" (median removal)	1,200	Sq Yd	$3.50	$4,200
Manholes to be Adjusted	40	Each	$1,500.00	$60,000
Utility Valves to be Adjusted	15	Each	$500.00	$7,500
Thermoplastic Pavement Marking Line, 4"	17,600	Foot	$0.75	$13,200
Thermoplastic Pavement Marking Line, 6"	11,500	Foot	$1.00	$11,500
Thermoplastic Pavement Marking Line, 12"	600	Foot	$2.00	$1,200
Thermoplastic Turn Arrow	26	Each	$100.00	$2,600
Paint Bicycle Symbol and Arrow	33	Each	$25.00	$825
Sign: "Bike Lane"	13	Each	$50.00	$650
Sign: "Ahead"	1	Each	$20.00	$20
Sign: "Ends"	1	Each	$20.00	$20
			Subtotal Bike Lanes =	$753,165
Sidewalk				
PCC Sidewalk 6"	11,000	Sq Ft	$7.00	$77,000
			Subtotal Sidewalk =	$77,000
Sidewalk Ramps				
Sidewalk Removal	1,200	Sq Ft	$3.00	$3,600
Curb and Gutter Removal	150	Foot	$15.00	$2,250
Combination Concrete Curb and Gutter B-6.12	150	Foot	$40.00	$6,000
PCC Sidewalk 6"	1,200	Sq Ft	$7.00	$8,400
Detectable Warnings	80	Sq Ft	$35.00	$2,800
			Subtotal Sidewalk Ramps =	$23,050
			Subtotal Bike Lanes	$753,165
			Subtotal Sidewalk	$77,000
			Subtotal Sidewalk Ramps	$23,050
			Traffic Control (3%)	$25,600
			Mobilization (5%)	$42,685
			Total Cost - Cottage Grove Avenue to Dewey Street	**$921,500**

Subtotal Cedar Street to Vine Street	$528,600
Subtotal - Vine Street to Grove Street	$281,600
Subtotal - Grove Street to Cottage Grove Avenue	$163,600
Subtotal - Cottage Grove Avenue to Dewey Street	$921,500
Total Construction Cost	$1,895,300
Engineering (25%)	$473,825
Total Project Construction Cost	**$2,369,125**

To be paid for by the City of Urbana

Cedar Street to Grove Street				
Bike Lanes, Raised Median, Sidewalk Ramps, Traffic Signals				$810,200
Grove Street to Cottage Grove Avenue				
Class B Patching, 8"	50	Sq Yd	$120.00	$6,000
Cottage Grove Avenue to Dewey Street				
Hot-Mix Asphalt Surface Removal, 3"	10,500	Sq Yd	$1.00	$10,500
Polymerized Hot-Mix Asphalt Binder Course, IL19.0, N90	750	Ton	$100.00	$75,000
Class B Patching, 8"	1,600	Sq Yd	$120.00	$192,000
			Total Project Amount to be paid for by the City of Urbana	$1,093,700

Total Project Construction Cost	$2,369,125
Total Project Amount to be paid for by the City of Urbana	$1,093,700
Total Grant Application	**$1,275,425**
80% award	**$1,020,340**
20% city share	**$255,085**
TOTAL CITY OUT-OF-POCKET COSTS	**$1,348,785**