

**Detroit River International Crossing Study
Context Sensitive Solutions Workshop
August 24, 2006, 6:30 to 9:00 p.m.
DoubleTree Hotel
Notes**

The 13th in a series of Detroit River International Crossing Study (DRIC) community workshops was conducted on August 24, 2006 (Table 1). Its purpose was to work toward a consensus on the vision for the aesthetic treatment of the system – the bridge, plaza and interchange – proposed for a new crossing of the Detroit River between Detroit, Mich., and Windsor, Ontario.

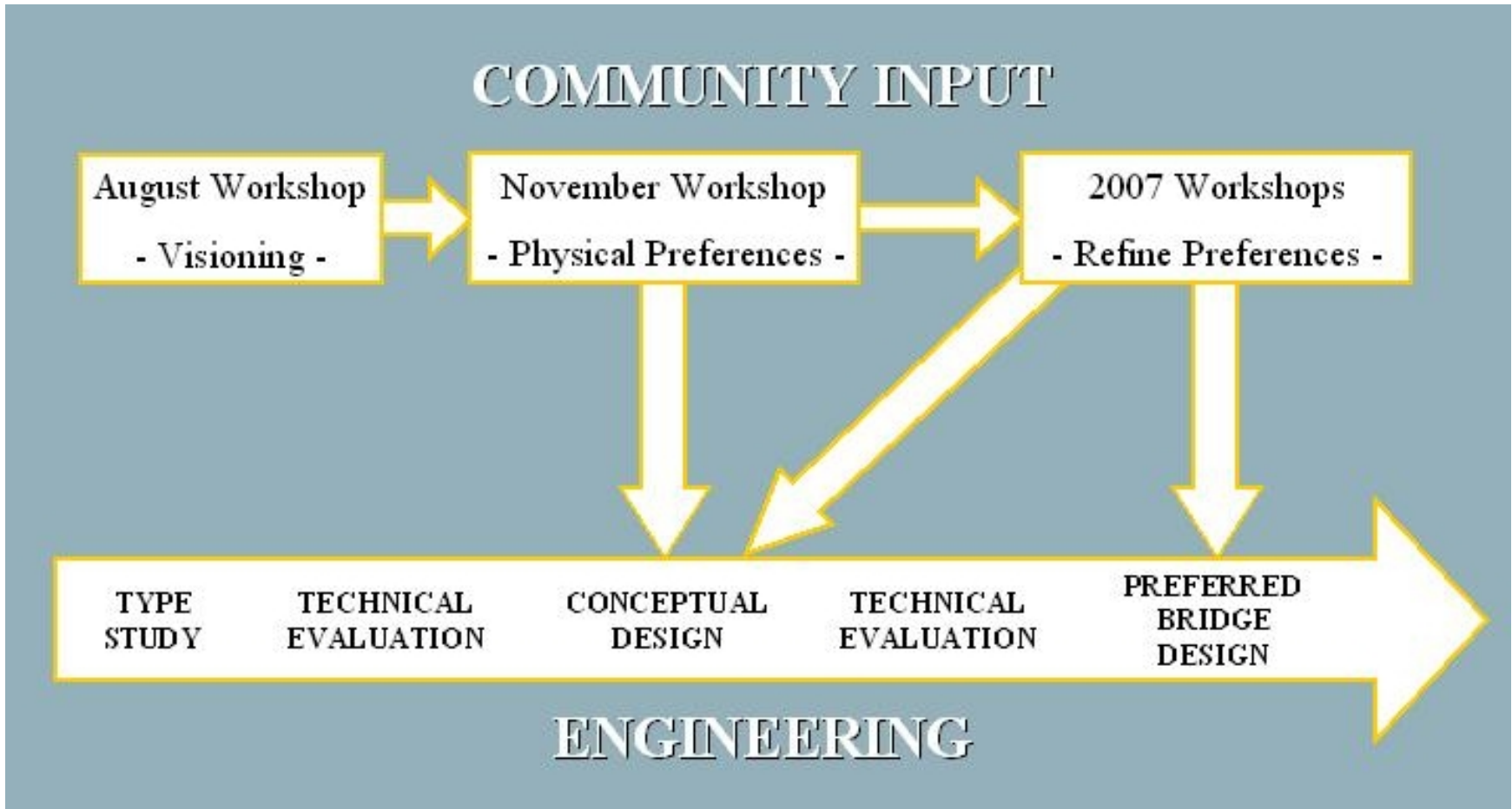
**Table 1
Detroit River International Crossing Study
Community Workshops Series**

#13	August 24, 2006	Context Sensitive Solutions Workshop – Vision of Bridge, Plaza (Internal) and Interchange
#12	June 22, 2006	Community Planning Process, Illustrative Community Plan and Bus Tour
#11	May 23, 2006	Community Planning Process, Illustrative Community Plans, and Enhancement Projects
#10	May 9/10, 2006	SW Detroit Social and Cultural Information Gathering
#9	April 19, 2006	Community, CSS, and Bridge Terminology
#8	March 22, 2006	Community Planning Exercises
#7	March 8, 2006	V.P. Survey and Introduction of the Community Analysis
#6	February 27, 2006	Vision State. Extract./Land Use Goals and Govern. Vision
#5	February 8, 2006	Proposed Plazas w/Preliminary Tie to Bridge/I-75
#4	January 18, 2006	Work Station “Q and A” and Proposed Plaza Locations
#3	January 4, 2006	Visions and Presentation of Preliminary Plaza Locations
#2	December 21, 2005	Visions/First Step to Plaza Location
#1	December 14, 2005	“Prouds” and “Concerns” & Visioning a Successful and Vibrant Area WITH and WITHOUT a Bridge

Source: The Corradino Group of Michigan, Inc.

Context Sensitive Solutions (CSS) is a blending of community values and sound engineering (Figure 1). The process, begun in April 2006, continued with the definition of visions in the August workshop and will extend to the November 2006 workshop, when the focus will be on physical preferences. The physical preferences will be refined in a series of CSS workshops in 2007. Parallel to the community input is engineering of the crossing system. At the end of this process, the DRIC work plan now calls for a preferred design to be advanced in the Draft Environmental Impact Statement for two bridge types – cable stay (Figure 2) and suspension (Figure 3) – for each of two crossings: X-10 (Figure 4) and X-11 (Figure 5).

Figure 1
Achieving Context Sensitive Solutions



Source: Parsons Transportation Group

Figure 2
Example Cable Stay Bridge at X-10 (B)



Source: Parsons Transportation Group

Figure 3
Example Suspension Bridge at X-10 (B)



Source: Parsons Transportation Group

Figure 4
Crossing X-10: North of Zug Island



Source: Parsons Transportation Group

Figure 5
Crossing X-11: North of Fort Wayne



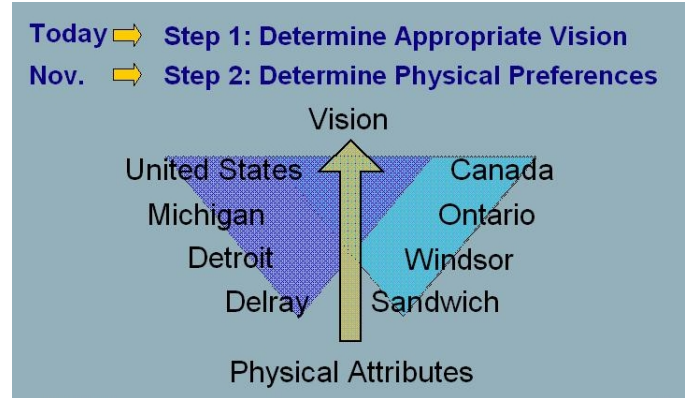
Source: Parsons Transportation Group

Bridge Component of Crossing System

The August 24th workshop was the first step in the two-step process to develop the CSS results. It reflected on the characteristics of local, regional, national and international communities (Figure 6). For the bridge component of the crossing system, the following six visions were focused upon.

1. Friendship
2. Industry
3. Gateway
4. Ecology
5. History
6. Culture

Figure 6
Detroit River International Crossing Study
Vision Process



Following a review of the meaning of each vision (Figures 7 through 12), workshop participants, using an electronic touchpad device, recorded their preference of each then for each river crossing – X-10 and X-11.¹

The distribution of the preference indications for the bridge vision is shown on Figures 13 through 18 and summarized on Table 2.

Table 2
Detroit River International Crossing Study
Vision Preference Evaluation
Bridge Component

Vision	Crossing X-10		Crossing X-11	
	Weighted Average	Rank	Weighted Average	Rank
Friendship	6.76	1	6.06	2
Industry	5.95	3	5.67	4
Gateway	5.93	4	5.98	3
Ecology	4.58	6	5.58	5
History	6.23	2	6.44	1
Cultural	5.52	5	5.23	6

Source: The Corradino Group of Michigan, Inc.

¹ It is noted that between 53 and 57 preference scores were recorded for the bridge vision except the “friendship” vision for Crossing X-11. Only 32 preferences were recorded. This was the first application of the preference system and the lack of familiarity may have lessened its use.

Detroit River International Crossing Study
Example Vision Expressions on Bridges

Figure 7
Friendship Vision Depiction



Figure 8
Industry Vision Depiction



Figure 9
Gateway Vision Depiction



Figure 10
Ecology Vision Depiction

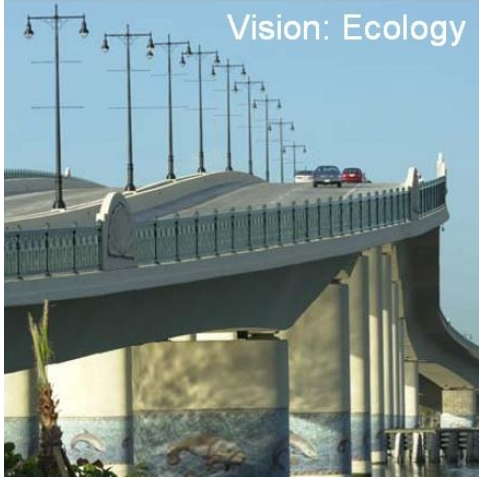


Figure 11
History Vision Depiction

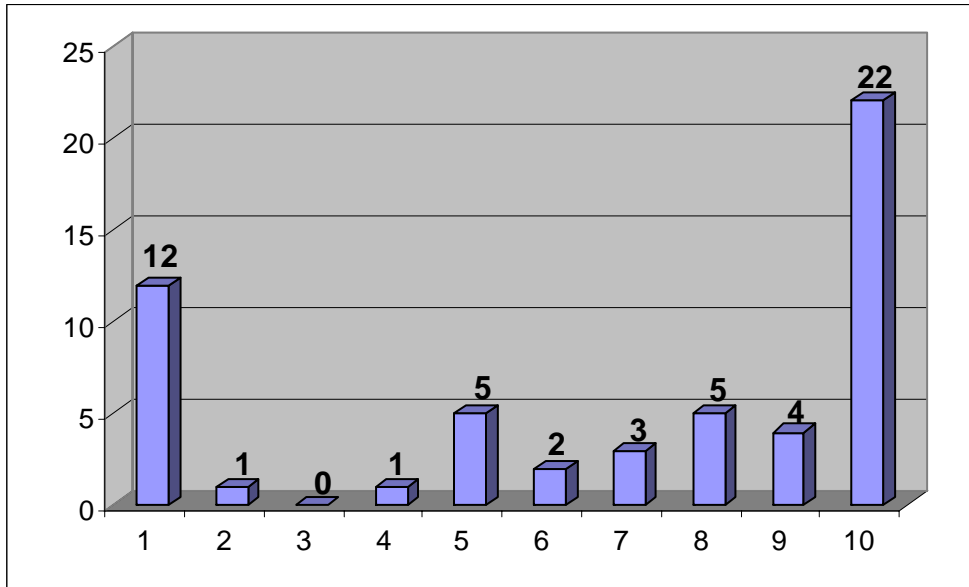


Figure 12
Culture Vision Depiction



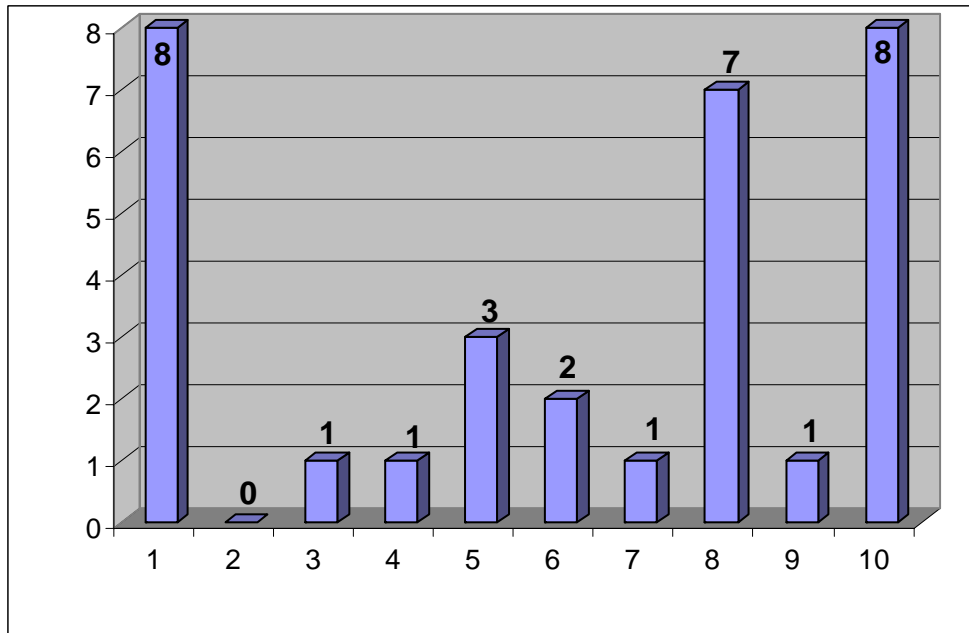
Source: Parsons Transportation Group

Figure 13A
Celebrating Friendship Vision Preference: Crossing X-10



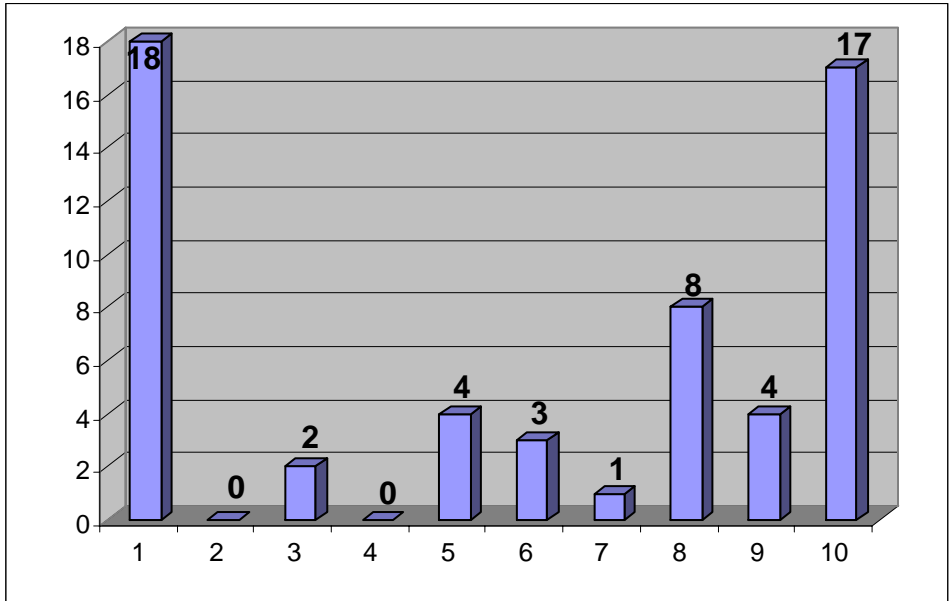
Source: The Corradino Group of Michigan, Inc.

Figure 13B
Celebrating Friendship Vision Preference: Crossing X-11



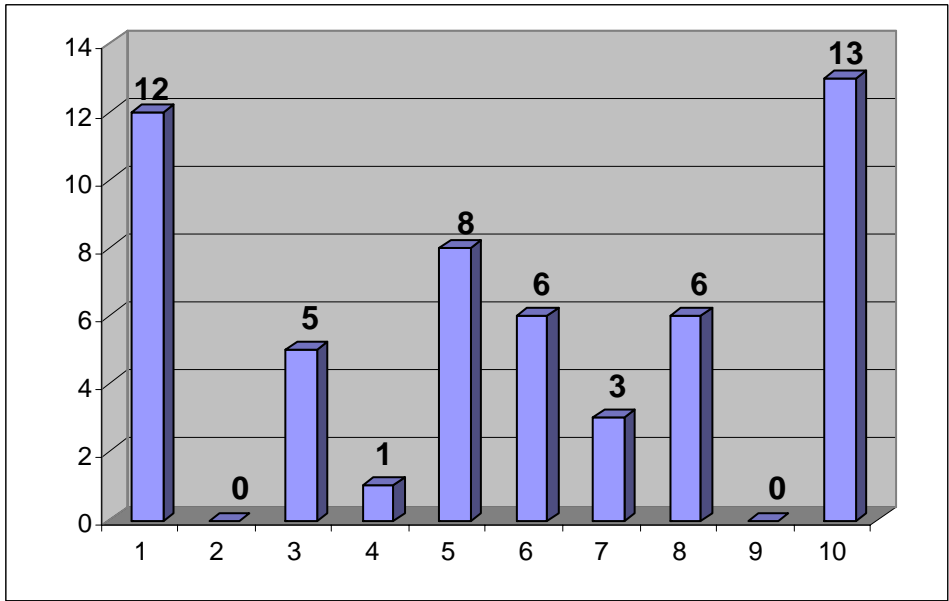
Source: The Corradino Group of Michigan, Inc.

Figure 14A
Industry Vision Preference: Crossing X-10



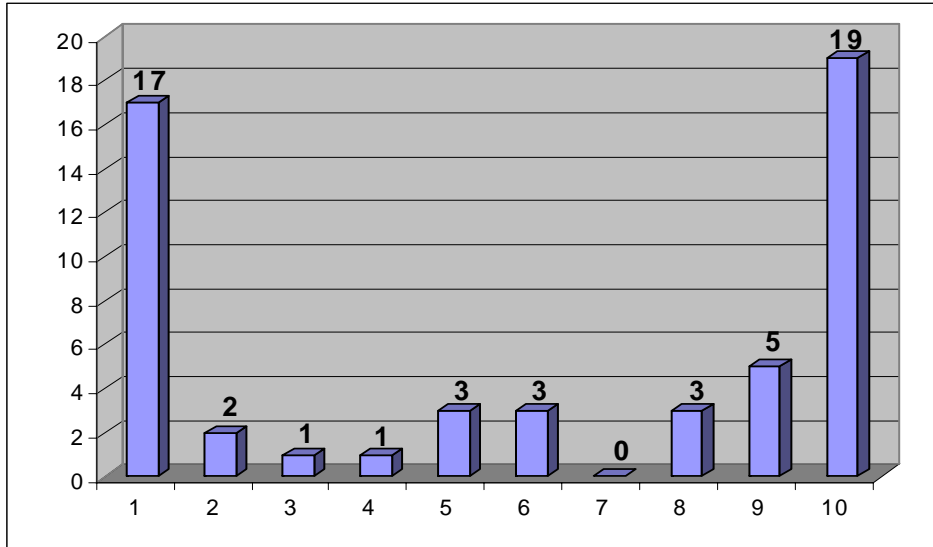
Source: The Corradino Group of Michigan, Inc.

Figure 14B
Industry Vision Preference: Crossing X-11



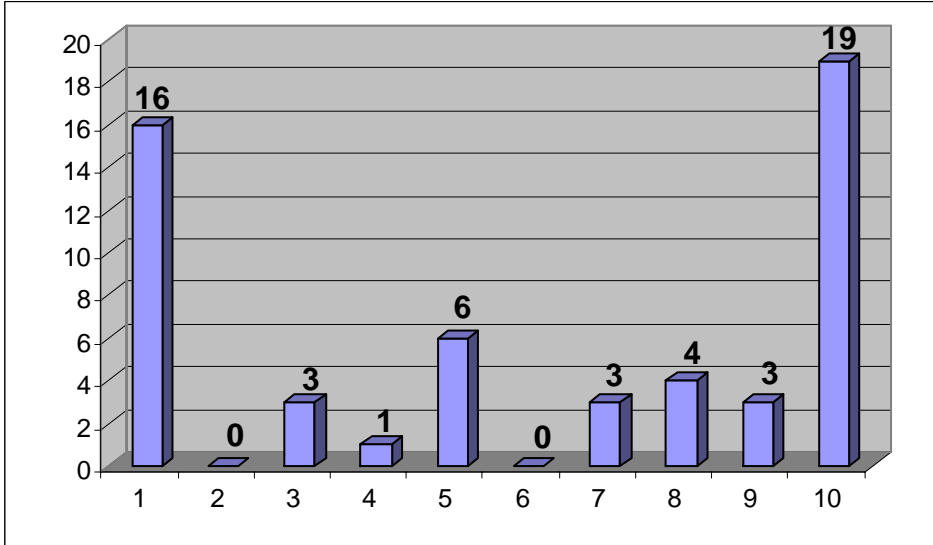
Source: The Corradino Group of Michigan, Inc.

Figure 15A
Gateway Vision Preference: Crossing X-10



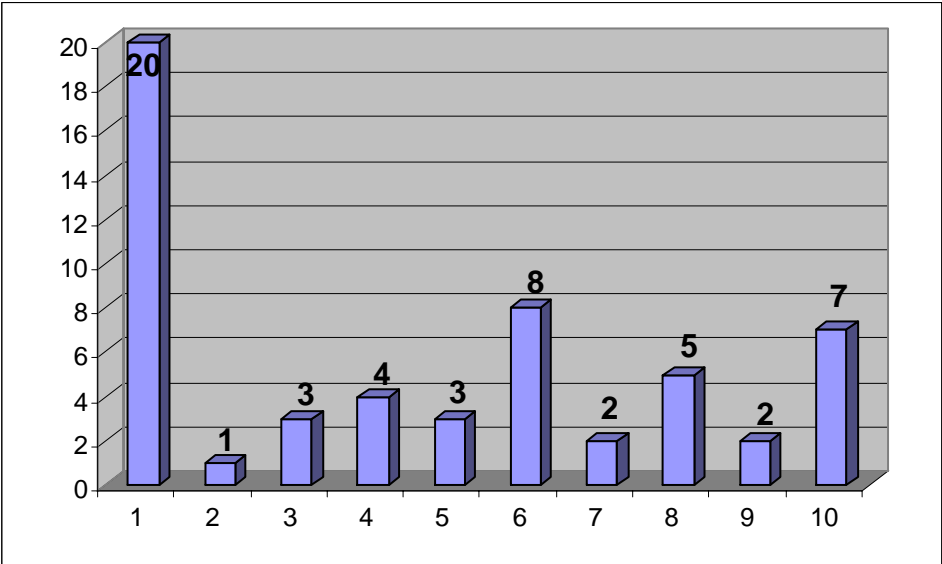
Source: The Corradino Group of Michigan, Inc.

Figure 15B
Gateway Vision Preference: Crossing X-11



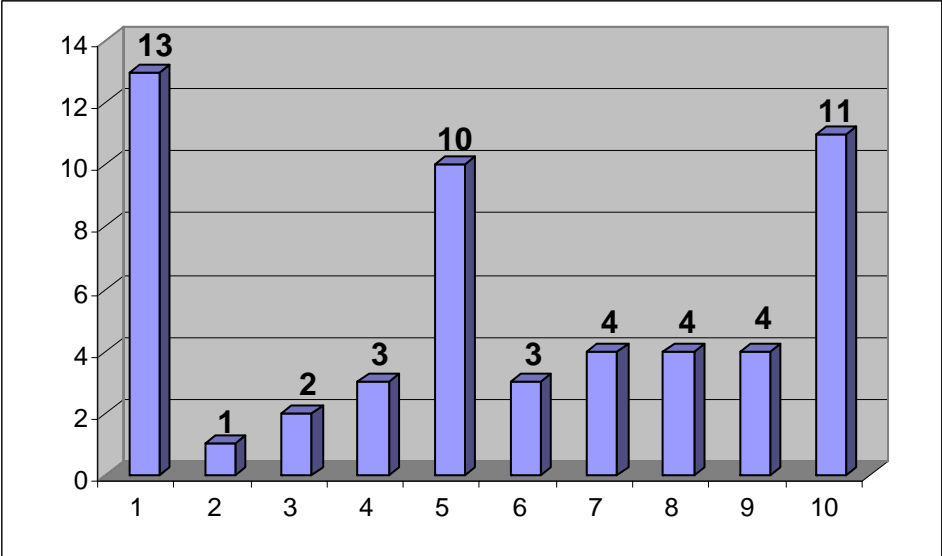
Source: The Corradino Group of Michigan, Inc.

Figure 16A
Ecology Vision Preference: Crossing X-10



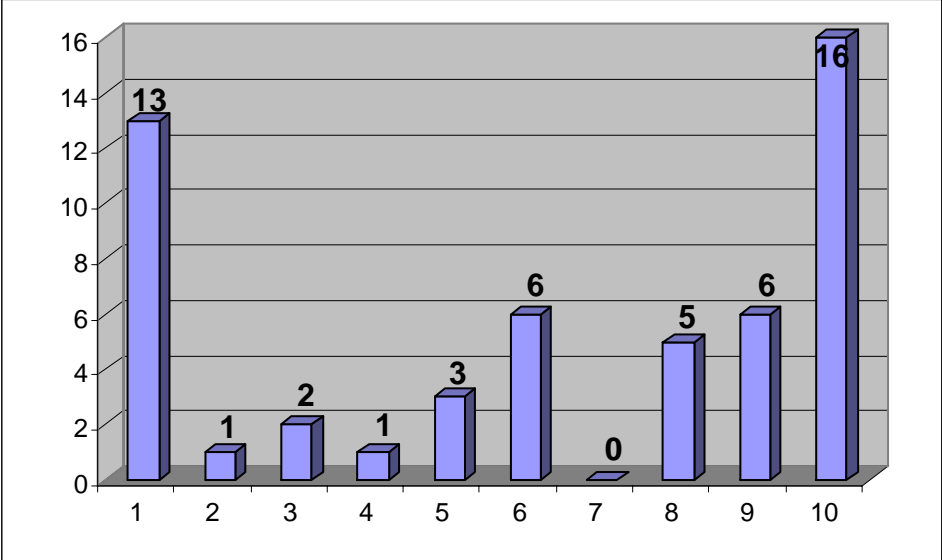
Source: The Corradino Group of Michigan, Inc.

Figure 16B
Ecology Vision Preference: Crossing X-11



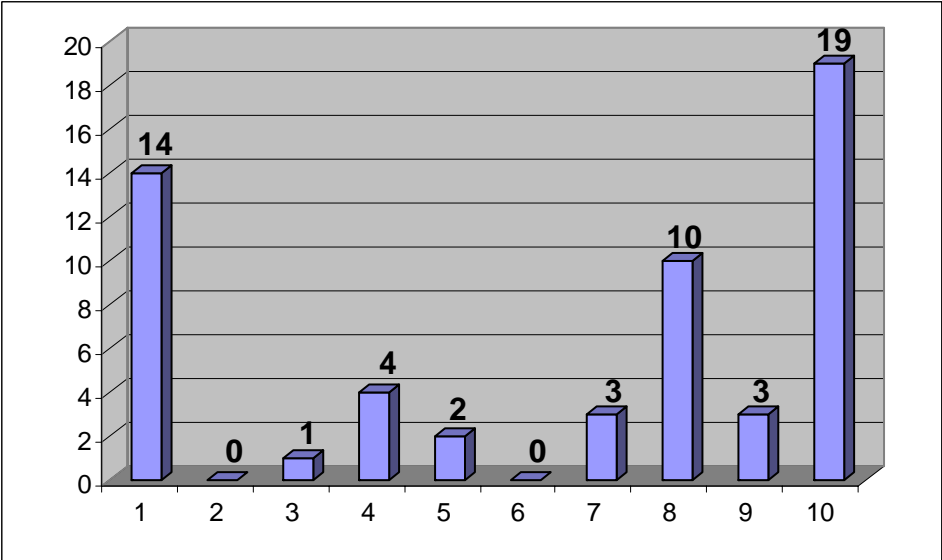
Source: The Corradino Group of Michigan, Inc.

Figure 17A
History Vision Preference: Crossing X-10



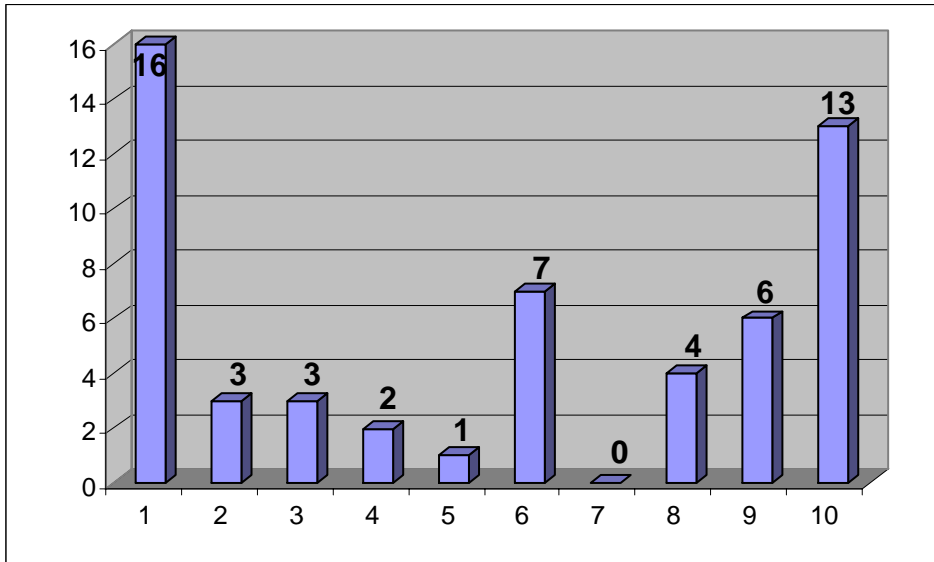
Source: The Corradino Group of Michigan, Inc.

Figure 17B
History Vision Preference: Crossing X-11



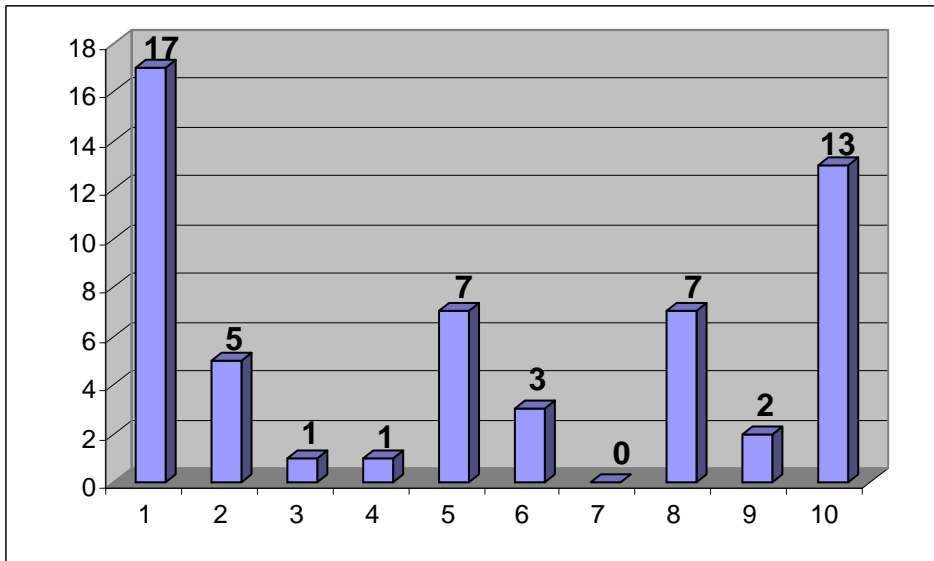
Source: The Corradino Group of Michigan, Inc.

Figure 18A
Culture Vision Preference: Crossing X-10



Source: The Corradino Group of Michigan, Inc.

Figure 18B
Culture Vision Preference: Crossing X-11



Source: The Corradino Group of Michigan, Inc.

Overall, on a scale of 1 to 10, with 1 indicating the least preference and 10 the most, the Friendship and History visions for the bridge component were most preferred for each crossing. The least preferred for each crossing were the Ecology and Cultural visions. The Gateway was a very close third preference for Crossing X-11.

Plaza and Interchange Components

Five broad vision categories were evaluated for the plaza’s internal physical features and its interchange with the freeway system.

- Industry
- History
- Geography
- Culture
- Gateway

Following the depictions and explanation of these themes (Figures 19 through 23), the plaza and interchange components of the river crossing system were evaluated for preference on a scale of 1 to 10 – 1 being the least preferred; 10 the most preferred.

The results of the plaza preference evaluation are illustrated on Figures 24 through 28 and summarized on Table 3.

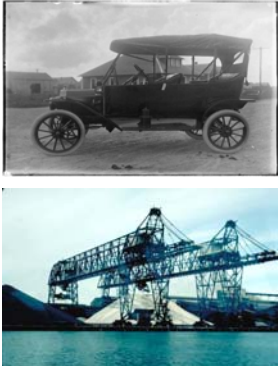
Table 3
Detroit River International Crossing Study
Vision Preference Evaluation
Plaza Component

Vision	Weighted Average	Rank
Industry	4.67	5
History	7.91	2
Geography	8.58	1
Culture	6.63	3
Gateway	6.42	4

Source: The Corradino Group of Michigan, Inc.

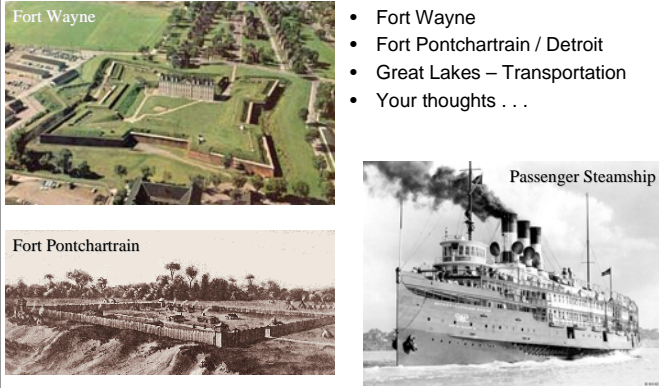
On a scale of 1 to 10, clearly the top two preferences are the Geography and History visions. The Industry vision is the least preferred for the plaza component of the crossing system.

Figure 19
Plaza and Interchange
Industry Vision Concepts




- Automobile Industry
- Iron Industry
- Your thoughts

Figure 20
Plaza and Interchange
History Vision Concepts



- Fort Wayne
- Fort Pontchartrain / Detroit
- Great Lakes – Transportation
- Your thoughts . . .

Figure 21
Plaza and Interchange
Geography Vision Concepts




- City of Detroit
- City of Delray
- The Riverfront
- Your thoughts

Figure 22
Plaza and Interchange
Culture Vision Concepts



- Motown
- Heritage
- Your thoughts

Figure 23
Plaza and Interchange
Gateway Vision Concepts



- Welcome to the US / Michigan
- Welcome to Delray
- Your thoughts

Source: Parsons Transportation Group

Figure 24
"Internal" Plaza Vision Preference: Industry

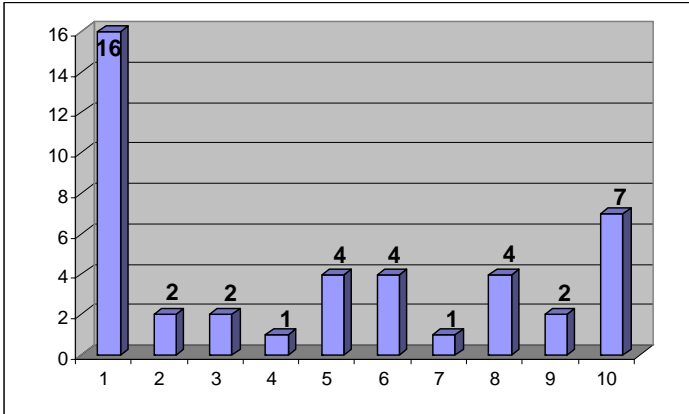


Figure 25
"Internal" Plaza Vision Preference: History

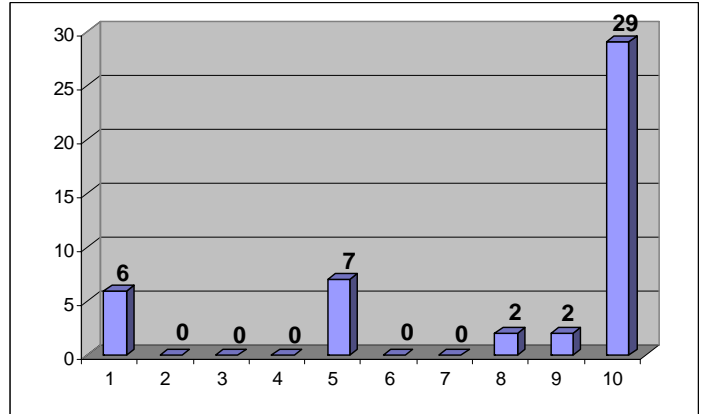


Figure 26
"Internal" Plaza Vision Preference: Geography

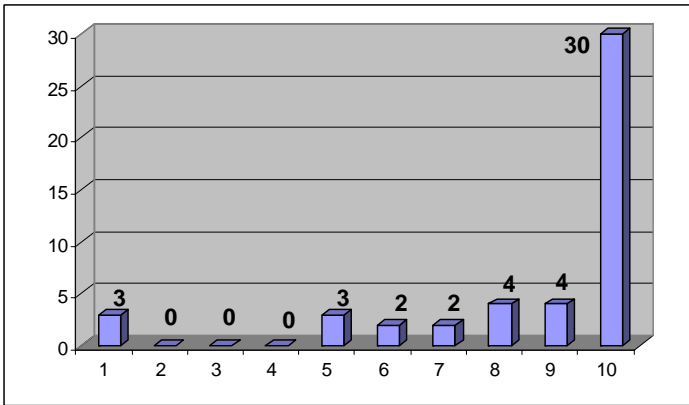


Figure 27
"Internal" Plaza Vision Preference: Culture

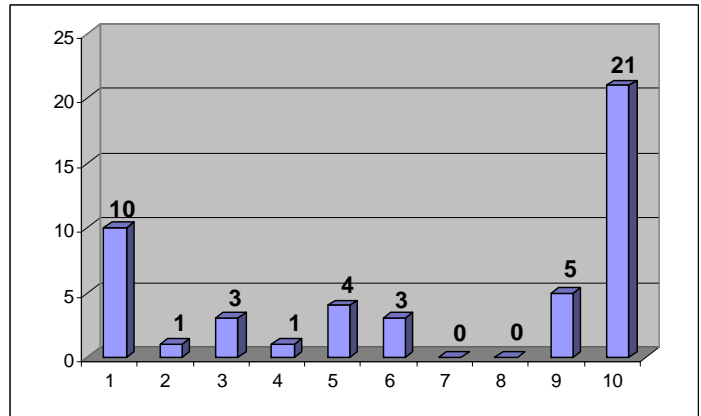
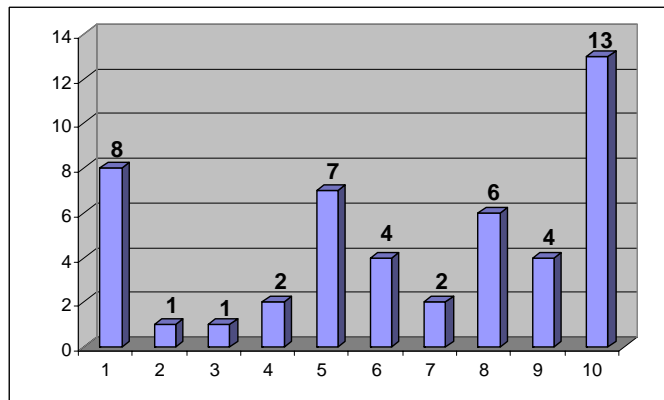


Figure 28
"Internal" Plaza Vision Preference: Gateway



Source: The Corradino Group of Michigan, Inc.

The results of the interchange preference evaluation are illustrated on Figures 29 through 33. The summary of the results indicates, on a scale of 1 (least) to 10 (most), the top two preferences are the Gateway and History visions; Culture is a close third. The least preferred is the Geography vision (Table 4).

Table 4
Detroit River International Crossing Study
Vision Preference Evaluation
Interchange Component

Vision	Weighted Average	Rank
Industry	6.08	4
History	7.63	2
Geography	5.50	5
Culture	7.33	3
Gateway	7.96	1

Source: The Corradino Group of Michigan, Inc.

Next Step on CSS

The next step in the DRIC Context Sensitive Solutions process is a “simulation workshop” to be held on November 2, 2006, at the IBEW hall (1358 Abbott Street). At that meeting, which will last from 10 a.m. to 7 p.m., the community will be involved in the application of various design treatments to establish the preliminary physical preferences of the crossing system components consistent with the vision preferences established on August 24th. This will involve computer simulations and artistic renderings guided by the workshop participants. The preliminary physical concepts will then be refined in workshops conducted in February, April and June 2007.

Figure 29
Interchange Vision Preference: Industry

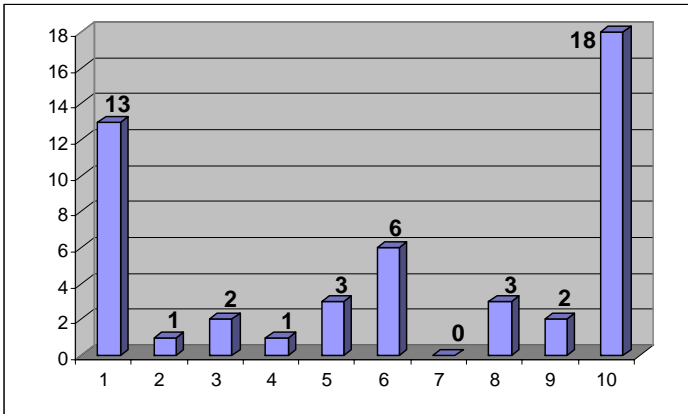


Figure 30
Interchange Vision Preference: History

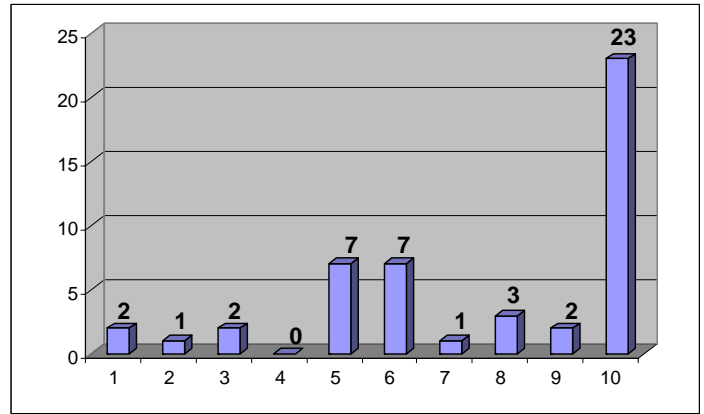


Figure 31
Interchange Vision Preference: Geography

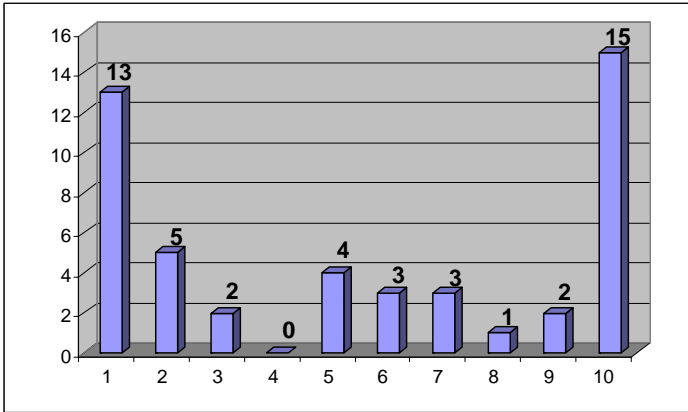


Figure 32
Interchange Plaza Vision Preference: Culture

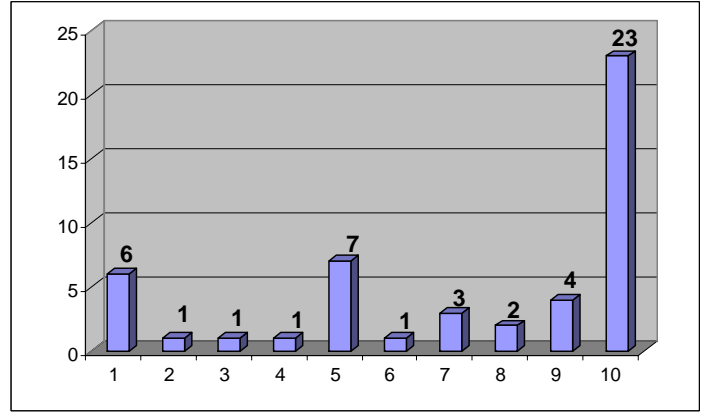
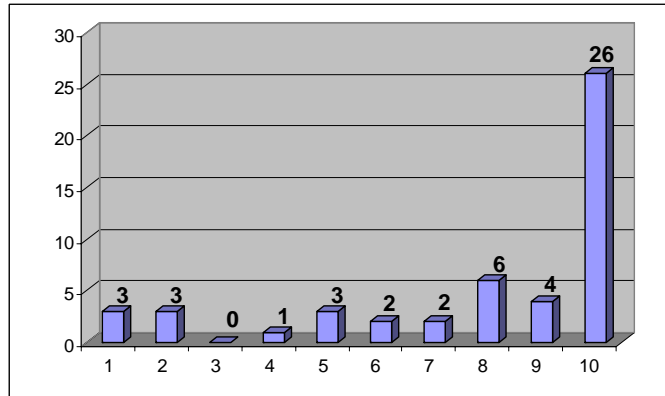


Figure 33
Interchange Vision Preference: Gateway



Noise Simulation

Another part of the workshop was the demonstration of the noise effects of a bridge and plaza based on measurements conducted near the Ambassador Bridge on June 7, 2006 (Figure 34). Noise levels were recorded for 10 minutes each, three times during the day at the five locations shown on Figure 34. The 10-minute average sound levels ranged between 57 and 66 dBA. The noisiest location was the truck plaza (Site No. 5). Overall, the noise near the Ambassador Bridge does not exceed 66 dBA at any measured receptor.

Noise Measurement Results (10-min Average Sound Level, dBA)

Location	Morning (7:30 – 9:30 AM)	Mid-day (10:00 AM – Noon)	Early Afternoon (1:00 – 3:00 PM)
No. 1: Intersection of St. Anne and Jefferson (south of Fort one block)	58	59	59
No. 2: NE corner of St. Anne and Lafayette (on corner by Ste. Anne Church)	61	62	61
No. 3: NE corner of 18 th and Lafayette (near new housing)	58	57	58
No. 4: NE corner of St. Anne Street and Porter (residential corner)	59	60	58
No. 5: SW corner of 21 st and Bristol Place	64	66	64

These recorded levels were played one-by-one at the August 24th workshop at the same volume at which they were recorded and to adjust them for an indoor environment.

Most people find noises of 65 dBA, or higher, interfere with conversation or watching television. The range of human responses to various sources of noise is illustrated on Figure 35. It is noteworthy the MDOT's policy on mitigating noise from a transportation project is triggered when noise levels over the loudest hour of the day average 66 dBA or more. If an analysis indicates this criterion is met or exceeded, a determination is made whether walls are feasible – can they be built from an engineering point of view? And, reasonable – does the protection offered justify the cost?

Figure 34
Locations At and Around Ambassador Bridge at Which Noise was Recorded
(May 26, 2006)



Source: The Corradino Group of Michigan, Inc.

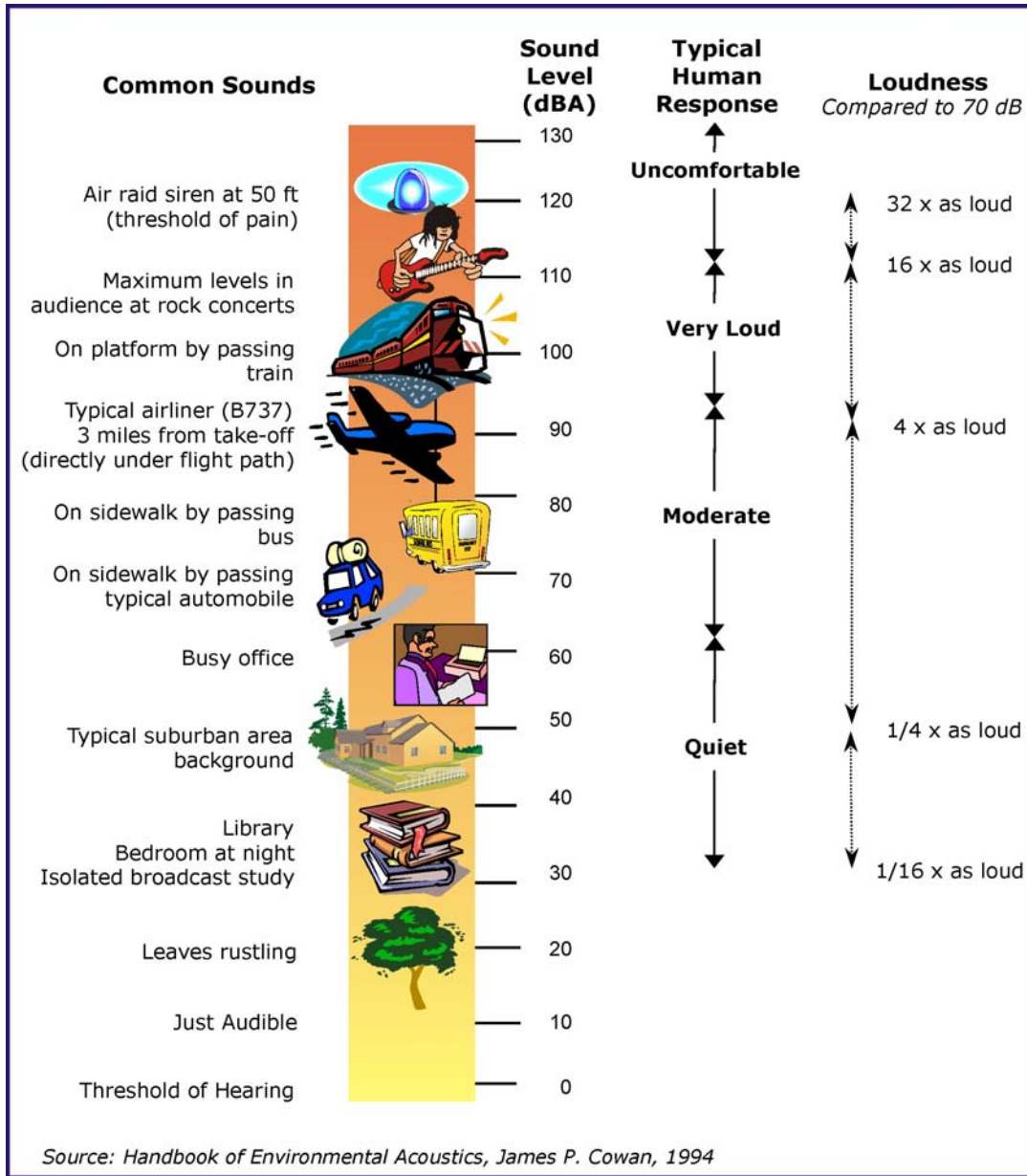
Preliminary – For Discussion Purposes Only

Figure 34 (continued)
Locations At and Around Ambassador Bridge at Which Noise was Recorded
(May 26, 2006)



Source: The Corradino Group of Michigan, Inc.

Figure 35
Common Sounds and Human Response



The next steps in the DRIC noise analysis will be to model future traffic on the Bridge and at the proposed plaza. Also, to be modeled is noise on the interchange ramps and along I-75 associated with the proposed new crossing. Then, if warranted, noise mitigation measures will be developed, consistent with MDOT's policy, stated above.

Detroit River International Crossing Study
Context Sensitive Solutions Workshop
August 24, 2006, 6:30 to 9:00 p.m.
DoubleTree Hotel
Attendees

1. Margie Anderson	Delray Resident
2. Bessie Barr	Detroit Resident (S. Schafer neighborhood)
3. Allison Benjamin	Southwest Detroit Environmental Vision
4. Sophie Bennett	Delray Resident
5. Scott Brines	Delray Resident
6. Tom Cervenak	Peoples Community Services/Delray House
7. Rosemary Y. Christian	St. Paul A.M.E. church
8. Shirley Cockrel	Delray Resident
9. Robert Cross	Delray Resident
10. Mary Ann Cuderman	Windsor Truck Watch
11. Milieo DeJohn	Riverview Resident
12. Mike Dempsey	Detroit Economic Growth Corporation
13. Yuri Diaz	Delray Resident
14. Audrey Ector	St. Paul A.M.E. church
15. Ernie Edick	Delray Business owner
16. Marilyn Edick	Delray Business owner
17. Robert Fieldbinder	CH2M Hill
18. Jackie Giles	Riverview Resident
19. Robert Giles	Riverview Resident
20. Pamela Goode	River Rouge Resident
21. Thelma Goodwin	Kemeny Recreation Center
22. Allen Gunther	Delray Resident
23. Peggy Jo Heilman	Delray Resident
24. Robert Heilman	Delray Resident
25. Alice Hellgel	Delray Resident
26. Mario Hernandez	Delray Resident
27. Betty Jarrett	Delray Resident
28. Karen Kavanaugh	Southwest Detroit Business Association
29. Denise Kehego	Delray Resident
30. Terry Kennedy	Windsor Truck Watch
31. S. Khasnabis	Wayne State University student
32. Earlie Kirkwood	Delray Resident
33. Dolores Leonard	Sierra Club
34. Katherine Lago	Detroit Resident
35. Edward Mack	Detroit Resident
36. Hassan Masbouth	Detroit Business owner
37. Nicole Matthews	Delray Resident
38. Terri Mattison	Original United Citizens of SW Detroit
39. Doris J. Miller	Detroit Resident
40. Sabuasallce Mishu	Wayne State University student
41. Barb Moore	Detroit Resident (S. Schafer neighborhood)

- | | |
|-------------------------|---|
| 42. George D. Moore | St. Paul A.M.E. church |
| 43. Heidi Mucherie | Community Legal Resources |
| 44. Bill Muir | Detroit River Tunnel Partnership |
| 45. David Nagy | Delray Community Council |
| 46. Dena Nagy | Delray Community Council |
| 47. John M. Nagy | Delray Community Council |
| 48. Marie Nance | Kemeny Recreation Center |
| 49. Thomas Nelson, Jr. | CH2M Hill |
| 50. Shirley Northcross | Detroit City Council member Reeves office |
| 51. Mickle Ohearn | Mactec engineering |
| 52. Jorge Ovando | Delray Resident |
| 53. Maria Ovando | Delray Resident |
| 54. Mario Ovando | Delray Resident |
| 55. Joe Polack | Detroit International Bridge Company |
| 56. Audrey Robinson | House Republican Policy Office |
| 57. Frank Rodriguez | Century 21 |
| 58. Richard Rowen | Madison Heights Resident |
| 59. Olga Savic | Office of State Representative Steve Tobocman |
| 60. Richard J. Schleyer | Detroit Public Schools |
| 61. Josephine Smith | Original United Citizens of SW Detroit |
| 62. Marcell Todd | Detroit Planning Commission |
| 63. Steve Toth | Delray Resident |
| 64. Don Vuchetich | Bluewater Bridge |
| 65. Debra A. Williams | Delray Resident/Delray church member |
| 66. Emma Williams | Delray Resident |

MDOT

- | | |
|-----------------------|----------|
| 1. Ebony Alexander | MDOT |
| 2. Mohammed Alghurabi | MDOT |
| 3. Tom Hanf | MDOT |
| 4. Wesley King | MDOT |
| 5. Bill Land | MDOT |
| 6. Hugh McNichol | MDOT |
| 7. Bob Parsons | MDOT |
| 8. Rita A. Screws | MDOT TSC |

Consultants

- | | |
|---------------------|------------------------------|
| 1. Rachel Bankowitz | CCRG |
| 2. Regine Beauboeuf | Parsons |
| 3. Josh Bocks | The Corradino Group |
| 4. Bruce Campbell | Parsons |
| 5. Joe Corradino | The Corradino Group |
| 6. Cliff Elling | Parsons |
| 7. Yuri Gurovich | Wyle Laboratories |
| 8. Jim Hartman | The Corradino Group |
| 9. Len Kozachuck | URS Canada |
| 10. Jeff Mason | Hamilton Anderson Associates |

- | | |
|------------------------|---------------------|
| 11. Harvey Santana | The Corradino Group |
| 12. Ted Stone | The Corradino Group |
| 13. Steve Stroh | URS |
| 14. Bradley Touchstone | Parsons |
| 15. Juanita Tucker | The Corradino Group |
| 16. Mark Velicevic | The Corradino Group |

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