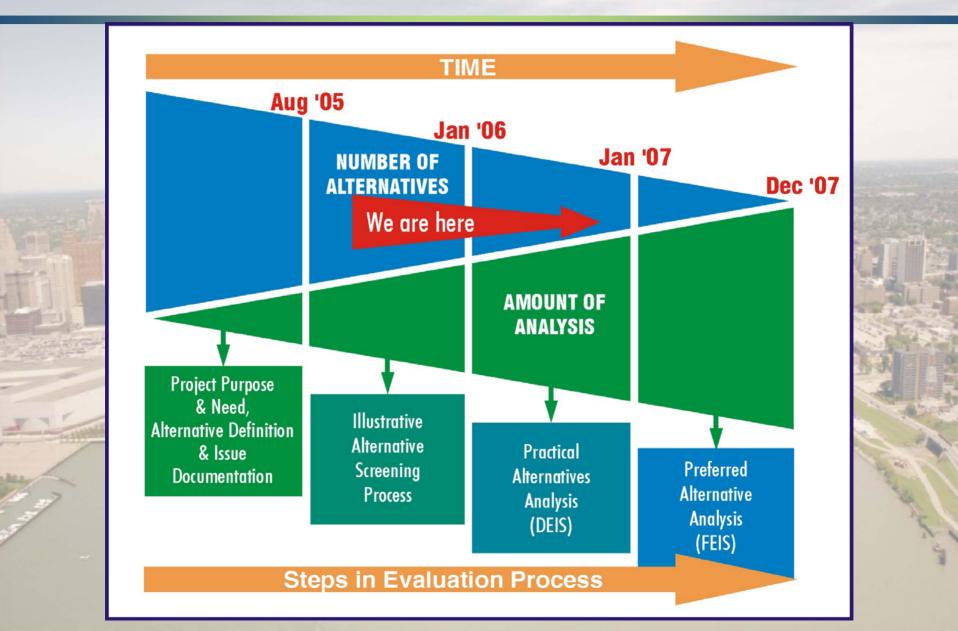
LAC/LAG/CCG Meeting

Preliminary
Assessment of Impacts

November 29, 2006

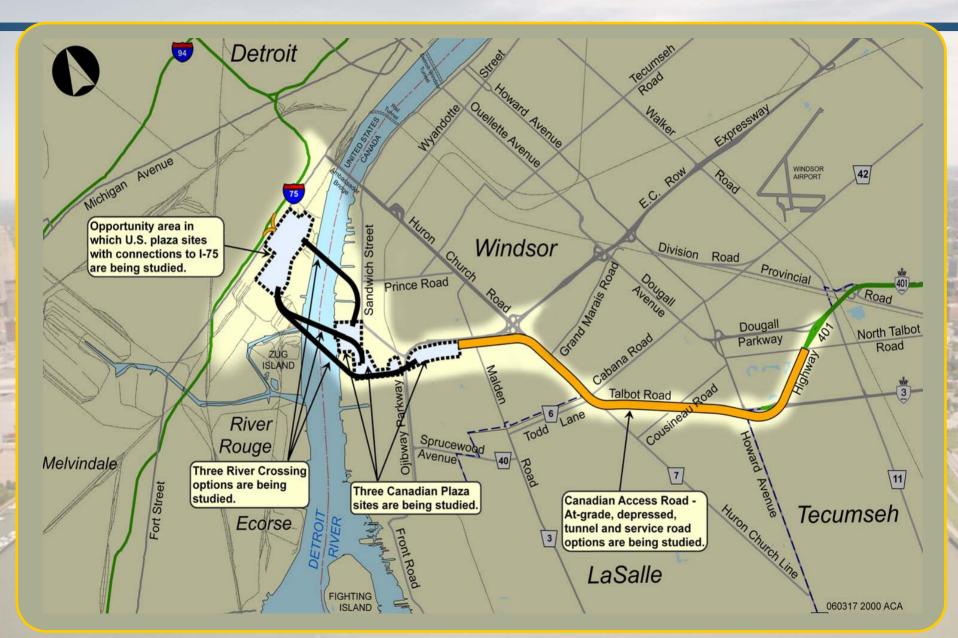
Detroite Riverventernationach Grossing Study

Evaluation Process

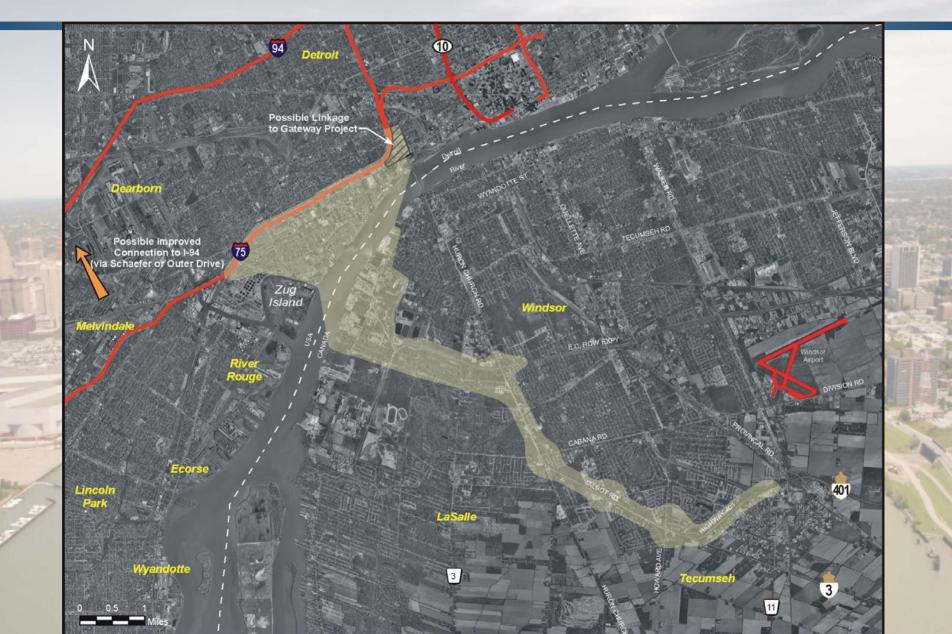


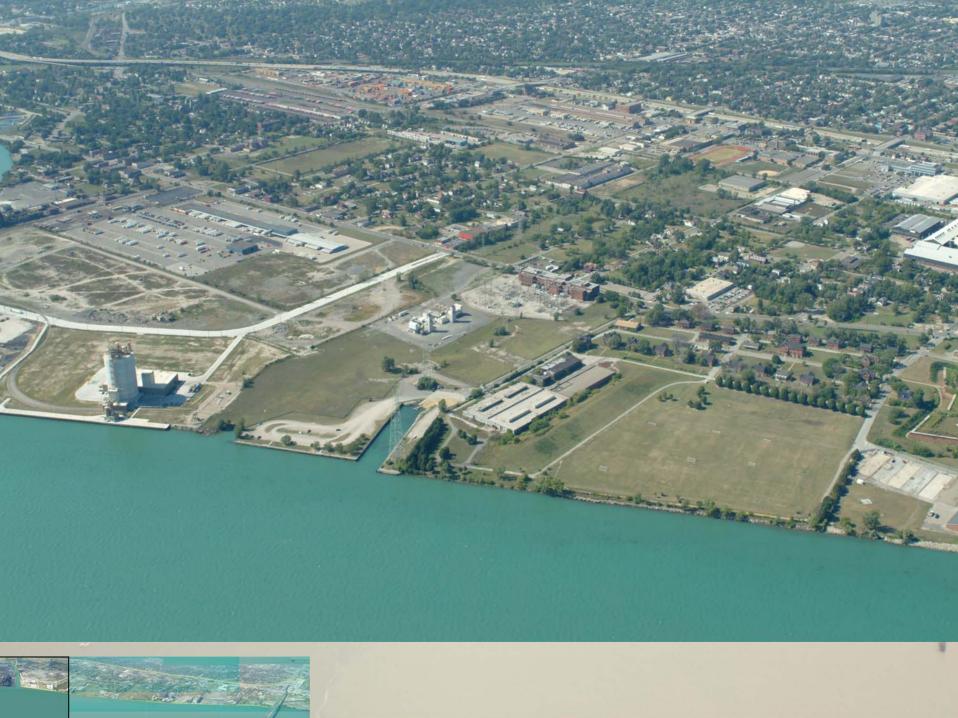


Practical Alternatives



Area of Continued Analyses

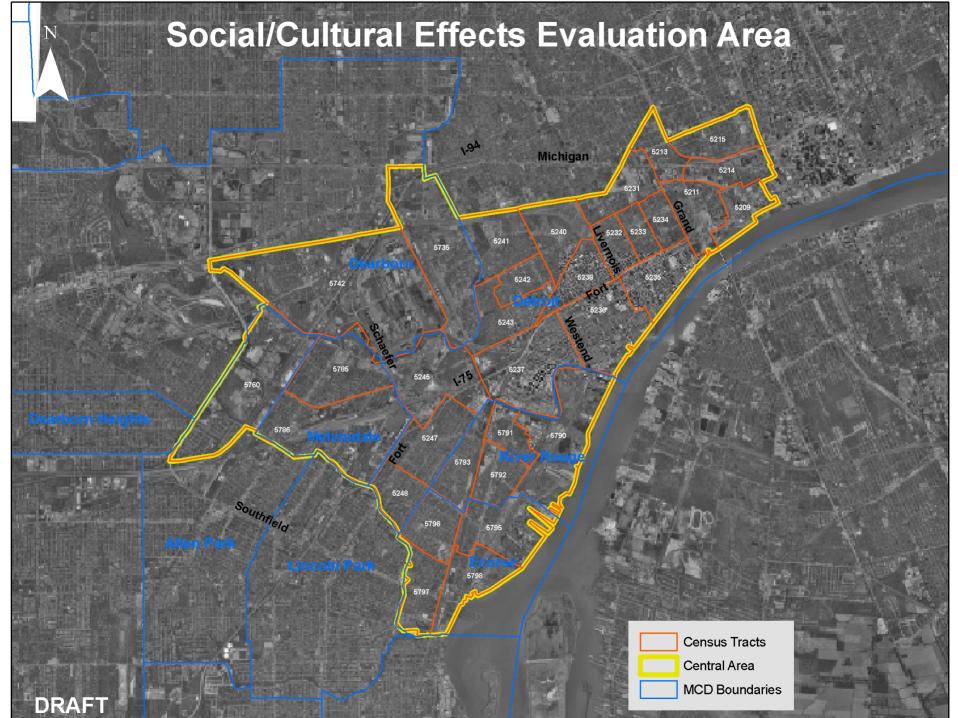


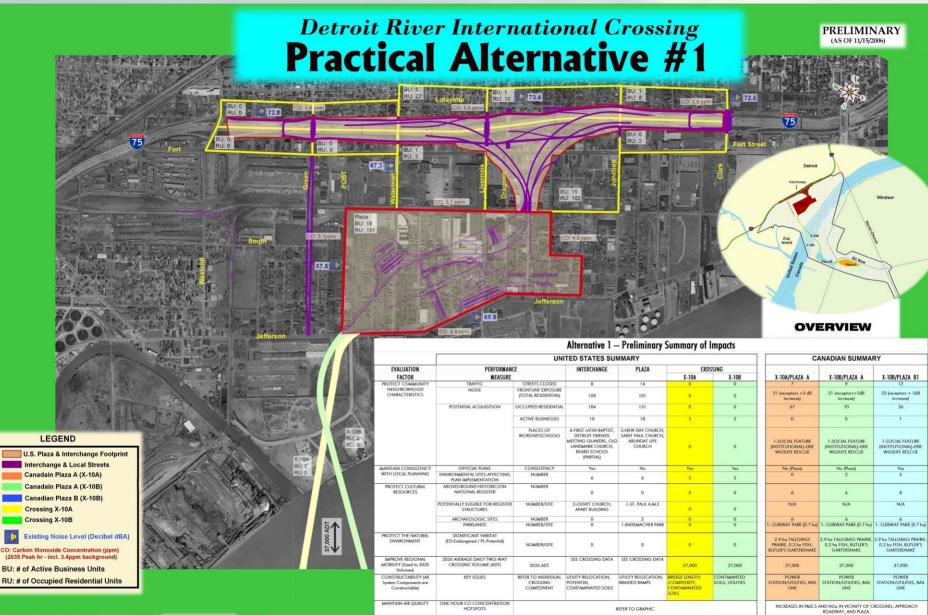




















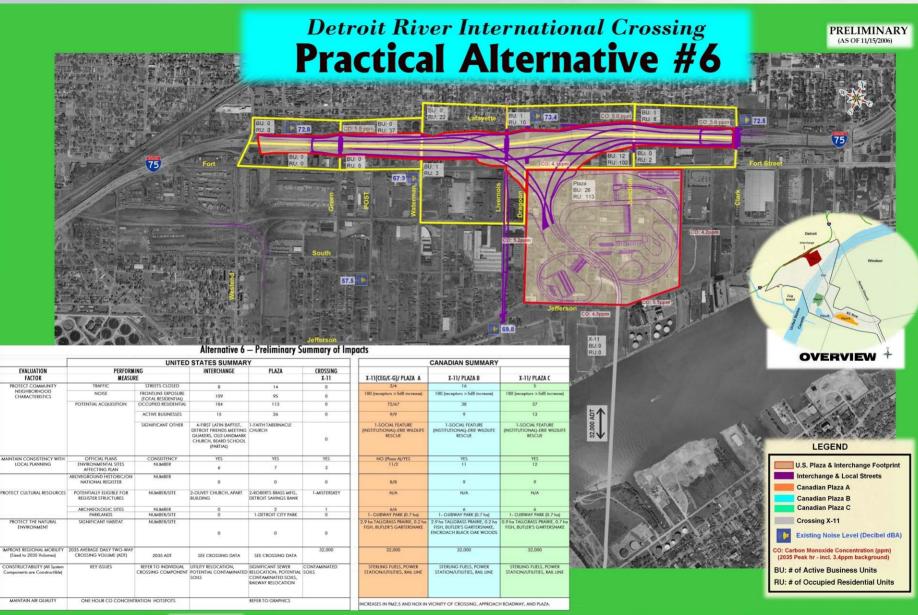






Alternative 1 – Preliminary Summary of Impacts

| Γ | | UNITED STATES SUMMARY | | | | | | C | ANADIAN SUMMAI | RY |
|---|--|---|--|--|---|--|---------------------------------|---|---|---|
| | EVALUATION | PERFORMANO | PERFORMANCE INTERCHANGE PLAZA CROSSING | | | SSING | | | | |
| | FACTOR | MEASURE | | | | X-10A | X-10B | X-10A/PLAZA A | X-10B/PLAZA A | X-10B/PLAZA B1 |
| | PROTECT COMMUNITY | TRAFFIC | STREETS CLOSED | 8 | 14 | 0 | 0 | 7 | 9 | 12 |
| | NEIGHBORHOOD CHARACTERISTICS | NOISE | FRONTLINE EXPOSURE (TOTAL RESIDENTIAL) | 109 | 101 | 0 | o | 21 (receptors >5 dB increase) | 21 (receptors>5dB increase) | 23 (receptors > 5dB increase) |
| | | POTENTIAL ACQUISITION | OCCUPIED RESIDENTIAL | 184 | 151 | 0 | 0 | 67 | 70 | 36 |
| | | | ACTIVE BUSINESSES | 18 | 18 | 3 | 2 | 0 | 0 | 1 |
| 1 | | | PLACES OF WORSHIP/SCHOOLS | 4-FIRST LATIN BAPTIST, DETROIT FRIENDS MEETING QUAKERS, OLD LANDMARK CHURCH, BEARD SCHOOL (PARTIAL) | 3-NEW DAY CHURCH, SAINT PAUL CHURCH, ABUNDAT LIFE CHURCH | o | 0 | 1-SOCIAL FEATURE (INSTITUTIONAL)-ERIE WILDLIFE RESCUE | 1-SOCIAL FEATURE (INSTITUTIONAL)-ERIE WILDLIFE RESCUE | 1-SOCIAL FEATURE (INSTITUTIONAL)-ERIE WILDLIFE RESCUE |
| | MAINTAIN CONSISTENCY | OFFICIAL PLANS | CONSISTENCY | Yes | No | Yes | Yes | No (Plaza) | No (Plaza) | Yes |
| | WITH LOCAL PLANNING | ENVIRONMENTAL SITES AFFECTING PLAN IMPLEMENTATION | NUMBER | 6 | 6 | 2 | 2 | 0 | 2 | 5 |
| | PROTECT CULTURAL RESOURCES | ABOVEGROUND HISTORIC/ON NATIONAL REGISTER | NUMBER | 0 | 0 | o | o | 6 | 6 | 8 |
| ą | | POTENTIALLY ELIGIBLE FOR REGISTER STRUCTURES | NUMBER/SITE | 2-OLIVET CHURCH, APART BUILDING | 1-ST. PAUL A.M.E | 0 | o | N/A | N/A | N/A |
| | | ARCHAEOLOGIC SITES | NUMBER | 0 | 2 | 0 | 0 | 6 | 6 | 6 |
| 4 | | PARKLANDS | NUMBER/SITE | 0 | 1-RADEMACHER PARK | 0 | 0 | 1 - OJIBWAY PARK (0.7 ha) | 1 - OJIBWAY PARK (0.7 ha) | 1 - OJIBWAY PARK (0.7 ha) |
| N | PROTECT THE NATURAL ENVIRONMENT | SIGNIFICANT HABITAT (ED-Endangered / PL-Potential) | NUMBER/SITE | 0 | 0 | 0 | o | 2.9 ha TALLGRASS PRAIRIE, 0.2 ha FISH, BUTLER'S GARTERSNAKE | 2.9 ha TALLGRASS PRAIRIE, 0.2 ha FISH, BUTLER'S GARTERSNAKE | 2.9 ha TALLGRASS PRAIRIE, 0.2 ha FISH, BUTLER'S GARTERSNAKE |
| * | IMPROVE REGIONAL MOBILITY (Sized to 2035 Volumes) | 2035 AVERAGE DAILY TWO-WAY CROSSING VOLUME (ADT) | 2035 ADT | SEE CROSSING DATA | SEE CROSSING DATA | 37,000 | 37,000 | 37,000 | 37,000 | 37,000 |
| 1 | CONSTRUCTABILITY (All System Components are Constructable) | KEY ISSUES | REFER TO INDIVIDUAL CROSSING COMPONENT | UTILITY RELOCATION, POTENTIAL CONTAMINATED SOILS | UTILITY RELOCATION, BRAIDED RAMPS | BRIDGE LENGTH /COMPLEXITY, CONTAMINATED SOILS | CONTAMINTED SOILS, UTILITIES | POWER STATION/UTILITIES, RAIL LINE | POWER STATION/UTILITIES, RAIL LINE | POWER STATION/UTILITIES, RAIL LINE |
| 2 | MAINTAIN AIR QUALITY | ONE HOUR CO CONCENTRATION HOTSPOTS | | ı | REFER TO GRAPHIC | | | INCREASES IN PM2.5 | AND NOx IN VICINITY OF C ROADWAY, AND PLAZA. | ROSSING, APPROACH |

















Alternative 6 - Preliminary Summary of Impacts

| | | UNITED | STATES SUMMAR | Υ | | | | CANADIAN SUMMARY | |
|---|---|---|---|---|-----------------------|-----|--|---|--|
| EVALUATION | PERFORM | ING | INTERCHANGE | PLAZA | CROSSING | 1 [| | | |
| FACTOR | MEASUR | | | | X-11 | | X-11(CEG/C-G)/ PLAZA A | X-11/ PLAZA B | X-11/ PLAZA C |
| PROTECT COMMUNITY | TRAFFIC | STREETS CLOSED | 8 | 14 | 0 | | 3/4 | 16 | 5 |
| NEIGHBORHOOD CHARACTERISTICS | NOISE | FRONTLINE EXPOSURE (TOTAL RESIDENTIAL) | 109 | 95 | 0 | | 180 (receptors >5dB increase) | 180 (receptors >5dB increase) | 180 (receptors >5dB increase) |
| | POTENTIAL ACQUISITION | OCCUPIED RESIDENTIAL | 184 | 113 | 0 | | 72/67 | 38 | 37 |
| | | ACTIVE BUSINESSES | 15 | 26 | 0 | | 9/9 | 9 | 13 |
| | | SIGNIFICANT OTHER | 4-FIRST LATIN BAPTIST, DETROIT FRIENDS MEETING QUAKERS, OLD LANDMARK CHURCH, BEARD SCHOOL (PARTIAL) | 1-FAITH TABERNACLE CHURCH | 0 | | 1-SOCIAL FEATURE (INSTITUTIONAL)-ERIE WILDLIFE RESCUE | 1-SOCIAL FEATURE (INSTITUTIONAL)-ERIE WILDLIFE RESCUE | 1-SOCIAL FEATURE (INSTITUTIONAL)-ERIE WILDLIFE RESCUE |
| MAINTAIN CONSISTENCY WITH | OFFICIAL PLANS | CONSISTENCY | YES | YES | YES | 1 | NO (Plaza A)/YES | YES | YES |
| LOCAL PLANNING | ENVIRONMENTAL SITES AFFECTING PLAN | NUMBER | 6 | 7 | 3 | | 11/2 | 11 | 12 |
| | ABOVEGROUND HISTORIC/ON NATIONAL REGISTER | NUMBER | 0 | 0 | 0 | | 8/8 | 9 | 9 |
| PROTECT CULTURAL RESOURCES | POTENTIALLY ELIGIBLE FOR REGISTER STRUCTURES | | 2-OLIVET CHURCH, APART BUILDING | 2-ROBERTS BRASS MFG, DETROIT SAVINGS BANK | 1-MISTERSKEY | | N/A | N/A | N/A |
| | ARCHAEOLOGIC SITES | NUMBER | 0 | 2 | 1 | | 6/6 | 6 | 6 |
| | PARKLANDS | NUMBER/SITE | 0 | 1-DETROIT CITY PARK | 0 | | 1- OJIBWAY PARK (0.7 ha) | 1- OJIBWAY PARK (0.7 ha) | 1- OJIBWAY PARK (0.7 ha) |
| PROTECT THE NATURAL ENVIRONMENT | SIGNIFICANT HABITAT | NUMBER/SITE | 0 | 0 | 0 | 2 | 2.9 ha TALLGRASS PRAIRIE, 0.2 ha FISH, BUTLER'S GARTERSNAKE | 2.9 ha TALLGRASS PRAIRIE, 0.2 ha FISH, BUTLER'S GARTERSNAKE, ENCROACH BLACK OAK WOODS | 0.9 ha TALLGRASS PRAIRIE, 0.7 ha FISH, BUTLER'S GARTERSNAKE |
| IMPROVE REGIONAL MOBILITY (Sized to 2035 Volumes) | 2035 AVERAGE DAILY TWO-WAY CROSSING VOLUME (ADT) | 2035 ADT | SEE CROSSING DATA | SEE CROSSING DATA | 32,000 | | 32,000 | 32,000 | 32,000 |
| CONSTRUCTABILITY (All System Components are Constructible) | KEY ISSUES | | UTILITY RELOCATION, POTENTIAL CONTAMINATED SOILS | SIGNIFICANT SEWER RELOCATION, POTENTIAL CONTAMINATED SOILS, RAILWAY RELOCATION | CONTAMINATED SOILS | | STERLING FUELS, POWER STATION/UTILITIES, RAIL LINE | STERLING FUELS, POWER STATION/UTILITIES, RAIL LINE | STERLING FUELS, POWER STATION/UTILITIES, RAIL LINE |
| MAINTAIN AIR QUALITY | ONE HOUR CO CONCENT | ration hotspots | | REFER TO GRAPHICS | 1 | 11 | INCREASES IN PM2.5 AND NOX IN VICINITY OF CROSSING, APPROACH ROADWAY, AND PLAZA. | | |

DRAFT

FOR DISCUSSION PURPOSES ONLY 11-15-06

Detroit River International Crossing Study Evaluation of Practical Alternatives Supporting Data - Alternative 01

| | | | | Interchange | Plaza | Crossing X10A | Crossing X10B |
|---------------------|-----------------------|---------------------------------|-------------------|-------------|-------|---------------|---------------|
| Evaluation Factor | Performan | ce Measure Category | Description/Units | | | | |
| | | Floodplain | Number/Acres | 0 | 0 | 3 | |
| | | Surface Run Off | Acres | 10 | 164 | 0 | |
| | Surface Water | Primary Streams ¹ | Number/Specify | 0 | 0 | 1: Detroit R. | 1: Detroit R |
| | | Secondary Streams ² | Number/Specify | 0 | 0 | 0 | |
| | | Other Water-crossings | Number/Specify | 0 | 0 | 0 | |
| Protect The Natural | Groundwater | Municipal Wells | Number | - 0 | 0 | 0 | |
| Environment | | Water In-takes | Number/Specify | 0 | 0 | 0 | |
| Environment | | Wetlands | Acres | 0 | 0 | 0 | |
| | Cinnificant Unbited | Fens / Bogs | Number/Acres | 0 | 0 | 0/0 | 0/ |
| | Significant Habitat | Endangered Species ³ | Potential Species | 0/0 | 0 | 0/0 | 0/0 |
| | | Designated Wildlife Refuges | Number/Acres | 0 | 0/0 | 0/0 | 0/0 |
| | Prime/Unique Farmland | Farmland | Acres | 0 | 0 | 0 | |
| | Mineral Resources | Salt /Limestone | Type/Specify | Salt | Salt | Salt | Sal |

Notes

- 1: Primary Streams are classified as water courses with an average width greater than 50ft/15m
- 2: Secondary streams are classified as water coursesles with an average width less than 50ft/15m.
- 3: Based on preliminary site investigation of the plaza sites (viewing from public access points), none of the plant or animal species listed as endangered species within the quads for this region are expected to occur within the boundaries of the plazas.

The crossings includes open portions of the Detroit River and nearshore areas where threatened, endangered, and special concern species are known to have been present. A summary of species with a potential to be present is provided below. This analysis and site investigation are preliminary in nature.

1 animal species listed by the State as Threatened is known to spawn upstream of the crossing corridor at Zug Island. 7 animal species listed by the State as Threatened, Endangered, or Special Concern have the potential to be present within specific habitats within or near the crossing corridor.

Range of Potential Impacts

Occupied Dwelling Units

| | U.S. | | | Canada | | | |
|----------|-------------|---------|----------|-----------------------|-----------------------|-----------------------|--|
| Crossing | Interchange | Plaza | Crossing | Crossing + Plaza A | Crossing + Plaza B | Crossing + Plaza C | |
| X-10 | 171-233 | 151 | 0 | 67-70 | 36 | NA | |
| X-11 | 29-190 | 113-168 | 0-16 | 67-72 | 38 | 37 | |

Range of Potential Impacts

Active Business Units

| | | U.S. | | Canada | | | |
|----------|-------------|-------|----------|-----------------------|-----------------------|-----------------------|--|
| Crossing | Interchange | Plaza | Crossing | Crossing + Plaza A | Crossing + Plaza B | Crossing + Plaza C | |
| X-10 | 17-25 | 18 | 2-3 | 0 | 1 | NA | |
| X-11 | 15-26 | 18-26 | 0-3 | 9 | 9 | 13 | |

Range of Potential Impacts

Frontline Noise Exposure – Residential Units

| | U.S. | | | Canada | | | |
|----------|-------------|--------|----------|-----------------------|-----------------------|-----------------------|--|
| Crossing | Interchange | Plaza | Crossing | Crossing + Plaza A | Crossing + Plaza B | Crossing + Plaza C | |
| X-10 | 88-109 | 101 | 0-4 | 21 | 23 | NA | |
| X-11 | 28-109 | 72-105 | 0-4 | 180 | 180 | 180 | |

Range of Potential Impacts

Historic Sites on National Register of Historic Places

| | U.S. | | | Canada | | | |
|----------|-------------|-------|----------|-----------------------|-----------------------|-----------------------|--|
| Crossing | Interchange | Plaza | Crossing | Crossing + Plaza A | Crossing + Plaza B | Crossing + Plaza C | |
| X-10 | 0 | 0 | 0 | 0 | 0 | NA | |
| X-11 | 0 | 0 | 0 | 0 | 0 | 0 | |

Range of Potential Impacts

Historic Structures Potentially Eligible for National Register of Historic Places

| | U.S. | | | Canada | | | |
|----------|-------------|-------|----------|-----------------------|-----------------------|-----------------------|--|
| Crossing | Interchange | Plaza | Crossing | Crossing + Plaza A | Crossing + Plaza B | Crossing + Plaza C | |
| X-10 | 2-4 | 1 | 0 | 6 | 6-8 | NA | |
| X-11 | 2-5 | 1-2 | 1 | 6/8 | 6/9 | 6/9 | |

Range of Potential Impacts

Active Parklands Units

| | U.S. | | | Canada | | | |
|----------|-------------|-------|----------|-----------------------|-----------------------|-----------------------|--|
| Crossing | Interchange | Plaza | Crossing | Crossing + Plaza A | Crossing + Plaza B | Crossing + Plaza C | |
| X-10 | 0 | 1 | 0 | 1 | 1 | NA | |
| X-11 | 0 | 1 | 0 | 1 | 1 | 1 | |

Range of Potential Impacts

Average Daily Two-way Traffic (2035)

to 37,400

to 32,000

| Crossing | Two-way ADT |
|----------|----------------|
| X-10 | 30,100 to 37,4 |
| X-11 | 24,200 to 32,0 |
| | |



Range of Potential Impacts

Constructability Issues

| | | | U.S. | | | Canada | | | |
|--|----------|----------------------------|---|----------------------------------|---|--|---|--|--|
| | Crossing | Interchange | Plaza | Crossing | Crossing + Plaza A | Crossing + Plaza B | Crossing + Plaza C | | |
| The state of the s | X-10 | •Utility Reloc. •Contamin. | •Utility Reloc. •Braided Ramps | •Bridge Length •Contamin. | •Power Sta. •Rail Line •Trans. Line •High Pres. Pipe | •Power Sta. •Rail Line •Trans. Line •High Pres. Pipe | NA | | |
| AL STREET | X-11 | •Utility Reloc. •Contamin. | •Utility Reloc. •Rail Line | •Utility Reloc. •Contamin. | Power Sta. Sterling Fuels Rail Line Trans. Line High Pres. Pipe | Sterling FuelsRail Line | Power Sta. Sterling Fuels Rail Line Trans. Line High Pres. Pipe | | |

Detroit River International Crossing Study Questions/Comments