Community Advisory Committee
Meeting #2

I-295/I-76/Route 42 Interchange Reconstruction

PRESENTATION OUTLINE

Purpose & Need
Alternative Selection Criteria
Presentation of Initial Alternatives

November 21, 2002

Presented by Bill Beans – NJ Department of Transportation
Lou Robbins, **Dewberry-Goodkind, Inc.**

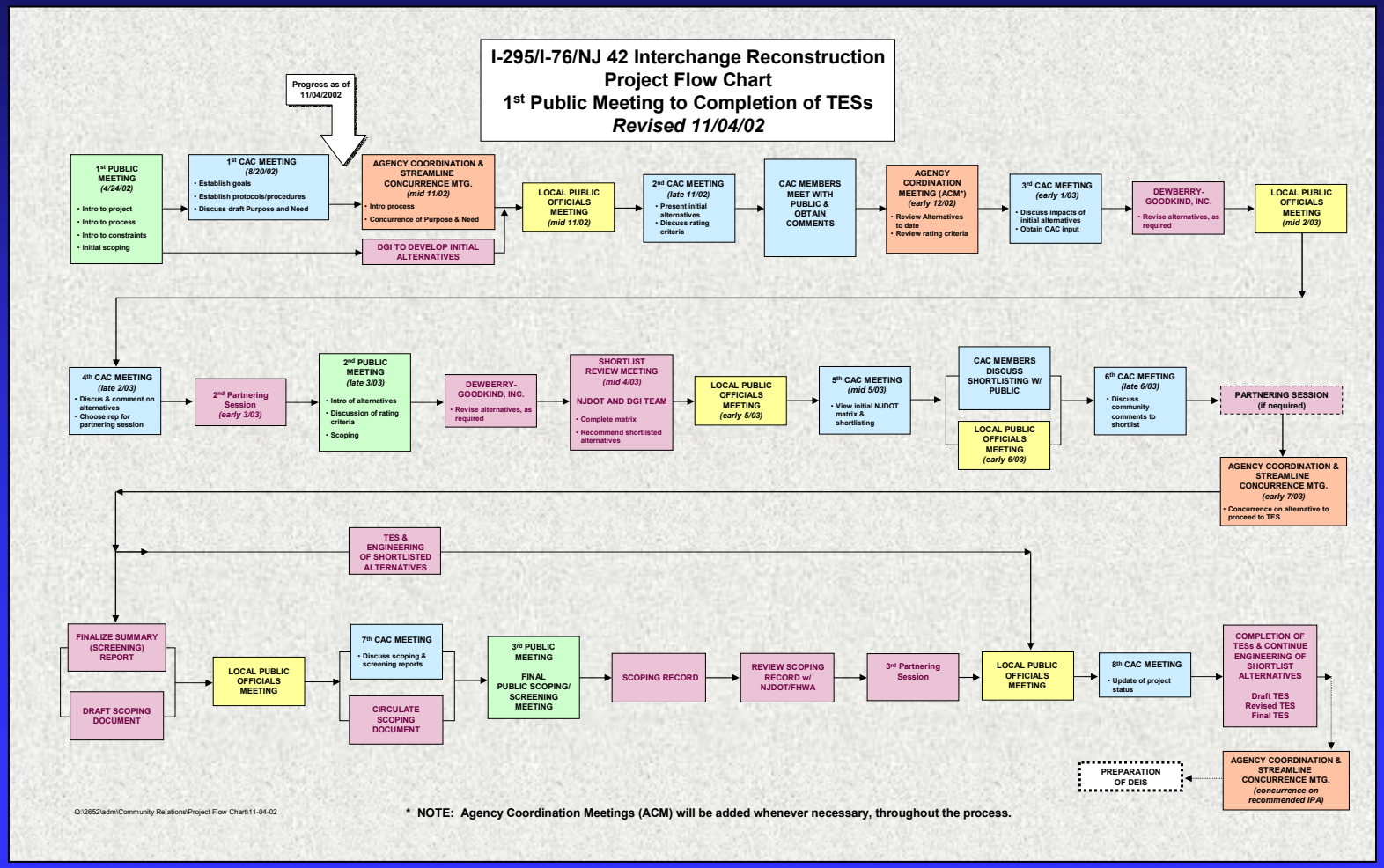
UPCOMING CAC MEETINGS

- Tentative Schedule:
  - Tuesday, January 7, 2003 *6 – 8:30pm*
    - Give us your input on the alternatives
  - Tuesday, March 4, 2003 *6 – 8:30 pm*
    - Give us input on any additional alternatives
    - Chose Representative for Partnering Session
    - Help us plan a Spring public meeting

NEXT STEPS IN DEVELOPMENT OF ALTERNATIVES

- At the January 7th *(tentative date)* CAC meeting:
  - Give us your input on these alternatives
- At the March 4th *(tentative date)* CAC meeting:
  - Give us your input on any additional alternatives
- At future CAC meetings:
  - Give us your input on a short list of alternatives

Flow Chart


I-295/I-76/NJ 42 Interchange Reconstruction
Project Flow Chart
1st Public Meeting to Completion of TESs
Revised 11/04/02
Progress as of 11/04/2002
1st PUBLIC MEETING (4/24/02)
• Intro to project
• Intro to process
• Intro to constraints
• Initial scoping
1st CAC MEETING (8/20/02)
• Establish goals
• Establish protocols/procedures
• Discuss draft Purpose and Need
AGENCY COORDINATION & STREAMLINE CONCURRENCE MTG. (mid 11/02)
• Intro process
• Concurrence of Purpose & Need
DGI TO DEVELOP INITIAL ALTERNATIVES
LOCAL PUBLIC OFFICIALS MEETING (mid 11/02)
2nd CAC MEETING (late 11/02)
• Present initial alternatives
• Discuss rating criteria
CAC MEMBERS MEET WITH PUBLIC & OBTAIN COMMENTS
AGENCY CORDINATION MEETING (ACM*) (early 12/02)
• Review Alternatives to date
• Review rating criteria
3rd CAC MEETING (early 1/03)
• Discuss impacts of initial alternatives
• Obtain CAC input
DEWBERRY-GOODKIND, INC.
• Revise alternatives, as required
LOCAL PUBLIC OFFICIALS MEETING (mid 2/03)
4th CAC MEETING (late 2/03)
• Discus & comment on alternatives
• Choose rep for partnering session
2nd Partnering Session (early 3/03)
2nd PUBLIC MEETING (late 3/03)
• Intro of alternatives
• Discussion of rating criteria
• Scoping
DEWBERRY-GOODKIND, INC.
• Revise alternatives, as required
SHORTLIST REVIEW MEETING (mid 4/03)
NJDOT AND DGI TEAM
• Complete matrix
• Recommend shortlisted alternatives
LOCAL PUBLIC OFFICIALS MEETING (early 5/03)
5th CAC MEETING (mid 5/03)
• View initial NJDOT matrix & shortlisting
CAC MEMBERS DISCUSS SHORTLISTING W/ PUBLIC
LOCAL PUBLIC OFFICIALS MEETING (early 6/03)
6th CAC MEETING (late 6/03)
• Discuss community comments to shortlist
PARTNERING SESSION (if required)
AGENCY COORDINATION & STREAMLINE CONCURRENCE MTG. (early 7/03)
• Concurrence on alternative to proceed to TES
TES & ENGINEERING OF SHORTLISTED ALTERNATIVES
FINALIZE SUMMARY (SCREENING) REPORT
DRAFT SCOPING DOCUMENT
LOCAL PUBLIC OFFICIALS MEETING
7th CAC MEETING
• Discuss scoping & screening reports
CIRCULATE SCOPING DOCUMENT
3rd PUBLIC MEETING
FINAL PUBLIC SCOPING/ SCREENING MEETING
SCOPING RECORD
REVIEW SCOPING RECORD w/ NJDOT/FHWA
3rd Partnering Session
LOCAL PUBLIC OFFICIALS MEETING
8th CAC MEETING
• Update of project status
COMPLETION OF TESs & CONTINUE ENGINEERING OF SHORTLIST ALTERNATIVES
Draft TES
Revised TES
Final TES
AGENCY COORDINATION & STREAMLINE CONCURRENCE MTG. (concurrence on recommended IPA)
PREPARATION OF DEIS
Q:\2652\adm\Community Relations\Project Flow Chart\11-04-02
* NOTE: Agency Coordination Meetings (ACM) will be added whenever necessary, throughout the process.

Matrix Criteria

- CONSTRUCTIBILITY

  For this criterion, the alternatives will be reviewed to determine probable construction or constructability issues. Evaluation factors include impacts to the local residents and motoring public during construction with an emphasis on traffic delays, impact of detours/diversions and length of construction duration. Evaluation of the alternatives for constructibility would be quantified as High Impact, Moderate Impact or Low Impact.

Matrix Criteria

- MAINTAINABILITY

  Evaluation factors for this criterion include anticipated ease of routine maintenance or the need for expensive or labor intensive maintenance for the alternatives under development to ensure that the project does not have extensive hidden high life cycle costs or flaws. This evaluation will consider whether the proposed facility can be properly maintained utilizing standard equipment/methods with acceptable labor demands. Examples of elements requiring high future maintenance could include: tunnels or multi-level structures. Impacts of numerous structures and single lane ramps with their inherent maintenance issues of salt usage and snow removal problems during the winter will also be considered. Each alternative will be rated for maintainability as Highly Difficult, Moderately Difficult or Low Difficulty.

Matrix Criteria

- COMPLIANCE WITH DESIGN CRITERIA

  Each alternative would be evaluated for compliance with applicable design standards (NJDOT-Design Manuals or AASHTO 2001 – A Policy on Geometric Design of Highways and Streets). The number of undesirable design features not requiring design exceptions, such as left exits or entrances, will be counted. The rating will be the counted value.

Matrix Criteria

- COMPARISON OF ESTIMATED CONSTRUCTION COST

  The relative relationship of Construction Costs for each alternative will be developed utilizing a comparison of roadway and bridge lengths for each alternatives. The length of new bridge lane construction required will be multiplied by a factor of 2 and added to the length of new roadway lanes to determine the relative cost required to construct each alternative. The effective lane length shown on the matrix is the sum of the actual lane length in feet plus two times the lane length of bridges.

Matrix Criteria

- RIGHT-OF-WAY

  For ROW, each of the following impacts will be considered to quantify the relocation and/or proximity impacts due to the individual alternative.

  - Residential Property Impacts - Impacts to residents will be evaluated for each of the alternatives by counting the number of discrete residential structures that could require taking and are therefore considered as a relocation. Residential structures that are located within 50' of the alignment will be less likely to incur relocation but will have proximity impacts and will therefore also be counted. For the Bellmawr Park area and other multi-family structures, each individual residential unit will be counted separately.
  - Commercial Property Impacts - Impacts to commercial properties will be evaluated for the alternatives in the same manner as the residential properties.

Matrix Criteria

- RIGHT-OF-WAY *(cont'd.)*
  - Institutional Properties - There are several institutional properties such as churches, schools cemeteries, etc. that may potentially be impacted. The impacts to these facilities will be shown the same as residential above except that the categories will be the number of facilities impacted severely, moderately, or only slightly.
  - Recreational Properties - There are several recreational properties that may potentially be impacted. The evaluation of the impacts will be performed in the same manner as the institutional properties. A probable relocation, and therefore a severe impact, would be where the impacts are extensive enough to make the facility nonfunctional. An example of a moderate property impact might be rearrangement of the layout of some ball fields. No differentiation will be made for recreational properties having or lacking protected 4(f) status.

Matrix Criteria

- WETLANDS

  Wetlands can be broken into 2 categories - tidal and non-tidal. For this evaluation, each type of wetland will be evaluated separately. The total wetlands impacted in acres for each alternative will be determined from existing published wetland mapping and confirmed by limited field observations.

  The wetlands have been identified through the use of Department of Environmental Protection and Army Corps of Engineer maps. Each alternative will be evaluated on the basis of total wetland acreage impacted.

Matrix Criteria

- NOISE

  Each alternative will be evaluated for its probable noise impact without mitigation. Factors used will be proximity to and type of receptors and the height of the new facility over the existing ground. The increase in noise will be rated as High, Moderate or Low.

- AIR

  Each alternative will be evaluated for its probable impact to air quality. The effects to air quality will also be rated as High, Moderate or Low.

Matrix Criteria

- SOCIOECONOMICS

  The study area consists of residential, industrial, commercial, recreational and public/quasi-public land uses. The only vacant land in the project area consists of wetlands and floodplains. Community facilities located in the project area also have been identified. Each alternative will be assessed for its' impact to the quality of life of the community, including impacts to public and community facilities. The subjective evaluation will include impacts to community cohesion, (i.e. division of existing neighborhoods), access impacts to residential or recreational uses, impacts to developed areas of cemeteries, possible diversion of traffic to local streets, etc. The impacts will be identified as High, Moderate and Low.

Matrix Criteria

- ENVIRONMENTAL JUSTICE

  The breakdown of potential minority and low-income populations in the project area has been identified at a census tract level. Each alternative will be evaluated for its' impact to low-income households and minorities as High, Moderate or Low.

Matrix Criteria

- ARCHEOLOGICAL

  Within the project study area there are current areas archeological resources. The level of sensitivity of the sites has been determined and mapped as: low, medium or high. Criteria used to determine the level of sensitivity of the impact is: the level of current disturbance, the degree of the slope of the land, the site's proximity to water, the soil type, the level to which the sites are disturbed under current conditions and artifacts found during excavations. This level of sensitivity is used to determine the probability level of the existence of an archeological site. The archeological evaluation of these sites will be based on the total acreage impacted for either Low, Moderate, or High sensitivity.

Matrix Criteria

- HISTORIC RESOURCES

  Within the project study area there are areas or sites of varying Historic significance. The number or sites impacted for each degree of impact – High, Moderate or Low will be identified.

- HAZARDOUS/CONTAMINATED SITES

  Several sites have been identified as potentially hazardous/contaminated sites in the project area. The alternatives will be rated with regard to the number of potentially hazardous sites impacted by each alternative.

Alternatives Short List Screening Matrix

DRAFT 10/31/02

I-295/I-76/Route 42 Interchange Reconstruction

Initial Alternative Short List Screening Matrix

IMPACTS	ALTERNATIVES										
	A	B	C	D	E	F	G	H	I	J	K
Constructibility											
Maintainability											
Compliance with Design Criteria											
Comparison of Estimated Construction Cost											
Right-of-Way											
♦ Residential											
♦ Commercial											
♦ Institutional	H- M- L-										
♦ Recreational	H- M- L-										
Wetlands											
♦ Tidal											
♦ Freshwater											
Noise											
Air											
Socioeconomics											
Environmental Justice											
Archeological Resources	H- M- L-										
Historic Resources	H- M- L-										
Hazardous Contamination											

H- High Sensitivity M- Moderate Sensitivity L- Low Sensitivity

ALTERNATIVE A

ALTERNATIVE B

ALTERNATIVE B

- Shifts I-295 to the east side of Rt.42/I-76
- Shifts I-295 North toward Mt Ephraim
- Northbound and Southbound I-295 are side-by-side
- I-295 3rd Level Viaduct over Ramp A and Ramp D
- Removes express/local lanes on I-76 Westbound
- I-295 Posted Speed Limit: 55 mph
- Ramp Speed Limits: 40 mph

A – RAMP DESIGNATION

PRELIMINARY
I-295 / I-76 / ROUTE 42
INTERCHANGE RECONSTRUCTION PROJECT
ALTERNATIVE B

ALTERNATIVE C

ALTERNATIVE C

- Northbound and Southbound I-295 are side-by-side.
- I-295 placed above Rt.42/I-76.
- I-295 3rd Level Viaduct over Ramp C and Browning Road
- I-295 3rd Level Viaduct over Ramp A and Ramp D
- I-295 shifts north toward Mt. Ephraim
- Removes express/local lanes on I-76 Westbound
- I-295 Posted Speed Limit: 55 mph
- Ramp Speed Limits: 40 mph

A – RAMP DESIGNATION

PRELIMINARY
I–295 / I–76 / ROUTE 42
INTERCHANGE RECONSTRUCTION PROJECT
ALTERNATIVE C

ALTERNATIVE D

ALTERNATIVE D

- Northbound and Southbound I-295 are side-by-side
- Shifts I-295 over parts of both the ballpark and the cemetery
- I-295 crosses Rt.42/I-76 on a skew
- I-295 3rd Level Viaduct over Ramp C and Browning Road
- Ramp D 3rd Level Viaduct over I-76/Rt. 42 and Ramp C
- Removes express/local lanes on I-76 westbound
- I-295 Posted Speed Limit: 55 mph
- Ramp Speed Limits: 40 mph

A – RAMP DESIGNATION

PRELIMINARY
I-295 / I-76 / ROUTE 42
INTERCHANGE RECONSTRUCTION PROJECT
ALTERNATIVE D

ALTERNATIVE E

ALTERNATIVE E

- Northbound and southbound I-295 are side-by-side.
- I-295 3rd Level Viaduct over I-76/Rt. 42 and Ramp E
- I-295 follows the most direct path
- Removes express/local lanes on I-76 westbound
- I-295 Posted Speed Limit: 65 mph
- Ramp Speed Limits: 40 mph

A – RAMP DESIGNATION

PRELIMINARY
I–295 / I–76 / ROUTE 42
INTERCHANGE RECONSTRUCTION PROJECT
ALTERNATIVE E

ALTERNATIVE F

ALTERNATIVE F

- Northbound and Southbound I-295 follow separate alignments.
- Northbound I-295 shifted to east side of Rt.42/I-76.
- Southbound I-295 shifted to west side of Rt.42/I-76.
- I-295 Northbound 3rd Level Viaduct over Ramp A and Browning Road
- I-295 Southbound 3rd Level Viaduct over Ramp A and Ramp D
- Removes express/local lanes on I-76 westbound
- I-295 Posted Speed Limit: 55 mph
- Ramp Speed Limits: 40 mph

A – RAMP DESIGNATION

PRELIMINARY
I–295 / I–76 / ROUTE 42
INTERCHANGE RECONSTRUCTION PROJECT
ALTERNATIVE F

ALTERNATIVE G

ALTERNATIVE G

- Northbound I-295 placed above Southbound I-295 using a Double-Decker Configuration
- I-295 4th Level Viaduct over Ramp A and Browning Road
- I-295 4th Level Viaduct over Ramp C and Ramp F
- I-295 3rd Level Viaduct over Ramp AD
- I-295 3rd Level Viaduct over Ramp BC
- I-295 3rd Level Viaduct over I-76/Rt. 42
- Ramp C has a left hand exit
- Removes express/local lanes on I-76 westbound
- I-295 Posted Speed Limit: 55 mph
- Ramp Speed Limits: 40 mph

A – RAMP DESIGNATION

PRELIMINARY
I-295 / I-76 / ROUTE 42
INTERCHANGE RECONSTRUCTION PROJECT
ALTERNATIVE G

ALTERNATIVE H

ALTERNATIVE H

- Northbound I-295 placed above Southbound I-295 using a Double-Decker Configuration
- I-295 4th Level Viaduct over Ramp A and Browning Road
- I-295 4th Level Viaduct over Ramp C and Ramp F
- I-295 3rd Level Viaduct over Ramp A/D
- I-295 3rd Level Viaduct over Ramp B/C
- I-295 3rd Level Viaduct over I-76/Rt. 42
- Ramp C 3rd Level Viaduct over I-76/Rt. 42 and Ramp D
- Removes express/local lanes on I-76 westbound
- I-295 Posted Speed Limit: 55 mph
- Ramp Speed Limits: 40 mph

A – RAMP DESIGNATION

PRELIMINARY
I–295 / I–76 / ROUTE 42
INTERCHANGE RECONSTRUCTION PROJECT
ALTERNATIVE H

ALTERNATIVE I

ALTERNATIVE I

- Northbound and Southbound I-295 are side-by-side
- I-295 crosses the cemetery
- Removes express/local lanes on I-76 westbound
- I-295 Posted Speed Limit 55 mph
- Ramp Speed Limits 40 mph

A — RAMP DESIGNATION

PRELIMINARY
I–295 / I–76 / ROUTE 42
INTERCHANGE RECONSTRUCTION PROJECT
ALTERNATIVE I

ANY QUESTIONS?