

Handouts



NORTH HOUSTON HIGHWAY IMPROVEMENT PROJECT

PUBLIC SCOPING MEETING

OCTOBER 9 & 11, 2012

WHERE TO GO?

- Sign-In
- Pick-Up Handouts
- View Video
- View Exhibits
- Ask Questions
- Share your Thoughts
- Leave your Comments

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Welcome to the Meeting!

Welcome to the 2nd Public Scoping Meeting for the North Houston Highway Improvement Project, located in Harris County, Texas.

This evening's meeting is an integral part of the Environmental Impact Statement (EIS) process and the Preliminary Engineering phase of this project.

We greatly appreciate your participation.

This handout will detail the many ways you may be involved throughout this project.

PROJECT LOCATION



PUBLIC MEETINGS

Tuesday

October 9, 2012

5:30 p.m. - 7:30 p.m.

OPEN HOUSE

Jefferson Davis High School

1101 Quitman Street

Houston, Texas 77009

Thursday

October 11, 2012

5:30 p.m. - 7:30 p.m.

OPEN HOUSE

Aldine Ninth Grade School

10650 North Freeway

Houston, Texas 77037

Purpose of the Public Scoping Meeting

- * Present and gather your input on the Alternatives Evaluation Screening Process, the Universe of Alternatives and the Six Preliminary Alternatives
- * Present two updated documents: Need and Purpose Statement and Agency Coordination and Public Involvement Plan
- * Discuss the project with you and answer questions
- * Present the project timeline, history and background
- * Encourage your continued involvement

Project website: www.IH45northandmore.com



DON'T FORGET!
We want your input on the:
1. Alternative Evaluation Screening Process
2. Preliminary Alternatives

INFORMATION ABOVE IS AVAILABLE AT THIS MEETING AND ON THE PROJECT WEBSITE

All information presented at tonight's meeting may be viewed on the project website.



Project Description

The proposed project and study limits begin at the interchange of US 59 and SH 288 south of downtown Houston and follow northward along IH 45 to the interchange of IH 45 and Beltway 8 North, a distance of approximately 16 miles. The proposed project area also includes portions of IH 10, IH 610, and US 59 near downtown Houston; and the Hardy Toll Road corridor from downtown to Beltway 8 North.

Projected increases in population and employment in the Houston metropolitan area will contribute to additional traffic congestion on IH 45, which is currently classified as serious to severe. The proposed project is needed to address the congestion and to accommodate existing and anticipated future traffic. Additionally, the project is needed to bring the roadway up to current design standards, which would improve safety and provide for more efficient movement of people and goods. Improved efficiency is also needed to aid in evacuation events. The purpose of the proposed North Houston Highway Improvement Project is to create additional roadway capacity to manage congestion, enhance safety, and to improve mobility and operational efficiency. The costs and sources of funding for future project implementation have not been determined.

A reasonable range of alternatives will be considered to satisfy the identified need for and purpose of the project. The alternatives will include the no-build alternative as well as managed lane/tolling alternatives. The proposed project will be developed in compliance with Section 6002 of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) and the National Environmental Policy Act (NEPA).

Alternatives Evaluation Process

INITIAL SCREENING PROCESS

- ⇒ An Initial Screening Process has been used to narrow the Universe of Alternatives down to the six Preliminary Alternatives presented at this evening's meeting. (See Page 3 of this handout for the Initial Screening Matrix)
- ⇒ The Universe of Alternatives is a combination of ideas from the project team, the public, and participating and cooperating agencies.
- ⇒ The evaluation criteria for the Initial Screening Process was developed using the need and purpose statement, the project goals, and the feedback received from the agencies and public at the 1st Scoping Meeting.

SECONDARY SCREENING PROCESS

- ⇒ A Secondary Screening Process will be used to narrow the six Preliminary Alternatives for each of the three segments (a total of 18), down to the three Reasonable Alternatives for each of the three segments (a total of 9). The Reasonable Alternatives will be presented at the next round of Public Meetings.
- ⇒ The next step is to complete another screening matrix for the three Reasonable Alternatives for each of the three segments, showing the details of this evaluation. This information will then be made available for your review and comment at another public meeting and on the project website.
- ⇒ See Page 4 of this handout for the Secondary Screening Matrix evaluation criteria. The evaluation criteria for the Secondary Screening Process is developed to evaluate the alternatives more thoroughly than the Initial Screening Process.

How to Submit Comments by Friday, October 26, 2012

There are several convenient ways to submit your comments about the project:

- **Use the comment box at this meeting to submit comments**

- **Mail comments to:**
 Director of Project Development
 Texas Department of Transportation
 P.O. Box 1386
 Houston, TX 77251

- **Email comments to:**
 HOU-piowebmail@txdot.gov
- **Go to the project website:**
 www.IH45northandmore.com and click on the "Comments/Contact Us" tab.

Your input is important to us.
Please submit your comments!

Project website: www.IH45northandmore.com

INITIAL SCREENING MATRIX

<i>DRAFT</i>			EVALUATION CRITERIA							
			Initial Screening of Universe of Alternatives							
			Meets Need and Purpose and Project Goals (Yes/No)	Engineering		Traffic	Environmental			
				Meets Current Design Criteria (Yes/No)	Additional ROW - Cavalcade to Quitman (Yes/No)	Traffic/Mobility Improvements* (High/Medium/Low)	Land Use and Cultural Resources within the Right-of-Way			
SEGMENT #	Alternative Type	Description					Community Parks (Yes/No)	Cemeteries (Yes/No)	National Register of Historic Places (Yes/No)	Recorded Archeological Sites (Yes/No)
Alternative #										
Alternative #										
Alternative #										
Alternative #	<i>SEE EXHIBITS FOR COMPLETED MATRIX</i>									
Alternative #										
Alternative #										
Alternative #										
Alternative #										

*Traffic/Mobility Improvements is a rating determined using outputs from the travel demand models. The model provides information on how many drivers will use the highway if improved, how this compares among various alternative improvements, and how many hours drivers can expect to save traveling on the highway if improved, also known as Vehicle-Hours Traveled (VHT).

SECONDARY SCREENING MATRIX

EVALUATION CRITERIA

DRAFT

Secondary Screening Process of Preliminary Alternatives

Segment 1 Preliminary Alternative	Alternative Type	Description	Meets Need and Purpose and Project Goals (Yes/No)	Signature Project Potential (Yes/No)	Engineering		Traffic	Environmental																													
					Meets Current Design Criteria (Yes/No)	Additional ROW - Cavalcade to Quitman (Yes/No)		Traffic/Mobility Improvements* (High/Medium/Low)	Land Use					Cultural Resources			Natural Resources				Air	Noise	Socioeconomics			HazMat											
									Community Parks (Yes/No)	Cemeteries (Yes/No)	Commercial (acres)	Residential (acres)	Industrial (acres)	Public (acres)	Total Additional ROW (acres)	National Register of Historic Places (Yes/No)	Recorded Archeological Sites (Yes/No)	Archeological High Probability Areas (acres)	Historic Sites Potentially Eligible for National Register (Yes/No)	Flooding	Wildlife	Wetlands	Streams	Number of Sensitive Receptors (number)	Noise-Sensitive Receptors (number)	Residential Displacements (number)	Commercial Displacements (number)	Residences Adjacent to Roadway (Yes/No)	Businesses Adjacent to Roadway (Yes/No)	Churches (number)	Schools (number)	Visual Impacts (Yes/No)	Changes in Community Cohesion (Yes/No)	Environmental Justice Issues (Yes/No)	Superfund Sites (number)		
																				100-Year Floodplain (acres)	Detention Basins (acres)	Threatened & Endangered Species (Yes/No)	Wetlands (acres)													Streams (acres)	
Alt. 1																																					
Alt. 3																																					
Alt. 4																																					
Alt. 5																																					
Alt. 6																																					
Alt. 7																																					
Alt. 8																																					

MATRIX TO BE COMPLETED DURING THE NEXT STEP OF THE EIS PROCESS

*Traffic/Mobility Improvements is a rating determined using outputs from the travel demand models. The model provides information on how many drivers will use the highway if improved, how this compares among various alternative improvements, and how many hours drivers can expect to save traveling on the highway if improved, also known as Vehicle-Hours Traveled (VHT).

Following this evening's meeting, the six Preliminary Alternatives for each of the three segments (18 total) will be narrowed down to three Reasonable Alternatives for each of the three segments (9 total) using the evaluation criteria in the matrix shown here.

This is the next step in the Alternatives Evaluation Process and is provided so you can review and comment on the evaluation criteria; therefore, it is not completed.

Please review this information, ask questions, and provide your comments on both the Initial Screening Matrix (Page 3) and the Secondary Screening Matrix above.

NORTH HOUSTON HIGHWAY IMPROVEMENT PROJECT

SECOND PUBLIC SCOPING MEETING COMMENT FORM

October 9 & 11, 2012

Thank you for attending this evening's second public scoping meeting. If you would like to provide written comments on the project you may use this form (feel free to include additional sheets of paper if necessary). Please submit this information in the comment box at this evening's meeting, or mail it to: Director of Project Development, Texas Department of Transportation, P.O. Box 1386, Houston, TX 77251. You may also email comments to: HOU-piowebmail@txdot.gov, or go to the project website: www.IH45northandmore.com and click on "Comments/Contact Us" tab. **For your comments to be included as part of the official record for this meeting, please email by Friday, October 26, 2012, or if mailing, have postmarked by this date.**

Overall, do you support or oppose the idea to improve highway transportation in the North Houston area?

Support _____ Oppose _____ No Opinion _____

Please explain in the space provided below:

Per Texas Transportation Code, §201.811(a)(5): check each of the following boxes that apply to you:

- I am employed by TxDOT
- I do business with TxDOT
- I could benefit monetarily from the project or other item about which I am commenting

OPTIONAL INFORMATION:

Name: _____

Address: _____

Phone: _____

Email address: _____



Proyecto de Mejorías de la Carretera del Norte de Houston

REUNIÓN DE ALCANCE PÚBLICO 9 Y 11 DE OCTUBRE, 2012

ADONDE IR?

- Registrarse
- Recoger Folletos
- Ver Video
- Ver Exhibiciones
- Hacer Preguntas
- Compartir Opiniones
- Dejar sus Comentarios

INDICE

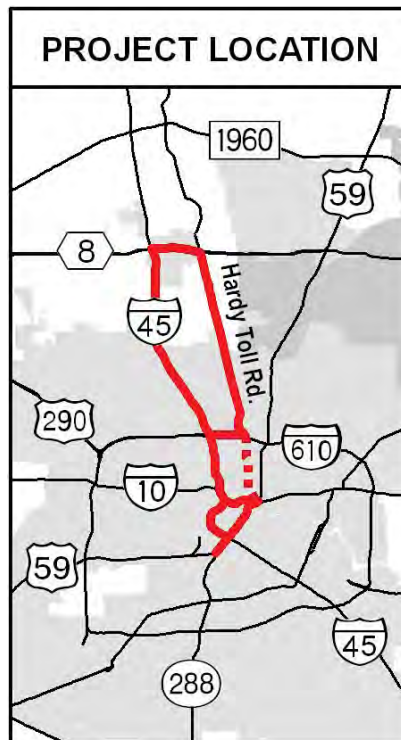
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¡Bienvenidos a la Reunión!

Bienvenidos a la 2ª Reunión de Alcance Público para el Proyecto de Mejorías de la Carretera del Norte de Houston, ubicado en el Condado de Harris, Texas.

La reunión de esta noche es una parte integral del proceso de la Declaración sobre el Impacto Medioambiental (EIS por sus siglas en Inglés) y la fase de ingeniería preliminar de este proyecto.

Agradecemos su participación.



REUNIONES PUBLICAS

martes

9 de octubre, 2012
5:30 p.m. - 7:30 p.m.

FORO ABIERTO
 Jefferson Davis High School
 1101 Quitman Street
 Houston, Texas 77009

jueves

11 de octubre, 2012
5:30 p.m. - 7:30 p.m.

FORO ABIERTO
 Aldine Ninth Grade School
 10650 North Freeway
 Houston, Texas 77037

Propósito de Reunión de Alcance Público

- * Presentar y aportar sus ideas sobre el Proceso de Evaluación Preliminar de Alternativas, el Universo de Alternativas y las Seis Alternativas Preliminares
- * Presentar dos documentos corrientes: Declaración de Necesidad y Propósito y Plan de Involucramiento Pública y Coordinación de Agencias
- * Discutir el proyecto con usted y contestar preguntas
- * Presentar la cronología para el proyecto, historia y los antecedentes
- * Promover su involucramiento continuo



Descripción del Proyecto

El proyecto propuesto y límites del estudio comienzan en el intercambio de US 59 y la carretera SH 288 al sur del centro de Houston y sigue hacia el norte a lo largo de la carretera IH 45 hasta el intercambio de IH 45 y carretera de Circunvalación Beltway 8 Norte, una distancia de aproximadamente 16 millas. El área propuesta para el proyecto también incluye porciones de IH 10, IH 610, y US 59 cerca del centro de Houston; y el corredor de la Calle de Peaje Hardy desde el centro hasta el Beltway 8 Norte.

Aumentos pronosticados en la población y empleo en la área metropolitana de Houston va contribuir a congestión de tráfico adicional en IH 45, que está corrientemente clasificado como serio a severo. El proyecto propuesto es necesario para arreglar la congestión y para acomodar tráfico existente y anticipado en el futuro. Adicionalmente, el proyecto es necesario para traer la carretera a los estándares corrientes de diseño, que mejorará seguridad y proveerá para movimiento mas eficiente para gente y mercancías. Mejor eficiencia también es necesaria para ayudar en eventos de evacuación. El propósito del Proyecto propuesto de Mejorías de la Carretera del Norte de Houston es para crear capacidad adicional para la carretera, reducir congestión, aumentar seguridad, y mejorar movilidad y eficiencia de funcionamiento. Los costos y recursos de financiar para implementar el proyecto en el futuro no se han determinado.

Un alcance razonable de alternativas serán considerados para satisfacer la necesidad identificada y el propósito de el proyecto. Las alternativas incluirá la alternativa no-construir y también alternativas de carriles manejados/de peaje. El proyecto propuesto se va desarrollar en conformidad con Sección 6002 del Acto de Igualdad de Transportación Seguro, Responsable, Flexible, y Eficiente: Un Legado para Usuarios (SAFETEA-LU por sus siglas en Inglés) y el Acto de Póliza Nacional del Medioambiente (NEPA por sus siglas en Inglés).

Proceso de Evaluación de Alternativas

PROCESO INICIAL DE ELIMINACION

- ⇒ Un Proceso Inicial de Eliminación se ha usado para restringir el Universo de Alternativas a seis Alternativas Preliminares presentado en la reunión de esta noche. (Ve Pagina 3 de este folleto sobre la Matriz Inicial de Eliminación)
- ⇒ El Universo de Alternativas es una combinación de ideas del equipo del proyecto, el público, y agencias que participó y cooperó.
- ⇒ Los criterios de evaluación para el Proceso Inicial de Eliminación se desarrolló usando la declaración de necesidad y propósito, la meta del proyecto, y comentarios recibidos de las agencias y público en la primera Reunión de Alcance.

SEGUNDO PROCESO DE ELIMINACION

- ⇒ Un Segundo Proceso de Eliminación se usará para restringir las seis Alternativas Preliminares para cada uno de los tres segmentos (un total de 18), a las tres Alternativas Razonables para cada uno de los tres segmentos (un total de 9). Las Alternativas Razonables serán presentadas en la próxima ronda de Reuniones Públicas.
- ⇒ El próximo paso es completar otra matriz de eliminación para las tres Alternativas Razonables para cada uno de los tres segmentos, mostrando los detalles de esta evaluación. Esta información después se hará disponible para su reviso y comentario en otra reunión pública y en el sitio de la Red del proyecto.
- ⇒ Ve Pagina 4 de este folleto para los criterios de evaluación de la Segunda Matriz de Eliminación. Los criterios de evaluación de la Segunda Matriz de Eliminación son desarrollados para evaluar las alternativas más completo que en el Proceso Inicial de Eliminación.

Como dar Comentarios más tardar el viernes, 26 de octubre, 2012

¡NO SE OLVIDE!
Queremos su
aportación sobre:

- 1. Proceso de Evaluación y Eliminación de Alternativas**
- 2. Alternativas Preliminares**

LA INFORMACION DE ARRIBA ES DISPONIBLE EN ESTA REUNION Y EN EL SITIO DE LA RED DEL PROYECTO

Todo la información presentado en la reunión de esta noche se puede ver en el sitio de la red del proyecto.



Ay varias maneras convenientes para dar su comentarios sobre el proyecto:

- **Use la caja de comentario en esta reunión para presentar comentarios**

- **Envía comentarios a:**
 Director of Project Development
 Texas Department of Transportation
 P.O. Box 1386
 Houston, TX 77251

- **Envía por correo electrónico a:**
 HOU-piowebmail@txdot.gov
- **Vaya al sitio de la Red del Proyecto:**
 www.IH45northandmore.com y cliquea en la lengüeta "Comments/Contact Us".

Sitio de la Red del Proyecto: www.IH45northandmore.com

INITIAL SCREENING MATRIX

<i>DRAFT</i>			EVALUATION CRITERIA							
			Initial Screening of Universe of Alternatives							
			Meets Need and Purpose and Project Goals (Yes/No)	Engineering		Traffic	Environmental			
				Meets Current Design Criteria (Yes/No)	Additional ROW - Cavalcade to Quitman (Yes/No)	Traffic/Mobility Improvements* (High/Medium/Low)	Land Use and Cultural Resources within the Right-of-Way			
SEGMENT #	Alternative Type	Description					Community Parks (Yes/No)	Cemeteries (Yes/No)	National Register of Historic Places (Yes/No)	Recorded Archeological Sites (Yes/No)
Alternative #										
Alternative #										
Alternative #										
Alternative #	<i>SEE EXHIBITS FOR COMPLETED MATRIX</i>									
Alternative #										
Alternative #										
Alternative #										
Alternative #										

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SECONDARY SCREENING MATRIX

EVALUATION CRITERIA

DRAFT

Secondary Screening Process of Preliminary Alternatives

Table with columns for Segment 1 Preliminary Alternative, Alternative Type, Description, and various evaluation criteria including Engineering, Traffic, Land Use, Cultural Resources, Natural Resources, Air, Noise, Socioeconomics, and HazMat.

MATRIX TO BE COMPLETED DURING THE NEXT STEP OF THE EIS PROCESS

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Following this evening’s meeting, the six Preliminary Alternatives for each of the three segments (18 total) will be narrowed down to three Reasonable Alternatives for each of the three segments (9 total) using the evaluation criteria in the matrix shown here.

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Please review this information, ask questions, and provide your comments on both the Initial Screening Matrix (Page 3) and the Secondary Screening Matrix above.

NORTH HOUSTON HIGHWAY IMPROVEMENT PROJECT

SECOND PUBLIC SCOPING MEETING COMMENT FORM October 9 & 11, 2012

Thank you for attending this evening's second public scoping meeting. If you would like to provide written comments on the project you may use this form (feel free to include additional sheets of paper if necessary). Please submit this information in the comment box at this evening's meeting, or mail it to: Director of Project Development, Texas Department of Transportation, P.O. Box 1386, Houston, TX 77251. You may also email comments to: HOU-piowebmail@txdot.gov, or go to the project website: www.IH45northandmore.com and click on "Comments/Contact Us" tab. **For your comments to be included as part of the official record for this meeting, please email by Friday, October 26, 2012, or if mailing, have postmarked by this date.**

Overall, do you support or oppose the idea to improve highway transportation in the North Houston area?

Support _____ Oppose _____ No Opinion _____

Please explain in the space provided below:

Per Texas Transportation Code, §201.811(a)(5): check each of the following boxes that apply to you:

- I am employed by TxDOT
- I do business with TxDOT
- I could benefit monetarily from the project or other item about which I am commenting

OPTIONAL INFORMATION:

Name: _____
Address: _____
Phone: _____
Email address: _____

NORTH HOUSTON HIGHWAY IMPROVEMENT PROJECT - UNIVERSE OF ALTERNATIVES SUMMARY

NORTH HOUSTON HIGHWAY IMPROVEMENT PROJECT - UNIVERSE OF ALTERNATIVES (SEGMENT 1 - BELTWAY 8 TO IH 610)			
ALTERNATIVE NO.	ALTERNATIVE TYPE	DESCRIPTION	COMMENTS
1	EXISTING CONFIGURATION	NO BUILD	NO BUILD SCENARIO
2	TSM UPGRADES	TRANSFORMATION SYSTEMS MANAGEMENT (TSM) PROJECTS	UPGRADE FACILITY WITH PLANNED TSM PROJECTS
3	WIDEN EXISTING WITH ELEVATED MANAGED LANES	ADDITION OF DIRECT CONNECTION FROM IH 45 TO HARDY TOLL ROAD THAT INCLUDES WIDENING OF HARDY TOLL ROAD TO PROVIDE ONE ADDITIONAL LANE INBOUND AND OUTBOUND.	SELECTED AS PRELIMINARY ALTERNATIVE
4	WIDEN EXISTING	THIRTEEN (13) LANE SECTION - INCLUDES EIGHT (8) GENERAL PURPOSE LANES AND FOUR (4) MANAGED LANES. ADDITIONAL ROW WILL BE ACQUIRED ON WEST SIDE OF IH 45.	SELECTED AS PRELIMINARY ALTERNATIVE
5	WIDEN EXISTING	THIRTEEN (13) LANE SECTION - INCLUDES EIGHT (8) GENERAL PURPOSE LANES AND FOUR (4) MANAGED LANES. ADDITIONAL ROW WILL BE ACQUIRED ON EAST SIDE OF IH 45.	SELECTED AS PRELIMINARY ALTERNATIVE
6	WIDEN EXISTING	THIRTEEN (13) LANE SECTION - INCLUDES EIGHT (8) GENERAL PURPOSE LANES AND FOUR (4) MANAGED LANES. ADDITIONAL ROW WILL BE ACQUIRED ON BOTH SIDES OF IH 45.	SELECTED AS PRELIMINARY ALTERNATIVE
7	ELEVATED MANAGED LANES	THIRTEEN (13) LANE SECTION - INCLUDES EIGHT (8) GENERAL PURPOSE LANES AND FOUR (4) ELEVATED MANAGED LANES ON A SINGLE STRUCTURE AT CENTER.	SELECTED AS PRELIMINARY ALTERNATIVE
8	ELEVATED MANAGED LANES	THIRTEEN (13) LANE SECTION - INCLUDES EIGHT (8) GENERAL PURPOSE LANES AND FOUR (4) ELEVATED MANAGED LANES ON TWO (2) SEPARATE STRUCTURES ON LEFT AND RIGHT SIDES OF CENTERLINE.	SELECTED AS PRELIMINARY ALTERNATIVE

NORTH HOUSTON HIGHWAY IMPROVEMENT PROJECT - UNIVERSE OF ALTERNATIVES (SEGMENT 2 - IH 610 TO IH 10)			
ALTERNATIVE NO.	ALTERNATIVE TYPE	DESCRIPTION	COMMENTS
1	EXISTING CONFIGURATION	NO BUILD	NO BUILD SCENARIO
2	TSM UPGRADES	TRANSFORMATION SYSTEMS MANAGEMENT (TSM) PROJECTS	UPGRADE FACILITY WITH PLANNED TSM PROJECTS
3	WIDEN EXISTING	THIRTEEN (13) LANE SECTION - INCLUDES TEN (10) GENERAL PURPOSE LANES AND TWO (2) REVERSIBLE, SEPARATE PURPOSE LANES.	SELECTED AS PRELIMINARY ALTERNATIVE
4	WIDEN EXISTING	THIRTEEN (13) LANE SECTION - INCLUDES EIGHT (8) GENERAL PURPOSE LANES AND FOUR (4) MANAGED LANES.	NOT SELECTED; DOES NOT PROVIDE SUFFICIENT SHOULDER WIDTHS FOR IH 45 MANUALLY
5	ELEVATED HOT LANES	THIRTEEN (13) LANE SECTION - INCLUDES TEN (10) GENERAL PURPOSE LANES AND TWO (2) ELEVATED HOT LANES.	NOT SELECTED; REQUIRES TWO (2) ADDITIONAL HOT LANES AND TWO (2) GENERAL PURPOSE LANES ON IH 45. THE IH 45/MARBY CORRIDOR TRAFFIC STUDY RECOMMENDS FOUR (4) ADDITIONAL MANAGED LANES WITHIN THE PROJECT FOR PROJECT. DOES NOT MEET NEED AND PURPOSE FOR PROJECT.
6	WIDEN EXISTING	THIRTEEN (13) LANE SECTION - INCLUDES TEN (10) GENERAL PURPOSE LANES AND TWO (2) NON-BARRIER SEPARATED HOT LANES.	NOT SELECTED; PROVIDES TWO (2) ADDITIONAL HOT LANES AND TWO (2) GENERAL PURPOSE LANES ON IH 45. THE IH 45/MARBY CORRIDOR TRAFFIC STUDY RECOMMENDS FOUR (4) ADDITIONAL MANAGED LANES WITHIN THE PROJECT LIMITS. DOES NOT MEET NEED AND PURPOSE FOR PROJECT.
7	WIDEN EXISTING	TEN (10) LANE SECTION - INCLUDES EIGHT (8) GENERAL PURPOSE LANES AND TWO (2) BARRIER SEPARATED HOT LANES.	NOT SELECTED; ONLY PROVIDES TWO (2) ADDITIONAL LANES ON IH 45. THE IH 45/MARBY CORRIDOR TRAFFIC STUDY RECOMMENDS FOUR (4) ADDITIONAL LANES WITHIN THE PROJECT LIMITS. IN ADDITION, THIS ALTERNATIVE DOES NOT PROVIDE SUFFICIENT SHOULDER WIDTHS FOR PROJECTS CONSIDERED. DOES NOT MEET NEED AND PURPOSE FOR PROJECT.
8	WIDEN EXISTING	TEN (10) LANE SECTION - INCLUDES EIGHT (8) GENERAL PURPOSE LANES AND TWO (2) NON-BARRIER SEPARATED HOT LANES.	NOT SELECTED; ONLY PROVIDES TWO (2) ADDITIONAL LANES ON IH 45. THE IH 45/MARBY CORRIDOR TRAFFIC STUDY RECOMMENDS FOUR (4) ADDITIONAL MANAGED LANES WITHIN THE PROJECT LIMITS. DOES NOT MEET NEED AND PURPOSE FOR PROJECT.
9	WIDEN EXISTING	THIRTEEN (13) LANE SECTION - INCLUDES EIGHT (8) GENERAL PURPOSE LANES AND TWO (2) REVERSIBLE MANAGED LANES.	NOT SELECTED; ONLY PROVIDES TWO (2) ADDITIONAL REVERSIBLE LANES ON IH 45. THE IH 45/MARBY CORRIDOR TRAFFIC STUDY RECOMMENDS FOUR (4) ADDITIONAL MANAGED LANES WITHIN THE PROJECT LIMITS. DOES NOT MEET NEED AND PURPOSE FOR PROJECT.
10	WIDEN EXISTING	THIRTEEN (13) LANE SECTION - INCLUDES EIGHT (8) GENERAL PURPOSE LANES AND FOUR (4) MANAGED LANES.	SELECTED AS PRELIMINARY ALTERNATIVE
11	WIDEN EXISTING WITH ELEVATED MANAGED LANES	THIRTEEN (13) LANE SECTION - INCLUDES EIGHT (8) GENERAL PURPOSE LANES AND TWO (2) MANAGED LANES ON A SINGLE STRUCTURE AT CENTER.	SELECTED AS PRELIMINARY ALTERNATIVE
12	WIDEN EXISTING WITH ELEVATED MANAGED LANES	THIRTEEN (13) LANE SECTION - INCLUDES EIGHT (8) GENERAL PURPOSE LANES AND FOUR (4) ELEVATED MANAGED LANES ON DOUBLE BECKER STRUCTURE AT CENTER.	SELECTED AS PRELIMINARY ALTERNATIVE
13	WIDEN EXISTING WITH ELEVATED MANAGED LANES	THIRTEEN (13) LANE SECTION - INCLUDES EIGHT (8) GENERAL PURPOSE LANES AND FOUR (4) ELEVATED MANAGED LANES ON TWO (2) SEPARATE STRUCTURES ON LEFT AND RIGHT SIDES OF CENTERLINE.	NOT SELECTED; PROHIBITS ELEVATED STRUCTURES TO EXISTING RESIDENTIAL PROPERTIES
14	ADD TUNNEL TO EXISTING	TUNNELED ROADWAY UNDERBENTH IH 45. INCLUDES FOUR (4) GENERAL PURPOSE LANES AND TWO (2) MANAGED LANES ON EACH SIDE OF CENTERLINE.	SELECTED AS PRELIMINARY ALTERNATIVE
15	ADD DIRECT CONNECTION	ADDITION OF DIRECT CONNECTION FROM IH 45 TO HARDY TOLL ROAD. INCLUDES FOUR (4) MANAGED LANES. THIS ALTERNATIVE ALSO INCLUDES WIDENING OF HARDY TOLL ROAD TO PROVIDE ONE ADDITIONAL LANE INBOUND AND OUTBOUND.	SELECTED AS PRELIMINARY ALTERNATIVE

NORTH HOUSTON HIGHWAY IMPROVEMENT PROJECT - UNIVERSE OF ALTERNATIVES (SEGMENT 3 - DOWNTOWN LOOP SYSTEM)			
ALTERNATIVE NO.	ALTERNATIVE TYPE	DESCRIPTION	COMMENTS
1	EXISTING CONFIGURATION	NO BUILD	NO BUILD SCENARIO
2	TSM UPGRADES	TRANSFORMATION SYSTEMS MANAGEMENT (TSM) PROJECTS	UPGRADE FACILITY WITH PLANNED TSM PROJECTS
3	CONVERT DOWNTOWN LOOP TO ONE WAY LOOP	CONVERT EXISTING DOWNTOWN LOOP ROADWAY NETWORK TO A ONE-WAY LOOP.	SELECTED AS PRELIMINARY ALTERNATIVE
4	ADD TUNNEL TO EXISTING	TUNNELED ROADWAY UNDERBENTH LA BRANCH ST AND TERMINATES AT THE US 59/51 288 INTERCHANGE. INCLUDES FOUR (4) MANAGED LANES.	SELECTED AS PRELIMINARY ALTERNATIVE
5	ADD TUNNEL TO EXISTING	TUNNELED ROADWAY UNDERBENTH IH 45. THREE CONTIGUOUS TUNNELS UNDERBENTH IH 45 FROM 59/51 288 INTERCHANGE TO A ONE-WAY LOOP.	SELECTED AS PRELIMINARY ALTERNATIVE
6	ADD TUNNEL TO EXISTING	TUNNELED ROADWAY UNDERBENTH IH 45. THREE CONTIGUOUS TUNNELS UNDERBENTH IH 45 FROM 59/51 288 INTERCHANGE. INCLUDES FOUR (4) MANAGED LANES.	SELECTED AS PRELIMINARY ALTERNATIVE
7	ADD TUNNEL TO EXISTING	TUNNELED ROADWAY UNDERBENTH HOUSTON AVE AND SPURS TO JEFFERSON ST AND BABY ST. TUNNEL TERMINATES AT IH 45 SOUTH OF THE IH 45/US 59 INTERCHANGE AND SPUR 527. INCLUDES FOUR (4) MANAGED LANES.	SELECTED AS PRELIMINARY ALTERNATIVE
8	ELEVATED MANAGED LANES	ELEVATED ROADWAY ALONG HOUSTON AVE AND TERMINATES AT IH 45 NEAR ALLEN PARKWAY. INCLUDES FOUR (4) MANAGED LANES.	NOT SELECTED; PROHIBITS ELEVATED STRUCTURES TO EXISTING RESIDENTIAL PROPERTIES
9	ADD TUNNEL TO EXISTING	THIRTEEN (13) LANE SECTION - INCLUDES EIGHT (8) GENERAL PURPOSE LANES AND FOUR (4) MANAGED LANES. THIS ALTERNATIVE ALSO INCLUDES WIDENING OF HARDY TOLL ROAD TO PROVIDE ONE ADDITIONAL LANE INBOUND AND OUTBOUND.	NOT SELECTED; LOW DEMAND FOR THIS ROUTE PER TRAVEL DEMAND MODEL
10	WIDEN EXISTING	THIRTEEN (13) LANE SECTION FROM IH 10 TO IH 45/US 59 INTERCHANGE INCLUDES EIGHT (8) GENERAL PURPOSE LANES.	SELECTED AS PRELIMINARY ALTERNATIVE

SELECTED AS PRELIMINARY ALTERNATIVES

NORTH HOUSTON HIGHWAY IMPROVEMENT PROJECT

NEED AND PURPOSE

APPROVED BY FHWA: JULY 2010
UPDATED: OCTOBER 2011
UPDATED: MAY 2012
APPROVED BY FHWA: JULY 2012



Section 1

Need for and Purpose of Proposed Action

Per Council on Environmental Quality (CEQ) regulations implementing the National Environmental Policy Act (NEPA), an Environmental Impact Statement (EIS) prepared for a proposed action should describe the problem(s) or other needs that the proposed action is intended to address (40 Code of Federal Regulations [CFR] 1502.13). Transportation improvements are needed within the North Houston Highway Improvement Project area in Houston, Texas, because the existing Interstate Highway (IH) 45 facility currently operates near capacity resulting in congestion during peak and off-peak periods. Additionally, future transportation demand from projected population and economic growth is expected to place a greater strain on the existing facility. The population of the entire Houston-Galveston region is expected to increase by an estimated 3 million people, or 65 percent, between the years 2000 to 2035, while the growth rate in the study corridor is projected to be approximately 35 percent. The additional demand will put a strain on the existing facility. The purpose of the proposed action is to help manage the projected transportation problems in the North Houston Highway Improvement Project corridor to improve mobility and safety.

The limits of the proposed project begin at the interchange of United States Highway (US) 59 and State Highway (SH) 288 and follow northward along IH 45 to the interchange of IH 45 and Beltway 8 North, a distance of approximately 16 miles. The proposed project area also includes portions of IH 10 and US 59 near the downtown Houston area, Hardy Toll Road located north of downtown Houston to Beltway 8 North, and IH 610 and Beltway 8 between IH 45 and Hardy Toll Road. *Section 1.1* describes the project area in more detail. The project area is shown on *Figure 1*.

1.1 Need for Proposed Action

In 1982, a one-way, reversible high occupancy vehicle (HOV) lane was retrofitted into the center of IH 45 North (North Freeway) from IH 10 to Farm-to-Market Road (FM) 1960, a distance of approximately 20 miles. This retrofit eliminated the interior shoulders of the freeway. Subsequent reconstruction of the facility occurred but did not take substantial additional right-of-way (ROW). Therefore, because of the HOV lane, the segment between IH 610 and Shepherd Drive does not meet current design standards. IH 45 North has been in its current configuration since 1990.

In 2002-2003, an Alternatives Analysis (AA) was conducted for the North-Hardy Corridor Study, examining both highway and transit alternatives from downtown Houston to SH 242 near The Woodlands.

Transportation needs and alternatives to address those needs in the North-Hardy Corridor were documented in three reports listed below, beginning with the Alternatives Analysis (AA). The studies evaluated transit and highway improvement alternatives for a corridor from downtown Houston to 30 miles north, principally in the area between IH 45 and the Hardy Toll Road, and including Bush Intercontinental Airport (IAH) and segments of IH 45 and US 59 south of downtown.

2003 North-Hardy Corridor Alternatives Analysis Report

Examined transit and highway alternatives; recommended that transit alternatives be examined prior to detailed evaluation of highway alternatives. The AA determined that even with parallel high-capacity transit and the extension of the Hardy Toll Road to downtown Houston, additional capacity would be needed on IH 45. The AA also concluded that, at minimum, two-way HOV service would be needed in the corridor. The preferred alternative from the 2003 study proposed 12 lanes from IH 10 to Beltway 8 North (8 general purpose lanes and 4 managed lanes) and 12 lanes from Beltway 8 North to FM 1960 (10 general purpose lanes and 2 HOV/high occupancy toll [HOT] lanes). Managed lanes are lanes designated for specific uses such as toll traffic, transit, or trucks. HOT lanes refer to high occupancy/toll lanes that are specifically designated for high occupancy vehicles and toll traffic.

2004 North-Hardy Corridor Planning Studies, Alternatives Analysis Report (Transit Component)

Findings were used to develop a regional Transit System Plan that combines an aggressive bus service program with Advanced High Capacity Transit (light rail). The Metropolitan Transit Authority of Harris County (METRO) is currently constructing 5.5 miles of the North Corridor Light Rail Transit project.

2005 North-Hardy Planning Studies, Alternatives Analysis Report (Highway Component)

The Recommended Highway Alternative from downtown Houston to Beltway 8 North is to add four managed lanes to the IH 45/Hardy Toll Road corridor.

The project area for this EIS is based on the study area of the previous Alternatives Analysis Report for the North-Hardy Corridor. The northern limit of the proposed project to be evaluated in this EIS is Beltway 8 North, which is a logical terminus for this project. *Figure 1* shows the project area, which encompasses the roadways that would be considered for improvements in order to address highway transportation needs in the North Houston Highway Improvement Project area from downtown Houston to Beltway 8 North.

The North-Hardy Planning Studies were completed in November 2005 and relied partly on information from the Houston-Galveston Area Council's (H-GAC) 2025 Regional Transportation Plan (RTP), which was the approved RTP at that time. Although this Need and Purpose statement utilizes some data from the previously completed studies, the need for the project will

be reevaluated, based on updated information, during the EIS process. The current approved regional transportation plan is the 2035 RTP Update. The proposed project is included in the 2035 RTP Update as an unfunded project.

Among the needs that were identified in determining the proposed transportation improvements to the portion of IH 45 extending from near downtown Houston northward to Beltway 8 North are the following:

- The roadway facility does not provide adequate capacity for existing and future traffic demands, resulting in congestion, longer travel times, and reduced mobility.
- The average daily traffic volumes on IH 45 in the areas from US 59 to IH 10 and IH 610 to Beltway 8 North are projected to increase by approximately 28 to 37 percent between 2011 to 2035. The average daily traffic volume on IH 45 between IH 10 and IH 610 is projected to increase by approximately 16 percent during the same period. Congestion can be measured by comparing the capacity of a roadway to the volume it carries during the peak hour. The higher the volume to capacity (V/C) ratio, the more congested the roadway. The facility currently operates at a V/C ratio of 0.84 to 1.18, with the higher V/C ratio between IH 610 and Beltway 8 North, which is “tolerable” to “moderate” congestion. Without improvements, the V/C ratio would increase approximately 36 percent in 2035, to a maximum of 1.6 in the area from Shepherd Drive to Beltway 8 North, which is classified as “severe” congestion, and to a maximum of 1.48 in the area between IH 610 and Shepherd Drive, which is approaching “severe” congestion.
- IH 45 (Pierce Elevated) serving the downtown area has an existing V/C ratio of 0.9, which is “serious” congestion, and is projected to increase to 1.2 by 2035.
- The one-way reversible HOV lane serves traffic in only one direction during the peak periods and is unused for large portions of the day, limiting its use. During the peak hour, the HOV lane congestion is “tolerable,” with a V/C ratio of 0.5.
- IH 45 is a designated evacuation route for the region; at its present capacity, its effectiveness would be limited in the event of a hurricane or other regional emergency.
- Portions of the IH 45 roadway do not meet current roadway design standards, creating a safety concern.
- Roadway design deficiencies also include inadequate stormwater drainage. Intense rainfall causes high water at the IH 45/IH 10 underpass and on the outside lanes and frontage roads between Parker Road and Gulf Bank Road. As an evacuation route, IH 45 cannot afford high water closures, especially during hurricane evacuations when high rainfall events are likely.

- Forecasts for commuter service indicate that even with parallel high-capacity transit in the corridor, managed lanes would be needed to support commuter traffic and express bus service.

1.1.1 Congestion

IH 45 is a major transportation facility serving the Houston metropolitan area. The City of Houston is the fourth largest metropolitan area in the United States and the largest in Texas. The Houston-Galveston area population is forecasted to grow by over 3 million people by 2035. IH 45 is currently congested in the peak period, and the projected population and employment growth in the northern sector of the city would cause increased travel demand within the corridor. Without the proposed improvements, the peak periods would increase in duration, resulting in increased traffic delays and diversions onto surrounding local streets.

Congestion is defined as the level at which transportation system performance is no longer acceptable due to traffic interferences (23 CFR 500.109). The level of system performance deemed acceptable by state and local officials varies by type of transportation facility, geographic location (metropolitan area or subarea, rural area), and/or time of day. In addition, according to H-GAC, the most congested areas are also areas where more crashes occur.

The existing IH 45 facility is used to transport the traveling public to and from home, work, retail, entertainment, and other activity centers. Travel destinations include downtown Houston, the Texas Medical Center, University of Houston, and Texas Southern University on the south end of the corridor, and The Woodlands and the Greenspoint area to the north. IH 45 is also a link to the three major airports in the region: George Bush Intercontinental Airport, Hobby Airport, and Ellington Field. The existing IH 45 facility is also used for through trips for travel origins and destinations that are outside the project area.

In addition to overall travel demand, congestion is aggravated by “bottlenecks” on the roadway. Bottlenecks are locations where merges and weaving due to busy entrance and exit ramps or the loss of a lane can cause traffic to slow, creating delays on an already busy facility. Critical bottlenecks on the IH 45 North Freeway (from north to south) are at Beltway 8 North, the Shepherd Drive curve where there is an entrance/exit to the HOV lane, ramp connections north and south of IH 610, IH 10 to Allen Parkway where merges and limited sight distance slow traffic, and at the interchange with US 59 and SH 288.

The need for additional capacity within the IH 45 corridor can be evaluated by the V/C ratio. V/C ratios that are less than 0.85 are considered to represent “tolerable” traffic conditions. V/C ratios between 0.85 and 1.00 indicate “moderate” levels of traffic congestion. V/C ratios over 1.00 indicate “serious” traffic congestion, and a V/C ratio over 1.5 indicates a “severe” level of traffic congestion.

Based upon the V/C ratios, existing conditions within the IH 45 corridor are tolerably to seriously congested, and with expected increases in population and employment growth, conditions will deteriorate further if no additional capacity is created. Year 2011 daily traffic volumes were approximately 163,000 vehicles per day (vpd) from US 59 to Allen Parkway; 201,500 vpd from Allen Parkway to IH 10; 192,000 vpd from IH 10 to IH 610; 254,500 vpd from IH 610 to Shepherd Drive; and 261,000 vpd from Shepherd Drive to Beltway 8 North. Daily traffic volumes include mainlanes and frontage roads only, no HOV lane volumes are included. The V/C ratios on these segments of IH 45 range from 0.84 to 1.18. The facility is essentially at capacity with average travel speeds around 25-30 miles per hour (mph) (Houston TranStar 2011). The degree of traffic congestion is reflected in the peak period speeds versus the posted speed limit of 60 mph. Use of the reversible HOV lane is controlled, thereby allowing it to operate at higher speeds. Weaving and merging at the HOV entrance/exit at Shepherd Drive contributes to further congestion.

Based on analyses in the 2025 RTP, the H-GAC identifies mobility and access among the goals for the Houston-Galveston region, strategies to meet these goals, and priority actions to be implemented by year 2025. The vision of the RTP is to enhance mobility by providing an efficient, affordable, safe, and environmentally responsible transportation system for both people and goods. The 2025 RTP indicates that future revenue for transportation improvements will not keep pace with future demands. According to the 2025 RTP, regional congestion levels in the Houston region will grow by 10 percent over present day levels even with the implementation of the 2025 RTP and congestion management practices in place to optimize operations, such as transportation demand management (TDM), transportation system management (TSM), and intelligent transportation system (ITS) improvements. TDM refers to managing the demand of the transportation network through modified travel patterns such as the 9-80 work week or telecommuting. TSM refers to managing the roadway facilities to maximize mobility by reducing bottlenecks and providing adequate weaving distances and intersection improvements. ITS includes detecting crashes and breakdowns to inform drivers, using changeable message signs, and coordinating signal timing to help with traffic flow.

The 2025 RTP forecasted population in the corridor from downtown Houston to Beltway 8 North (*Figure 2*) to increase from 92,320 in 2000 to 141,058 in 2025. This is a population increase of almost 53 percent in the analysis area. Employment in the area is expected to increase from 35,449 in 2000 to 58,352 in 2025, which is an increase of almost 65 percent. Predicted population and employment growth in the analysis area is presented in *Table 1-1*. In addition, areas north of Beltway 8 North included as part of the North-Hardy Planning Studies Alternatives Analysis Report (Highway Component) are expected to experience significant growth in population and employment (93 percent and 75 percent, respectively, between 2000 and 2025). The Montgomery County to SH 105 area shows a 119.7 percent population increase, as compared to a 53.6 percent increase in employment. H-GAC's 2035 RTP reports that larger residential developments are occurring farther from the region's business districts,

which currently contain a majority of the region's employment. This is evident in Montgomery County, as H-GAC studies project that household densities (households per square mile) in most areas of Montgomery County will more than double between 2005 and 2035.

Table 1-1. Population and Employment Growth

Area	Population			Employment		
	(2000)	(2025)	Percent Increase	(2000)	(2025)	Percent Increase
Downtown – IH 610	22,878	32,512	42.1	6,807	10,307	51.4
IH 610 – Beltway 8	69,442	108,546	56.3	28,642	48,045	67.7
Subtotal	92,320	141,058	52.8	35,449	58,352	64.6
Beltway 8 – Montgomery Co.	55,646	93,146	67.4	38,523	79,481	106.3
Montgomery Co. – SH 105	39,772	87,283	119.7	29,646	45,524	53.6
Total	187,738	321,487	71.24	103,618	183,357	76.95

Source: 2025 Regional Transportation Plan, H-GAC, 2005.

The demographic projections in the 2025 RTP indicate that daily vehicle miles traveled (VMT) on IH 45 between downtown Houston and Conroe will increase from approximately 10 million to over 17 million by 2025, a 76 percent increase.

Latent demand in the corridor could also add traffic to IH 45. Latent demand refers to traffic that does not use a facility once it reaches a certain point of congestion, but would use it if the capacity were increased or congestion lessened. In other words, there is a ready market of travelers that would use a facility once additional capacity is available. Latent demand is based on several factors such as the capacity and condition of alternate routes and the availability of transit.

If no improvements were made to IH 45, the V/C ratio for the general purpose lanes in the year 2035 would increase to 1.6 between Shepherd Drive and Beltway 8 North, which is "severe" congestion, and to a maximum of 1.48 in the area between IH 610 and Shepherd Drive, which is approaching "severe" congestion. Travel speeds during the peak period would drop to an average of less than 20 mph. With the improvements proposed in the 2002-2003 North-Hardy Alternatives Analysis, the V/C ratio on IH 45 is projected to range from 1 to 1.2 in 2025, which is moderate to serious congestion. The reversible HOV lane is projected to operate at a V/C ratio of 1.02 in 2025.

Projected demand in the corridor shows the need for expanded capacity. Managed lanes are a flexible and economical way to provide additional capacity. Four managed lanes are proposed to accommodate the forecasted transit use, which is projected to fill up a single lane in the peak direction, and still provide capacity for single occupancy vehicle (SOV) traffic and carpools. The

traffic flow in the managed lanes would be regulated by maintaining a minimum speed through variable pricing. Toll rates would vary according to the number of persons in a vehicle and the time of day. Carpools of three or more occupants and transit vehicles could use the lanes for free in the peak direction during the peak hours, and SOVs would pay a toll. The North-Hardy AA proposed four managed lanes to accommodate forecasted demand, which is projected to increase from 7,300 vpd in 2000 to approximately 17,500 vpd by 2025. The managed lanes would accommodate the increased transit and carpool/vanpool use and still provide capacity for single occupant toll traffic. The managed lanes would also provide two-way, all day service, unlike the current one-way reversible HOV lane.

1.1.2 **Safety**

The 2035 RTP Update reports that the likelihood of being in a fatal or injury crash in the Houston-Galveston region is 36 percent higher than the State of Texas average and 149 percent higher than the national average.

The HOV lane statistics are determined separate from the typical highway statistics so there are not comparable statistics; however, according to the Metropolitan Transit Authority of Harris County (METRO) Police Department, the HOV lane has averaged about two crashes per month between 2005 and 2008. The June 2011 Quarterly Report prepared by the Texas Transportation Institute for TxDOT and METRO reported that crash frequency on the IH 45 North HOV facility continued to be higher than most of the other facilities excluding the Katy (IH 10) facility. The report indicated that the cause of the crashes could be due to the fact that this facility is one of the oldest in the system with less than desirable design standards.

The 2035 RTP Update reports that according to National Safety Council methodology, traffic crashes cost the region approximately \$5 billion a year in motor vehicle damage, medical care, lost wages and productivity, insurance costs, and costs incurred by emergency management. In addition, it is estimated that half of the congestion experienced in the region is the result of incidents on the highway.

Crash data obtained from TxDOT on IH 45 from US 59 to Greens Road indicate that there were a total of 4,288 crashes (including 41 fatal crashes) reported over a three-year period from January 2008 through July 2011. *Table 1-2* summarizes these crashes by type. This section of IH 45 includes the project area from US 59 to BW 8.

Table 1-2. Crashes on IH 45 North

Year	Fatal Crashes	Incapacitating Crashes	Non-Incapacitating Crashes	Possible Injury Crashes	Non-Injury Crashes	Unknown	Total Crashes
2008	17	22	104	360	682	47	1,232
2009	10	14	71	269	524	31	919
2010	9	45	118	373	889	41	1,475
2011*	5	18	54	159	412	14	662
Total	41	99	347	1,161	2,507	133	4,288

* Data available through July 2011

Source: Texas Department of Transportation 2011.

1.1.3 Emergency Evacuation

Another safety issue for the Houston region is emergency evacuation. IH 45 is identified as an emergency evacuation route for the Houston-Galveston region in the event of a major storm, hurricane, or chemical spill. During Hurricane Rita in 2005, approximately 2.5 million people attempted to evacuate the region, resulting in stopped traffic for miles on major arterial freeways, where it took up to nine hours to travel a distance of 10 to 20 miles. Additionally, the depressed section of IH 45 in the vicinity of Main Street flooded during the heavy rainfall associated with Tropical Storm Allison in June 2001, reducing the capacity of the roadway for evacuation. In addition to Tropical Storm Allison, TxDOT has observed drainage and flooding problems on the freeway main lanes at this location during times of intense rainfall. Flooding/drainage problems also occur on the IH 45 frontage roads at three primary locations: between Tidwell and Parker, at North Shepherd, and at SH 249/West Mount Houston Road. A current TxDOT drainage criterion calls for storm sewers draining interstate highways to be designed for the 10-year design storm event. Currently in Harris County the 10-year design storm frequency is 2.9 inches/hour in the project area. Some existing roadways, including IH 45 in the project area, are not designed per the current drainage design criteria and, when flooded, have reduced capacity for evacuating vehicles.

Adding capacity to IH 45, especially lanes that are flexible in operation, such as managed lanes, would increase the carrying capacity of the roadway, providing more efficient evacuation capabilities. Bringing the facility up to current design standards would also improve the operation and safety of the facility during normal and emergency operations.

1.1.4 Roadway Design

The IH 45 roadway facility does not meet current roadway design standards. There are narrow lane widths, narrow or non-existent shoulders, low bridge clearances, and several structures

that are functionally obsolete that can have a negative impact on transportation safety and operations in the corridor. Roadway improvements that would correct design deficiencies may require acquisition of additional ROW in some areas. Incorporating additional lanes in the IH 45 or Hardy Toll Road corridor would require additional ROW in some areas. Between the IH 45/IH 10 interchange northward to IH 610 North, potential ROW acquisition would likely be required at intersections of IH 45 with existing streets. From IH 610 North to Beltway 8 North, ROW acquisition along IH 45 would likely be necessary at and between intersections. If the Hardy Toll Road were selected to accommodate the additional lanes, ROW acquisition would likely be required from IH 610 North to Beltway 8 North. The four-lane extension of the Hardy Toll Road from IH 610 North southward to the IH 10/US 59 interchange along railroad ROW is a separate project currently in the schematic design phase and would require ROW acquisition.

Existing major design deficiencies of IH 45 in the project area include:

- Lane and shoulder widths were reduced in certain portions of the facility to accommodate the reversible HOV lane, resulting in shoulder widths being less than the minimum design criteria of 10 feet. There are no inside shoulders between IH 10 and Shepherd Drive. Some lane widths have also been reduced from the minimum and usual criteria of 12 feet. Portions of the reversible HOV lanes and HOV shoulders along IH 45 are also substandard.
- Multiple bridges have low vertical clearances (i.e., distance between top of pavement and bottom of structure). TxDOT design guidelines recommend a desired vertical clearance of 16 feet 6 inches. Bridges at Cottage Street, North Main Street, North Street, Quitman Street, Hogan Street and West Dallas Street all have clearances of 14 feet 10 inches or less. These bridges are substandard based on the current design guidelines. The bridge at Cottage Street was struck by southbound trucks three times during a one-year period during 2007-2008 (TxDOT 2008).
- Various structures in the corridor, while not structurally deficient, are functionally obsolete, meaning that the width, vertical clearance, waterway adequacy, or approach roadway alignment are not adequate for the traffic type, traffic volume, or drainage needs.
- The vertical alignment of IH 45 from US 59 to Beltway 8 North contains multiple vertical curves that do not meet desired design speeds. Substandard vertical alignment affects safety because the driver's sight distance is less than optimum.
- The horizontal alignment of IH 45 from US 59 to Beltway 8 North contains multiple horizontal curves that do not meet desired design speeds.

Standard lane widths with adequate sight distances and clearances provide safety and comfort for drivers, and inside shoulders offer a place of refuge for disabled vehicles. A roadway that does not meet these design standards may be a safety hazard.

Pavement rehabilitation is also needed within the IH 45 corridor. Approximately 12.0 miles of pavement on the main lanes and frontage roads of IH 45 in the study area (4.5 miles of main lanes and 7.5 miles of frontage roads) were determined to be in poor or very poor condition in 2007.

1.2 Purpose of Proposed Action

The purpose of the proposed North Houston Highway Improvement Project is to implement an integrated system of transportation improvements that would:

- Manage the traffic congestion in the IH 45 corridor through added capacity, options for SOV lanes, and improved operations.
- Improve mobility on IH 45 between US 59 and Beltway 8 North by accommodating projected population growth and latent demand in the corridor.
- Provide expanded transit and carpool opportunities with two-way, all-day service on managed lanes, and access to METRO Park & Ride facilities.
- Bring the roadway facility up to current design standards with shoulders and auxiliary lanes to improve safety and operations.
- Expand capacity for emergency evacuations by providing proper design and flexible operation.
- Eliminate areas of flooding on the IH 45 main lanes.

The ultimate goal is to provide a facility with additional capacity for projected demand by incorporating transit opportunities, travel demand and management strategies, and flexible operations. Such a facility would help manage congestion, improve mobility, enhance safety, and provide travelers with options to get to their destinations.

NORTH HOUSTON HIGHWAY IMPROVEMENT PROJECT

AGENCY COORDINATION AND PUBLIC INVOLVEMENT PLAN

**APPROVED BY FHWA: JULY 2010
UPDATED: OCTOBER 2011
UPDATED: MAY 2012
APPROVED BY FHWA: JULY 2012**



Agency Coordination and Public Involvement Plan

*Public Law 109-59, Safe, Accountable, Flexible, Efficient Transportation Equity Act:
A Legacy for Users (SAFETEA-LU), Title VI, Section 6002*

Environmental Impact Statement

North Houston Highway Improvement Project

**From SH 288/US 59 Interchange to Beltway 8 North,
Including Downtown Connector System
CSJ 0912-00-146**

Harris County

**U.S. Department of Transportation
Federal Highway Administration**

Texas Department of Transportation

**Approved by FHWA: July 2010
Updated: October 2011
Updated: May 2012
Approved by FHWA: July 2012**

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Agency Coordination and Public Involvement Plan North Houston Highway Improvement Project From SH 288/US 59 Interchange to Beltway 8 North, Including Downtown Connector System

This Agency Coordination and Public Involvement Plan is provided in accordance with Public Law 109-59, Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU), Title VI, Section 6002, Efficient Environmental Reviews for Project Decision Making.

I. Purpose of the Agency Coordination and Public Involvement Plan

The Texas Department of Transportation (TxDOT), as a joint lead agency, in coordination with the Federal Highway Administration (FHWA), the lead federal agency, prepared this Agency Coordination and Public Involvement Plan (Plan) to facilitate and document the lead agencies' structured interaction with the public and other agencies and to inform the public and other agencies how the coordination will be accomplished. The Plan outlines how the lead agencies have divided the responsibilities for compliance with the various aspects of the environmental review process, such as the issuance of invitations to participating agencies, and how the lead agencies will provide opportunities for input from the public and other agencies, in accordance with applicable laws, regulations, and policies.

Full public and agency participation in and comment on the environmental review process for the proposed project is invaluable in implementing a collaborative and successful process. In this spirit, this Plan is intended to promote early and continuous involvement from stakeholders, agencies, and the public. The Plan describes the proposed project, the roles of the agencies and the public, the project need and purpose, schedule, level of detail for alternatives analysis, methods to be used in the environmental analysis, and the proposed process for coordination and communication.

This Plan is a flexible and fluid document and will be available for public review at public meetings, including scoping meetings and hearings held throughout the National Environmental Policy Act (NEPA) evaluation process, and upon request at the TxDOT Houston District office.

II. Project Description and Scope

Interstate Highway (IH) 45 is a major north-south transportation route through the Houston metropolitan area. The limits of the proposed project begin at the interchange of United States Highway (US) 59 and State Highway (SH) 288 and follow northward along IH 45 to the interchange of IH 45 and Beltway 8 North, a distance of approximately

16 miles. The proposed project area also includes portions of IH 10 and US 59 near the downtown Houston area, Hardy Toll Road located north of downtown Houston to Beltway 8 North, and IH 610 and Beltway 8 between IH 45 and Hardy Toll Road.

Proposed Improvements: To be determined. Proposed improvements would provide four additional travel lanes (proposed to be managed lanes) within the IH 45 and/or Hardy Toll Road Corridors.

Roadway Interchanges: To be determined.

Proposed Right-of-Way: To be determined.

Proposed Project Length: Approximately 16 miles from the US 59/SH 288 interchange to Beltway 8 North.

Estimated Construction

Let Date: To be determined.

Estimated Construction

Duration: To be determined.

Estimated Costs: To be determined.

Project Location: City of Houston, Harris County, Texas

The project area includes IH 45 between the SH 288/US 59 interchange south of downtown Houston extending northward to Beltway 8 North. Additional areas included as part of the proposed project area are the Hardy Toll Road between IH10 and Beltway 8 North, portions of IH 10 and US 59 near downtown Houston, and IH 610 and Beltway 8 between IH 45 and Hardy Toll Road. Acquisition of additional ROW would be required to construct the proposed improvements, as needed. A map of the project area is provided in *Appendix A*.

NEPA Evaluation Objective

The primary objective of the NEPA evaluation is to assess the needs of the project area and evaluate possible alternatives, including a no build alternative. Environmental impacts will be further evaluated for those alternatives that meet the need for and purpose of the project in order to recommend and select a preferred alternative. The Environmental Impact Statement (EIS) process will include full participation and involvement of the public, elected officials, cooperating agencies, participating agencies, and other interested parties.

III. Project Need and Purpose

Transportation improvements are needed within the North Houston Highway Improvement Project IH 45 project area because the existing IH 45 facility currently experiences undesirable levels of congestion during peak and off-peak periods. Increased traffic on IH 45 from expected future regional population and employment growth would further increase the congestion already being experienced in the project area. The proposed transportation improvements to the portion of IH 45 extending from near downtown Houston northward to Beltway 8 North are needed because the existing IH 45 facility has the following problems:

- The roadway facility does not provide adequate capacity for existing and future traffic demands, resulting in congestion, longer travel times, and reduced mobility.
- The average daily traffic volumes on IH 45 from US 59 to IH 10 and IH 610 to Beltway 8 North are projected to increase by approximately 28 to 37 percent between 2011 to 2035. Congestion can be measured by comparing the capacity of a roadway to the volume it carries during the peak hour. The higher the volume to capacity (V/C) ratio, the more congested the roadway. The facility currently operates at a V/C ratio of 0.84 to 1.18, with the higher V/C ratio between IH 610 and Beltway 8 North, which is “tolerable” to “moderate” congestion. Without improvements, the V/C ratio would increase approximately 36 percent in 2035, to a maximum of 1.6 in the area from Shepherd Drive to Beltway 8 North, which is classified as “severe” congestion, and to a maximum of 1.48 in the area between IH 610 and Shepherd Drive, which is approaching “severe” congestion.
- IH 45 (Pierce Elevated) serving the downtown area has an existing V/C ratio of 0.9, which is “serious” congestion, and is projected to increase to 1.2 by 2035.
- The one-way reversible HOV lane serves traffic in only one direction during the peak periods and is unused for large portions of the day, limiting its use. During the peak hour, the HOV lane congestion is “tolerable,” with a V/C ratio of 0.5.
- IH 45 is a designated evacuation route for the region; at its present capacity, its effectiveness would be limited in the event of a hurricane or other regional emergency.
- Portions of the IH 45 roadway do not meet current roadway design standards, creating a safety concern.
- Roadway design deficiencies also include inadequate stormwater drainage. Intense rainfall causes high water at the IH 45/IH 10 underpass and on the outside lanes and frontage roads between Parker Road and Gulf Bank Road. A current TxDOT

drainage criterion calls for storm sewers draining interstate highways to be designed for the 10-year design storm event. Currently, in Harris County, the 10-year design storm frequency is 2.9 inches/hour in the project area. Some existing roadways, including IH 45 in the project area, are not designed per the current drainage design criteria and, when flooded, have reduced capacity for evacuating vehicles. As an evacuation route, IH 45 cannot afford high water closures, especially during hurricane evacuations when intense rainfall is likely.

- Forecasts for commuter service indicate that even with parallel high-capacity transit in the corridor, managed lanes would be needed to support commuter traffic and express bus service.

The purpose of the proposed action is to improve mobility, enhance safety, and provide travelers with options to get to their destinations.

IV. Agency Roles and Responsibilities

Early identification of the roles and responsibilities of the various agencies involved in the NEPA process will facilitate the timely review and resolution of issues. The environmental coordination process will involve the following entities:

- **Lead Federal Agency** – FHWA. FHWA will furnish guidance and independently review the EIS. FHWA, as lead agency, will be responsible for facilitating the expeditious resolution of the environmental review process and ensuring that the EIS is completed under the requirements of NEPA and SAFETEA-LU. The FHWA will ensure that the project sponsor complies with all design and mitigation commitments in the Record of Decision, and that the document is appropriately supplemented if project changes become necessary.
- **Joint Lead Agency** – TxDOT. As the direct recipient of federal funds, TxDOT will serve as joint lead agency. FHWA and TxDOT will provide guidance throughout the NEPA process and will assist in preparation and review of the documentation.
- **Project Sponsor** – TxDOT. TxDOT is the agency, or entity, that seeks approval from the U.S. Department of Transportation for a highway or transit project.
- **Cooperating Agencies** – Agencies with jurisdiction by law or special expertise are invited to serve as cooperating agencies in the preparation and review of the EIS. These agencies will have a higher degree of authority, responsibility, and involvement in the environmental review process than participating agencies. Cooperating agencies must approve schedule changes if affected by the

proposed change. *Appendix B* includes the letter inviting the cooperating agencies to take part in the study.

- **Participating Agencies** – Agencies involved with coordination and review of the project include the federal and non-federal agencies listed below. The agencies will participate in meetings with the project team during the study and will be invited to attend public meetings. If a participating agency is not able to attend scheduled meetings, the project team will offer the agency an alternative opportunity to provide input. *Appendix C* includes the letter inviting the participating agencies to take part in the study.

Agency Roles and Responsibilities

Federal Highway Administration (FHWA)	Lead Agency	<i>Responsible for guidance and environmental review process and ensuring that the EIS is completed under the requirements of NEPA and SAFETEA-LU.</i>
Texas Department of Transportation (TxDOT)	Joint Lead Agency Project Sponsor	<i>Responsible for guidance throughout the NEPA process and will assist in preparation and review of the document. Seeking approval for highway project.</i>
United States Environmental Protection Agency (EPA)	Cooperating Agency Participating Agency	<i>Responsible for ensuring compliance with NEPA and the Clean Air Act Amendments. EPA will review the DEIS document and provide input. EPA will participate in agency meetings and the review of USACE permit applications.</i>
United States Fish and Wildlife Service (USFWS)	Cooperating Agency Participating Agency	<i>Responsible for ensuring compliance with Section 7 of the Endangered Species Act and the Fish and Wildlife Coordination Act. USFWS will also participate in the review of USACE applications.</i>
United States Army Corps of Engineers (USACE)	Cooperating Agency Participating Agency	<i>Responsible for ensuring compliance with Section 404 of the Clean Water Act and issuing permits for the discharge of dredged or fill material in Waters of the United States, including wetlands.</i>

Table cont.

United States Coast Guard (USCG)	Cooperating Agency Participating Agency	<i>Responsible for ensuring compliance with Section 9 of the Rivers and Harbors Act and the General Bridge Act related to the construction of structures over navigable waters of the U.S.</i>
Federal Transit Administration	Cooperating Agency Participating Agency	<i>Responsible for guidance related to public transit systems.</i>
Metropolitan Transit Authority of Harris County, Texas (METRO)	Cooperating Agency Participating Agency	<i>Responsible for providing transit plans and studies. METRO operates the IH 45 N HOV lane and will be consulted in the planning and design of the proposed managed lanes.</i>
Texas Parks and Wildlife Department (TPWD)	Participating Agency	<i>Responsible for the review of state listed species, fish, game, and parkland impacts. TPWD will participate in USACE Section 404 permitting.</i>
Texas Commission on Environmental Quality (TCEQ)	Participating Agency	<i>Responsible for the review of impacts to air and water resources. TCEQ will provide information on 303(d) impaired waters, and participate in Section 404 permitting for 401 Water Quality Certification.</i>
Texas Historical Commission (THC)	Participating Agency	<i>Responsible for Section 106 historic eligibility determinations and tribal coordination, as well as the review of cultural resource documentation.</i>
Texas Railroad Commission (TRC)	Participating Agency	<i>Responsible for the overview and regulation of oil and natural gas production, distribution, and storage.</i>
Texas General Land Office (GLO) Coastal Coordination Council	Participating Agency	<i>Responsible for the management of state property and mineral rights. The GLO is also responsible for the Coastal Coordination Council, which manages the stated coastal zones.</i>
Harris County	Participating Agency	<i>Responsible for providing information on roadway plans, studies, and plats.</i>
Harris County Toll Road Authority (HCTRA)	Participating Agency	<i>Responsible for construction and operation of Harris County toll roads. HCTRA will be consulted in the planning and design of the managed lanes.</i>

Table cont.

Harris County Flood Control District (HCFCD)	Participating Agency	<i>Responsible for providing information on county drainage plans, floodplains, and water quality. HCFCD will review USCAE permit applications.</i>
Houston-Galveston Area Council (HGAC)	Participating Agency	<i>Responsible for regional planning and air quality conformity. HGAC will provide traffic modeling and demographic information and participate in meetings during document preparation.</i>
City of Houston	Participating Agency	<i>Responsible for providing information on roadway plans, studies, and plats.</i>
Houston Downtown Management District	Participating Agency	<i>Responsible for administering the Tax Increment Reinvest Zone No. 3 (TIRZ 3), also known as the Downtown District, which is bounded largely by the freeway ring around Houston's central business core, including IH 10, US 59 and IH 45.</i>

Agency Contacts

Agency	Contact	Phone	E-Mail
FHWA	Gregory S. Punske, P.E., District Engineer	512-536-5960	Gregory.Punske@dot.gov
TxDOT	Pat Henry, P.E., Director of Project Development	713-802-5241	PHenry@dot.state.tx.us
EPA	Dr. Alfredo "Al" Armendariz, Regional Administrator	214-665-2100	Armendariz.Al@epa.gov
USFWS	Edith Erfling, Fish & Wildlife Biologist	214-286-8282	Edith_Erfling@fws.gov
USACE	Col. Christopher W. Sallese, District Engineer and Commanding Officer	409-766-3059	christopher.w.sallese@swg02.usace.army.mil
USCG	Marcus E. Woodring, Commander, Houston-Galveston Sector	713-671-5100	N/A
FTA	Laura Wallace, Community Planner	817-978-0575	laura.wallace@dot.gov
TPWD	Carter Smith, Executive Director	512-389-4800	carter.smith@tpwd.state.tx.us

Table cont.

Agency	Contact	Phone	E-Mail
TCEQ	Donna Phillips, Area Director, Coastal and East Texas	713-767-3659	igr@tceq.state.tx.us
THC	Jim Bruseth, Division Director	512-463-5863	jim.bruseth@thc.state.tx.us
TRC	John J. Tintera, Executive Director	512-463-7068	John.Tintera@rrc.state.tx.us
GLO	Jeffrey Davis, Field Office Director	281-470-1191	Jeffrey.Davis@glo.state.tx.us
Harris County	John R. Blount, P.E., Director Architecture & Engineering Division	713-386-4877	JBlount@pid.hctx.net
HCTRA	Peter Key, Director	832-601-7800	N/A
HCFC	Mike Talbot, Director	713-684-4000	MT@hcfcd.co.harris.tx.us
HGAC	Alan C. Clark, Transportation & Air Quality Manager/MPO Director	713-993-4585	Alan.Clark@h-gac.com
City of Houston	Marlene Gafrick, Director of Planning & Development	713-837-7701	Marlene.Gafrick@cityofhouston.net
METRO	George Greanias, President & CEO	713-739-4000	george.greanias@ridemetro.org
HDMD	Robert Eury	713-654-1470	

V. Project Schedule and Milestones

Early, continuous, and active public and agency involvement is an important aspect of the coordination process. Elected officials, agencies, stakeholders, and the public should be involved throughout the study process to aid in the identification and evaluation of alternatives.

Project Milestones	
Agency coordination Kick-off Meeting	2011
Public Meeting #1 - Scoping Meeting	2011
Public Meeting #2 – Scoping Meeting	2012
Public Meeting #3 - Public Workshop	2012/2013
Public Meeting #4 - Public Workshop; Recommended Alternative	2013
Circulate Draft Environmental Impact Statement (DEIS)	2014

Table cont.

Public Hearing	2014
Circulate Final Environmental Impact Statement (FEIS)	2015
Record of Decision	2016
Completion of Permits, Licenses, or Approvals subsequent to issuance of the Record of Decision (ROD)	Post ROD

VI. Agency and Public Review Periods

Formal review periods for the environmental documents (draft EIS [DEIS] and final EIS [FEIS]) for the resource agencies and the public will be 60 days. Copies of the DEIS and FEIS will be readily available for review at physical locations and on the project website.

VII. Project Development and Alternatives Evaluation Process

- **Project Initiation Letter** – Letter was sent to FHWA in October 2006.
- **Notice of Intent** – A notice of intent (NOI) to prepare an EIS was published in the State and Federal Registers in October 2011.
- **Development of Need and Purpose** – The project team will work with the cooperating agencies to develop the need for and purpose of the proposed project. Input from the public will also be solicited. The need and purpose statement will be circulated for review and comment, and will be revised as needed to reflect comments received.
- **Public Meeting #1: Scoping** – One round of two public meetings will be held at two different locations to help define the study area, need and purpose, goals and objectives for the project, and to identify issues to be studied. Summary information from the *North-Hardy Planning Studies Alternatives Analysis Report* will be presented. Copies of the draft agency coordination and public involvement plan, and draft statement of need and purpose will be available for review. Comment forms will allow the public to provide their comments on the draft statement of need and purpose, the draft agency coordination and public involvement plan, and prioritized concerns. Comments will be accepted after the meeting via letters/email for a period of not more than 30 days from the date of availability of materials on which comment is requested.
- **Development of Impact Assessment Methods** – The project team will work with the participating agencies to develop the appropriate methods to be used

and the level of detail required in the analysis of the alternatives. Cooperating agencies will have the opportunity to comment on how the alternatives will be evaluated and on how the impacts of alternatives on various resources will be assessed. The methods for the analysis of alternatives for the proposed project will be available for public review and comment at the second round of public meetings. The methods will be revised as needed to reflect comments received.

- **Development of Range of Alternatives** – The project team will identify a wide range of alternatives (the universe of alternatives) that will be narrowed to six preliminary alternatives, plus the “No-Action” alternative. The preliminary alternatives will be further narrowed to three reasonable alternatives, plus the “No-Action” alternative, for more detailed study. The universe of alternatives will be developed from previously identified alternatives that were presented in the *North-Hardy Planning Studies Alternatives Analysis Report*, and alternatives developed by the project engineering team. The universe of alternatives and subsequent selection of preliminary and reasonable alternatives will be provided to FHWA for review prior to the second, third, and fourth rounds of public meetings. The project team will schedule meetings with elected officials and resource agencies as needed or as requested to discuss the universe of alternatives and selected reasonable alternatives to be studied in more detail.
- **Public Meeting #2: Scoping** – A second public scoping meeting will be held in an open house format to present the universe of alternatives and the initial screening process used to select six preliminary alternatives for further study. The proposed secondary screening process will be presented, and will be applied to the six preliminary alternatives to select three reasonable alternatives to be presented at Public Meeting #3. Exhibits will be presented and copies of the final agency coordination and public involvement plan and final statement of need and purpose will be available. The screening of the universe of alternatives will be available for review and discussion during Public Meeting #2, as well as study area constraints, need, purpose, goals and objectives, study process and methods, schedule, and contact information. Comments will be accepted during the meetings and afterwards via letters/email for a period of not more than 30 days from the date of availability of materials on which comment is requested.
- **Public Meeting #3:** A third public meeting will be held in an open house format to present the three reasonable alternatives selected from the six preliminary alternatives. The screening process that will be used for the three reasonable alternatives will be presented, and will be applied to select the recommended alternative which will be presented at Public Meeting #4. Study area constraints, need, purpose, goals and objectives, study process and methods, schedule, and

contact information will also be provided. Exhibits will be presented and copies of the agency coordination and public involvement plan and the statement of need and purpose will again be available. Comments will be accepted during the meetings and afterwards via letters/email for a period of not more than 30 days from the date of availability of materials on which comment is requested.

- **Analysis of Alternatives** – Transportation, social, economic, and environmental impacts of the universe of alternatives will be evaluated and compared at an equal level of detail. Evaluation criteria will be based on elements from the project purpose, and goals and objectives. After the preliminary alternatives are identified from the universe of alternatives through an initial screening process, a more detailed secondary screening process will be applied to the preliminary alternatives to identify three reasonable alternatives. Impacts comparisons of the reasonable alternatives will be based primarily on quantifiable data.
- **Public Meeting #4** – One round of two public meetings will be held at two different locations to present the proposed preferred alternative selected from the three reasonable alternatives presented at Public Meeting #3. Exhibits showing the proposed preferred alternative will be available for review. Comment forms will allow meeting attendees to provide comments on the proposed preferred alternative. Comments will also be accepted after the meeting via letters/email for a period of not more than 30 days from the date of availability of materials on which comment is requested.
- **Preparation of a DEIS** – A printed report for public review and comment documenting the need for the project, describing the alternatives analysis process, analyzing likely impacts from each alternative, and describing steps to avoid impacts or minimize harm to the environment will be prepared, reviewed by FHWA, and circulated prior to a public hearing. The DEIS will identify a preferred alternative.
- **Public and Agency Review of the DEIS** – The proposed review time for the DEIS is 60 days. The DEIS will be available for review online, at the TxDOT Houston District office, and other locations.
- **Public Hearing for Public Comments on the DEIS** – Two Public Hearings will be held at two separate locations to present the results of the preliminary engineering and environmental analysis studies. The preferred alternative will be presented. Verbal and written public comments will be solicited. The comment period will end no sooner than 45 days after the DEIS is available for public review.

- **Identification of the Preferred Alternative and Level of Design Detail** – The preferred alternative presented at the Public Hearing will be developed to a higher level of detail to facilitate the development of mitigation measures or to facilitate concurrent compliance with other applicable environmental laws.
- **Preparation of a Final Environmental Impact Statement** – A FEIS will document the lead agency alternative and will provide a response to comments made on the DEIS.
- **Public and Agency Review of the FEIS** – A formal comment period of not less than 30 days will follow the release of the FEIS for public review.
- **Record of Decision** – The Record of Decision will document FHWA’s decision and will commit to mitigation of anticipated impacts.
- **Completion of Permits, Licenses, or Approvals** – Applications for permits, licenses, and/or approvals required to authorize the proposed project will be prepared and coordinated as impacts from the preferred project alternative are identified and quantified. Issuance of any required permits/licenses/approvals will be necessary prior to the initiation of construction activities.

VIII. Public Involvement Goals

The comprehensive public involvement plan for the North Houston Highway Improvement Project EIS consists of a variety of activities and components, all centered on providing proactive public involvement that produces complete information, timely public notice and access to key decisions, and that supports early and continuing involvement in the study process. Objectives to achieve a successful public involvement program include:

- Establish and maintain widespread community involvement in the study process by providing the media and public with current communications.
- Provide frequent opportunities for the public, including the business community, environmental interest groups, and neighborhood organizations to provide input.
- Be inclusive of individuals in the study area who are minorities and those who have limited English proficiency, low incomes, and special communication or physical requirements. Presentations, meeting notices, and communication materials will accommodate persons with special communications needs by providing translations. Public meeting and workshop handouts will be provided in

Spanish. All meetings and workshops will be held in locations accessible to persons with disabilities.

- Ensure that all persons who wish to provide input have the opportunity and that all ideas are given fair consideration.
- Emphasize the public involvement program as a learning process for both the public and project team members.
- Use visually informative slides, boards, newsletters, handouts, and computer-generated presentations to help communicate technical concepts and retain public interest.
- Consider and respond to public input received during the study process.

The specific activities involved in the public involvement plan are described below.

IX. Stakeholder Meetings and Miscellaneous Meetings

Stakeholder meetings and miscellaneous meetings with area transportation agencies and other interested resource agencies will be held to discuss evaluation methods and alternatives to be studied. It is anticipated that stakeholder meetings will occur on an as-requested basis during the early stages of the project. The meetings will assist in keeping the stakeholders informed of project status. These meetings will be held as needed throughout the development of the project to provide updates and gather information and input.

X. Presentations

The project team will meet with elected officials in the study area to discuss the study area constraints, need and purpose, process and methods, schedule, and issues and concerns. See *Appendix D* for a list of elected officials.

Presentations will be made by the project team upon request by local organizations such as a Chamber of Commerce and other concerned citizens and civic groups.

XI. Coordination and Communication Tools

The project team will develop the following communication tools to assist with delivering a consistent and thorough message to the public and stakeholders.

Newsletters – Periodic newsletters will be prepared to assist with providing general information and responding to questions from the public.

Media Releases – Media releases will be sent prior to public meetings and the Public Hearing, and prior to DEIS and FEIS review periods.

Emails – Emails will be sent to elected officials prior to informational meetings informing them of needed information and maps that may be of assistance to the planning team.

Website – Updated information will be posted periodically on the project website www.IH45northandmore.com. The updates will consist of text and graphics. Agencies and the public may review project materials, meeting information, coordination and public involvement activities, schedule, responses to comments received, and check the status of the project on the website.

Glossary of Common Terms – A glossary of common terms used to describe the proposed project and the environmental review process will be developed and posted on the project website. The glossary will also be available at public meetings and workshops.

XII. Mailing List

The project team will develop and maintain a mailing list of names and addresses to be used for disseminating study information and public meeting/hearing notices. A preliminary mailing list includes individuals who attended public meetings during the North-Hardy planning studies, and elected officials in the study area. Names and addresses of property owners recorded in public sources as owning property within the project corridor will be added prior to the first public meeting. The project team will maintain and update the list throughout the duration of the project and following each public meeting/hearing based on the attendees list or any other requests received.

XIII. Public Meeting/Hearing Advertisement

Newspaper notices will be published 30 days and 10 days prior to a scheduled public meeting. Notices will be sent to recipients on the mailing list approximately 3 to 4 weeks prior to the meeting. Elected officials will be notified prior to the notices appearing in the papers.

In addition to sending notices to the recipients on the mailing list, all public meetings and the Public Hearing will be advertised in *The Houston Chronicle* and other local publications in the study area. News releases will also be sent to local media.

XIV. Public Meetings and Public Hearing

Four rounds of two public meetings each and one round of two Public Hearings will be conducted during the study. The public meetings and the Public Hearings will be held at

two different locations in the study area. Public meetings will be conducted in an open house format, and the Public Hearings will have a formal hearing format with an exhibit viewing session, formal presentation, and public comment period. Comments that are received within 10 days after the meetings or hearings will be included as part of the formal meeting/hearing record.

Public Meeting #1 – The primary focus will be on receiving input from the public regarding the study area limits, need and purpose, agency coordination and public involvement plan, and goals and objectives. A public meeting summary document will be made available for public review. This meeting will be held in two different locations within the study area and is planned for:

2011 – Public Meeting #1 to present preliminary need and purpose, and goals and objectives, and to identify issues to be studied. A draft agency coordination and public involvement plan will also be presented for review.

Public Meeting #2 – This public meeting will primarily focus on the issues to be studied that were identified in Public Meeting #1 and to present the universe of conceptual alternatives that were evaluated through an initial screening process to identify six preliminary alternatives selected from the universe of alternatives. A final statement of need and purpose and the final agency coordination and public involvement plan will be available for review. Evaluation criteria used for the initial screening of the universe of alternatives, and the secondary screening process to be applied to the identified preliminary alternatives will be presented to the public for review and comment. This meeting will be held at two different locations within the study area and is planned for:

2012 – Public Meeting #2 to present the final statement of need and purpose and the final agency coordination and public involvement plan. Public input will also be received on issues and concerns to be addressed. The universe of conceptual alternatives, the initial screening process, the six preliminary alternatives identified from the screening, and the secondary screening process to be applied to the preliminary alternatives will be presented.

Public Meeting #3 – The primary focus will be to present three reasonable alternatives selected from the six preliminary alternatives identified in Public Meeting #2 that will be studied in detail in the DEIS. This meeting will be held in two different locations within the study area and is planned for:

2012/2013 – Public Meeting #3 to present three reasonable alternatives, and the methods to be used for the evaluation and analysis of the alternatives.

Public Meeting #4 – This public meeting will be to present the proposed preferred alternative selected from among the three reasonable alternatives presented at Public Meeting #3. The meeting will be held at two different locations within the study area and is planned for:

2013 – Public Meeting #4 to present the proposed preferred alternative.

Public Hearing – The focus will be to present detailed studies on the reasonable alternatives and present a recommended alternative. An exhibit viewing session will be held prior to a formal presentation, and following the presentation, the public will have an opportunity to offer comments for the formal record.

2014 – Public Hearing regarding the DEIS document and its findings for a recommended alternative.

XV. Public Comments and Responses

Within two months following each public meeting, a hard copy report that includes the complete meeting documentation and public comments and responses will be available for public review at the following location during normal business hours:

Texas Department of Transportation
Houston District
7600 Washington Avenue
Houston, TX 77007

The report will include a meeting summary, handouts, exhibits, publicity summary, sign-in sheets, photographs, comments received, and comment responses. An electronic version of a meeting summary and comment responses will be posted on the project website, www.IH45northandmore.com. Responses to comments received at the Public Hearing will be addressed in the Final Environmental Impact Statement (FEIS). Information will be available for project status and upcoming public meeting dates and locations at the website www.IH45northandmore.com.

Comments will be received and considered in the evaluation of alternatives throughout the study via:

Postal Mail	Texas Department of Transportation Houston District P.O. Box 1386 Houston, Texas 77251-1386
Email	Hou-piowebmail@txdot.gov
Website	www.IH45northandmore.com (see Comment/Contact Us tab)

XVI. Record of Decision

Comments received during the Public Hearing will be considered and the FEIS will be revised, as appropriate, to address the comments received. The revised document will be submitted to FHWA for review. Upon completion of the review, FHWA will issue a Record of Decision.

XVII. Permits, Licenses, or Approvals

Throughout the project study period, the need for specific permits, licenses, or approvals required to authorize the proposed project will be identified and documented in the DEIS. When a preferred alternative is selected, additional investigations of the preferred alternative will be conducted and impacts to physical, biological, and socioeconomic resources will be identified and quantified in the FEIS. If a permit, license, or approval for impacts to a resource or resources is known to be required, preparation and coordination of an appropriate application or approval process will be conducted such that a decision as to the issuance of the permit, license, or approval may be made subsequent to the publication of FHWA's Record of Decision.

Appendix A
Preliminary Project Area Map

NORTH HOUSTON HIGHWAY IMPROVEMENT PROJECT

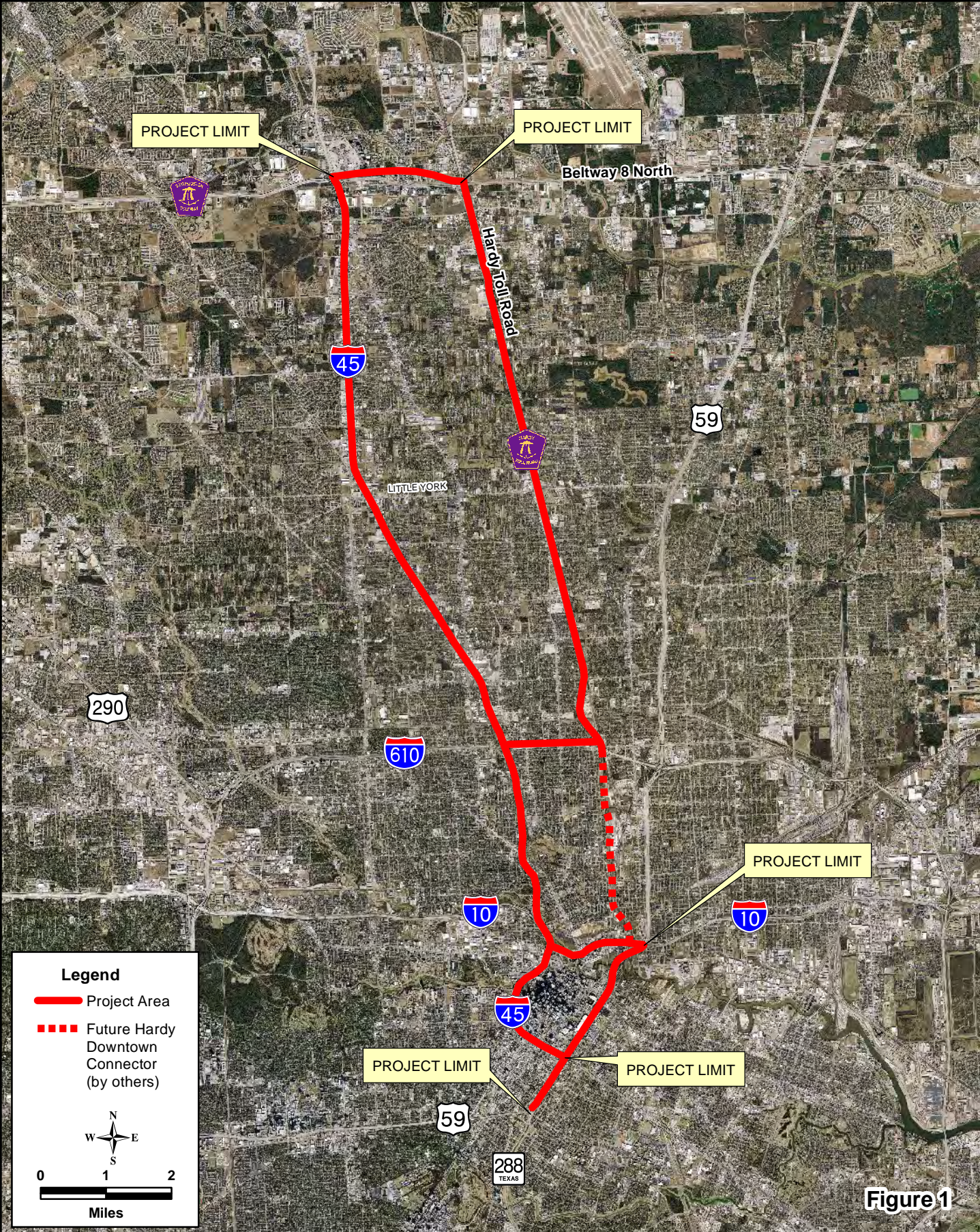


Figure 1

Appendix B
Cooperating Agencies

Date

Name

Title

Agency

Address

City, State ZIP

Subject: Cooperating Agency Involvement and Agency Scoping Meeting Invitation: North Houston Highway Improvement Project Environmental Impact Statement

Dear Name:

The Federal Highway Administration (FHWA), in cooperation with the Texas Department of Transportation (TxDOT), is initiating an Environmental Impact Statement (EIS) for the North Houston Highway Improvement Project. Please reference the attached documents for a detailed project description with a project area map, and a copy of the project Notice of Intent.

Due to your agency's jurisdiction over areas that may be affected by the proposed project, we are inviting you to become a cooperating agency with the FHWA in the development of the EIS for the proposed project.

If your agency is interested in becoming a cooperating agency for this project, your agency's involvement would entail only those areas under its jurisdiction, and no direct writing or analysis will be necessary for the document's preparation. The following activities are planned to maximize interagency cooperation:

- Coordination meetings,
- Technical study coordination,
- Joint field reviews, and
- Shared project information.

We look forward to your response to this invitation to join the project as a cooperating agency. If you have any questions or would like to discuss the project in more detail or agency roles and responsibilities during the preparation of this EIS, please contact Julia Ragsdale at 512-416-2612 or julia.ragsdale@txdot.gov.

In addition to this invitation to become a cooperating agency, you and other federal agency representatives are invited to attend a focused meeting for agency discussion regarding the project, prior to the public scoping meeting. The federal agency scoping meeting will be held as follows:

Monday, November 14, 2011
2:00 p.m. to 4:00 p.m.
TxDOT Houston District, Conference Room 105
7600 Washington Avenue
Houston, Texas 77007

If you cannot attend the agency scoping meeting, please consider sending a representative. If you have any questions regarding this meeting, please contact Pat Henry at 713-802-5241.

Scoping meetings for the general public will be held as follows:

Tuesday, November 15 6:00 p.m. – 8:00 p.m. Jefferson Davis High School 1101 Quitman Street Houston, TX 77009	Thursday, November 17 6:00 p.m. – 8:00 p.m. Aldine Senior High School 11101 Airline Drive Houston, TX 77037
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The purpose of the scoping meetings is to provide information about the proposed project and solicit feedback on the draft Project Coordination Plan and the draft Need and Purpose document. The Coordination Plan facilitates and documents TxDOT's and FHWA's interaction with the public and agencies, and informs the public on how coordination will be accomplished. The Need and Purpose document defines the transportation problem to be solved by the proposed project and provides data to support the project purpose. Meeting attendees will also have the opportunity to view project area maps identifying existing conditions and environmental constraints, ask questions of the study team, and discuss their concerns.

Thank you for your participation and interest in this project.

Sincerely,

Gregory Punske, P.E.
District Engineer
Federal Highway Administration

Cc: Mark A. Marek, P.E., Interim Director, Environmental Affairs Division, TxDOT
Michael W. Alford, P.E., Interim District Engineer, Houston District, TxDOT

Enclosure: Project Description and Project Area Map (Figure 1)
Project Notice of Intent (NOI)

NORTH HOUSTON HIGHWAY IMPROVEMENT PROJECT Project Description

The Federal Highway Administration (FHWA), in cooperation with the Texas Department of Transportation (TxDOT), is initiating an Environmental Impact Statement (EIS) for the North Houston Highway Improvement Project.

The limits of the proposed project begin at the interchange of United States Highway (US) 59 and State Highway (SH) 288 and follow northward along Interstate Highway (IH) 45 to the interchange of IH 45 and Beltway 8 North, a distance of approximately 16 miles. The proposed project area also includes portions of IH 10, IH 610, US 59, SH 288 near the downtown Houston area, and the Hardy Toll Road located north of downtown Houston (Figure 1).

The purpose of the proposed North Houston Highway Improvement Project is to implement an integrated system of transportation improvements that would:

- Manage the traffic congestion in the IH 45 corridor through added capacity, options for Single Occupancy Vehicle (SOV) lanes, and improved operations.
- Improve mobility by increasing peak hour travel speeds by up to 10 mph on IH 45 between US 59 and Beltway 8 North by accommodating projected population growth and latent demand in the corridor.
- Provide expanded transit and carpool opportunities with two-way, all-day service on managed lanes.
- Bring the roadway facility up to current design standards with shoulders and auxiliary lanes to improve safety and operations.
- Expand capacity for emergency evacuations by providing proper design and flexible operation.

The ultimate goal is to provide a facility with additional capacity for projected demand by incorporating transit opportunities, travel demand and management strategies, and flexible operations. Such a facility would help manage congestion, improve mobility, enhance safety, and provide travelers with options to get to their destinations.

The North Houston Highway Improvement Project corridor is a critical corridor connecting downtown Houston and the Greenspoint area in North Houston, and providing links to George Bush Intercontinental Airport, the Texas Medical Center, the University of Houston, and Texas Southern University. The North Houston Highway Improvement Project area also includes the Hardy Toll Road.

For the North Houston Highway Improvement Project EIS, TxDOT will consider a reasonable range of alternatives for detailed study including the no-build alternative. The EIS will identify a recommended alternative, including the number of lanes, roadway configuration, and operational characteristics. Evaluation of the potential impacts from construction and operation of the proposed project will include but not be limited to: impacts or potential displacements to residents and businesses; impacts to air quality; impacts from traffic noise; impacts to water quality; impacts to waters of the United States; impacts to historic and archeological resources; impacts to hazardous materials; impacts to floodplains; impacts to socio-economic resources (including environmental justice and limited English proficiency populations); indirect impacts; cumulative impacts; impacts to land use; impacts to vegetation; and impacts to wildlife.

NORTH HOUSTON HIGHWAY IMPROVEMENT PROJECT

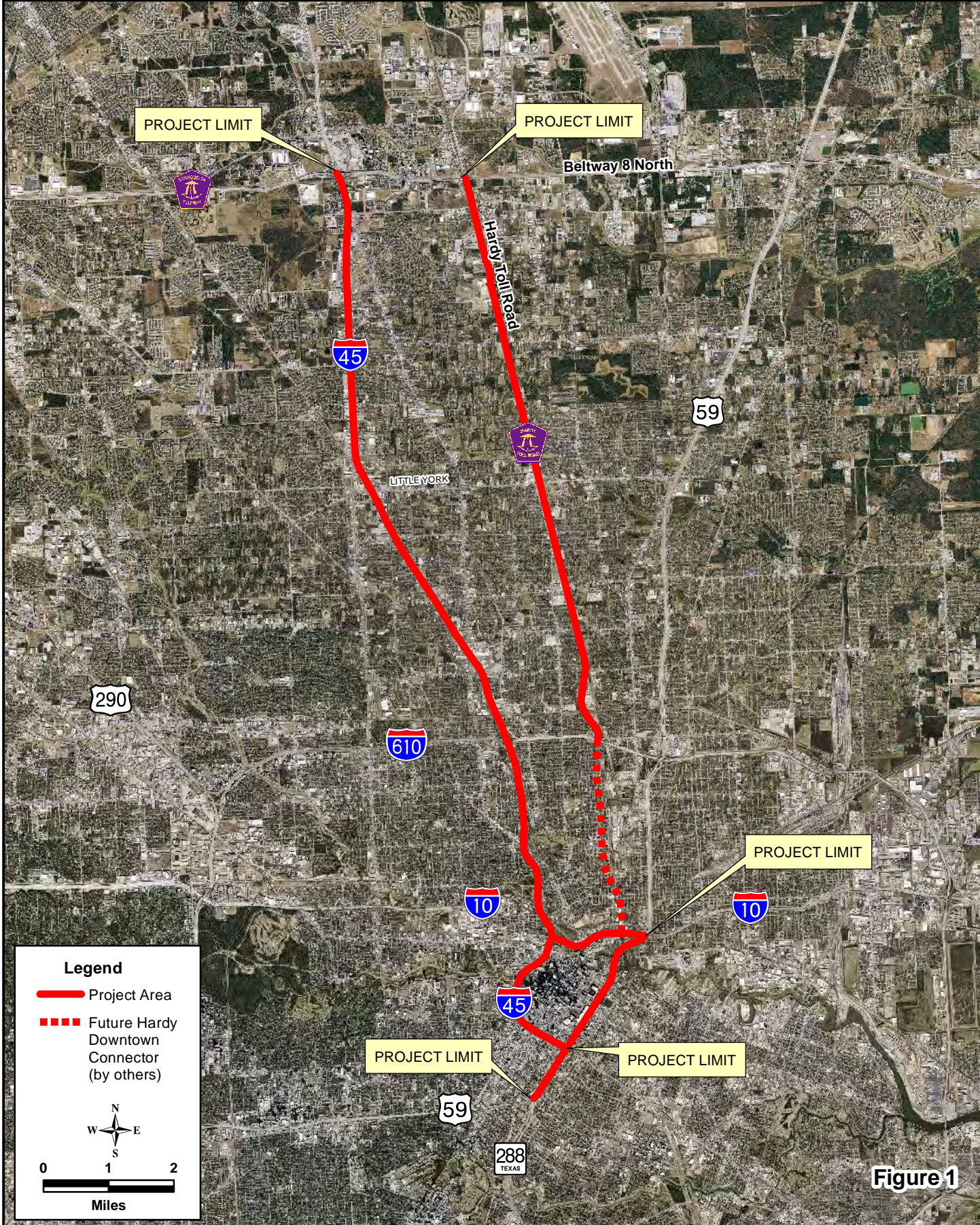


Figure 1

Appendix C
Participating Agencies

Date

Name

Title

Agency

Address

City, State ZIP

Subject: Participating Agency Involvement and Agency Scoping Meeting Invitation:
North Houston Highway Improvement Project Environmental Impact Statement

Dear Name:

The Federal Highway Administration (FHWA), in cooperation with the Texas Department of Transportation (TxDOT), is initiating an Environmental Impact Statement (EIS) for the North Houston Highway Improvement Project. Please reference the attached documents for a detailed project description with a project area map, and a copy of the project Notice of Intent.

With this letter, we extend to your agency an invitation to become a participating agency with FHWA and TxDOT in the development of the EIS for the proposed project. This designation does not imply that your agency either supports the proposal or has any special expertise with respect to the evaluation of the project.

Pursuant to Section 6002 of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU), participating agencies are responsible for identifying, as early as possible, any issues of concern regarding the project's potential environmental or socioeconomic impacts that could substantially delay or prevent an agency from granting a permit or other approval that is needed for the project. We suggest your agency's role in the development of the above project should include the following as they relate to your area of expertise:

1. Provide meaningful and early input on defining the proposed project's need and purpose, determining the range of alternatives to be considered, and the methods and level of detail required in alternatives analysis.
2. Participate in coordination meetings and joint field reviews, as appropriate.
3. Timely review and comment on the pre-draft or pre-final environmental documents to reflect the views and concerns of your agency on the adequacy of the document, alternatives considered, and the anticipated impacts and mitigation.

Please respond to TxDOT in writing with an acceptance or denial of the invitation **within 30 days of this letter**. If you have any questions or would like to discuss the project in more detail or agency roles and responsibilities during the preparation of this EIS, please contact me at 713-802-5241, or Ms. Kelly Lark at 713-802-5989.

In addition to this invitation to become a participating agency, you and other federal, state, and local agency representatives are invited to attend a focused meeting for agency discussion regarding the project, prior to the public scoping meeting. The agency scoping meeting will be held as follows:

Monday, November 14, 2011
10:00 a.m. to 12:00 p.m.
TxDOT Houston District, Conference Room 105
7600 Washington Avenue
Houston, Texas 77007

If you cannot attend the agency scoping meeting, please consider sending a representative. If you have any questions regarding this meeting, please contact me or Ms. Kelly Lark.

Scoping meetings for the general public will be held as follows:

Tuesday, November 15 6:00 p.m. – 8:00 p.m. Jefferson Davis High School 1101 Quitman Street Houston, TX 77009	Thursday, November 17 6:00 p.m. – 8:00 p.m. Aldine Senior High School 11101 Airline Drive Houston, TX 77037
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The purpose of the scoping meetings is to provide information about the proposed project and solicit feedback on the draft Project Coordination Plan and the draft Need and Purpose document. The Coordination Plan facilitates and documents TxDOT's and FHWA's interaction with the public and agencies, and informs the public on how coordination will be accomplished. The Need and Purpose document defines the transportation problem to be solved by the proposed project and provides data to support the project purpose. Meeting attendees will also have the opportunity to view project area maps identifying existing conditions and environmental constraints, ask questions of the study team, and discuss their concerns.

Thank you for your participation and interest in this project.

Sincerely,

Pat Henry, P.E.
Director of Project Development

Houston District

Cc: Mr. Gregory S. Punske, P.E., District Engineer, FHWA
Mr. Mark A. Marek, P.E., Interim Director, Environmental Affairs Division,
TxDOT

Enclosure: Project Description and Project Area Map (Figure 1)
Project Notice of Intent (NOI)

NORTH HOUSTON HIGHWAY IMPROVEMENT PROJECT Project Description

The Federal Highway Administration (FHWA), in cooperation with the Texas Department of Transportation (TxDOT), is initiating an Environmental Impact Statement (EIS) for the North Houston Highway Improvement Project.

The limits of the proposed project begin at the interchange of United States Highway (US) 59 and State Highway (SH) 288 and follow northward along Interstate Highway (IH) 45 to the interchange of IH 45 and Beltway 8 North, a distance of approximately 16 miles. The proposed project area also includes portions of IH 10, IH 610, US 59, SH 288 near the downtown Houston area, and the Hardy Toll Road located north of downtown Houston (Figure 1).

The purpose of the proposed North Houston Highway Improvement Project is to implement an integrated system of transportation improvements that would:

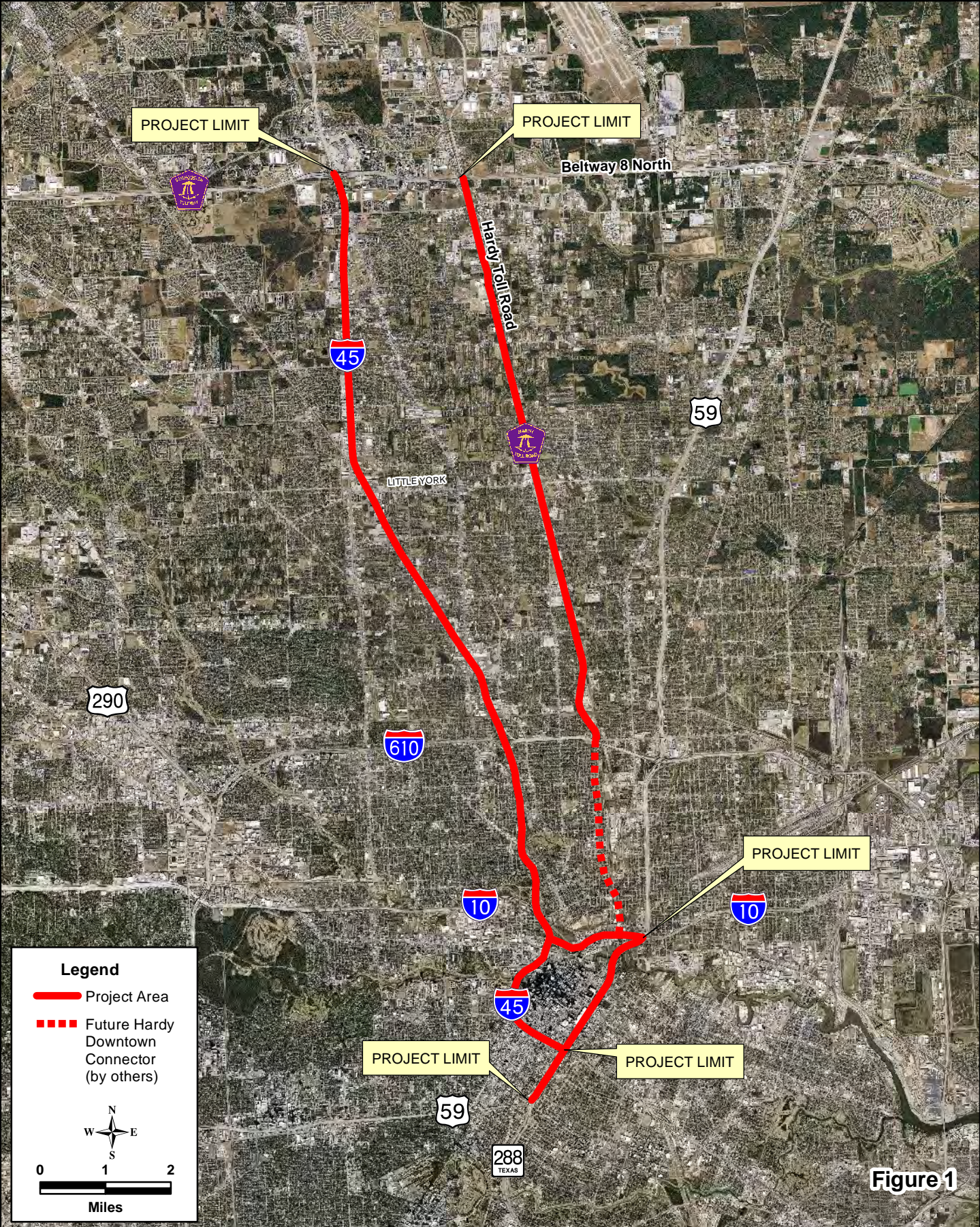
- Manage the traffic congestion in the IH 45 corridor through added capacity, options for Single Occupancy Vehicle (SOV) lanes, and improved operations.
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The ultimate goal is to provide a facility with additional capacity for projected demand by incorporating transit opportunities, travel demand and management strategies, and flexible operations. Such a facility would help manage congestion, improve mobility, enhance safety, and provide travelers with options to get to their destinations.

The North Houston Highway Improvement Project corridor is a critical corridor connecting downtown Houston and the Greenspoint area in North Houston, and providing links to George Bush Intercontinental Airport, the Texas Medical Center, the University of Houston, and Texas Southern University. The North Houston Highway Improvement Project area also includes the Hardy Toll Road.

For the North Houston Highway Improvement Project EIS, TxDOT will consider a reasonable range of alternatives for detailed study including the no-build alternative. The EIS will identify a recommended alternative, including the number of lanes, roadway configuration, and operational characteristics. Evaluation of the potential impacts from construction and operation of the proposed project will include but not be limited to: impacts or potential displacements to residents and businesses; impacts to air quality; impacts from traffic noise; impacts to water quality; impacts to waters of the United States; impacts to historic and archeological resources; impacts to hazardous materials; impacts to floodplains; impacts to socio-economic resources (including environmental justice and limited English proficiency populations); indirect impacts; cumulative impacts; impacts to land use; impacts to vegetation; and impacts to wildlife.

NORTH HOUSTON HIGHWAY IMPROVEMENT PROJECT



**Appendix D
Elected Officials**

**NORTH HOUSTON HIGHWAY IMPROVEMENT PLAN
ELECTED OFFICIALS MAILING LIST 3-30-12**

Type	Surname	Salutation	F Name	L Name	Title	Department	Bus/Org	Address	City	State	ZIP	Phone	Fax	Email
Federal	The Hon.	Congresswoman	Sheila Jackson	Lee	Congresswoman	District 18	US House of Representatives	1919 Smith St., Suite 1180	Houston	TX	77002	713-655-0050	713-655-1612	
Federal	The Hon.	Congressman	Gene	Green	Congressman	District 29	US House of Representatives	256 N. Sam Houston Pkwy E., Suite 29	Houston	TX	77060	281-999-5879	281-999-5716	
Federal	The Hon.	Congressman	John	Culberson	Congressman	District 7	US House of Representatives	10000 Memorial Dr. Suite 620	Houston	TX	77024-3490	713-682-8828	713-680-8070	
Federal	The Hon.	Senator	John	Cornyn	Senator		US Senate	517 Hart, Senate Office Bldg.	Washington	DC	20510	202-224-2934		
Federal	The Hon.	Senator	Kay Bailey	Hutchison	Senator		US Senate	284 Russell, Senate Office Bldg.	Washington	DC	20510	202-224-5922		
State	The Hon.	Representative	Sylvester	Turner	State Representative	District 139	Texas House of Representatives	6915 Antoine St., Suite E	Houston	TX	77091	713-683-6363	713-957-0718	
State	The Hon.	Representative	Armando	Walle	State Representative	District 140	Texas House of Representatives	150 W. Parker Rd., Suite 700	Houston	TX	77076	713-694-8620	713-694-8613	
State	The Hon.	Representative	Garnet	Coleman	State Representative	District 147	Texas House of Representatives	5445 Almeda, Suite 501	Houston	TX	77004	713-520-5355	713-520-1860	
State	The Hon.	Representative	Jessica	Farrar	State Representative	District 148	Texas House of Representatives	P.O. Box 30099	Houston	TX	77249	713-691-6912	713-691-3363	
State	The Hon.	Senator	Rodney G.	Ellis	State Senator	District 13	Texas State Senate	440 Louisiana, Suite 575	Houston	TX	77002	713-236-0306	713-236-0604	
State	The Hon.	Senator	John	Whitmire	State Senator	District 15	Texas State Senate	803 Yale St.	Houston	TX	77007	713-864-8701	713-864-5287	
State	The Hon.	Senator	Mario	Gallegos, Jr.	State Senator	District 6	Texas State Senate	5206 Irvington Blvd., Unit D	Houston	TX	77009	713-742-5000	713-742-5016	
County	The Hon.	Commissioner	El Franco	Lee	Commissioner	Precinct 1	Harris County	1000 Preston, 9th Floor	Houston	TX	77002	713-755-6111		pct1@hctx.net
County	The Hon.	Commissioner	Jack	Morman	Commissioner	Precinct 2	Harris County	1001 Preston, Room 950	Houston	TX	77002	713-755-6220		pct2@hctx.net
County	The Hon.	Commissioner	Steve	Radack	Commissioner	Precinct 3	Harris County	1000 Preston, 9th Floor	Houston	TX	77002	713-755-6306		pct3@hctx.net
County	The Hon.	Commissioner	R. Jack	Cagle	Commissioner	Precinct 4	Harris County	1001 Preston, Suite 950	Houston	TX	77002	713-755-6444	713-755-8801	pct4@hctx.net
County	The Hon.	County Judge	Ed	Emmett	County Judge		Harris County	1001 Preston, Suite 911	Houston	TX	77002	713-755-4000		judge.emmett@cjo.hctx.net
City	The Hon.	Council Member	Stephen	Costello	Council Member	At-Large 1	City of Houston	900 Bagby, City Hall Annex, First Floor	Houston	TX	77002	832-393-3014	832-393-3347	atlarge1@houstontx.gov
City	The Hon.	Council Member	Andrew C.	Burks, Jr.	Council Member	At-Large 2	City of Houston	900 Bagby, City Hall Annex, First Floor	Houston	TX	77002	832-393-3013	832-393-3336	atlarge2@houstontx.gov
City	The Hon.	Council Member	Melissa	Noriega	Council Member	At-Large 3	City of Houston	900 Bagby, City Hall Annex, First Floor	Houston	TX	77002	832-393-3005	832-393-3251	atlarge3@houstontx.gov
City	The Hon.	Council Member	C.O. "Brad"	Bradford	Council Member	At-Large 4	City of Houston	900 Bagby, City Hall Annex, First Floor	Houston	TX	77002	832-393-3012	832-393-3327	atlarge4@houstontx.gov
City	The Hon.	Council Member	Jack	Christie	Council Member	At-Large 5	City of Houston	900 Bagby, City Hall Annex, First Floor	Houston	TX	77002	832-393-3006	832-393-3261	atlarge5@houstontx.gov
City	The Hon.	Council Member	Jerry	Davis	Council Member	District B	City of Houston	900 Bagby, City Hall Annex, First Floor	Houston	TX	77002	832-393-3009	832-393-3291	districtb@houstontx.gov
City	The Hon.	Council Member	Wanda	Adams	Council Member	District D	City of Houston	900 Bagby, City Hall Annex, First Floor	Houston	TX	77002	832-393-3001	832-393-3201	districtd@houstontx.gov
City	The Hon.	Council Member	Edward	Gonzales	Council Member	District H	City of Houston	900 Bagby, City Hall Annex, First Floor	Houston	TX	77002	832-393-3003	832-393-3224	districth@houstontx.gov
City	The Hon.	Council Member	James	Rodriguez	Council Member	District I	City of Houston	900 Bagby, City Hall Annex, First Floor	Houston	TX	77002	832-393-3011	832-393-3313	districti@houstontx.gov
City	The Hon.	Mayor	Annis	Parker	Mayor		City of Houston	P.O. Box 1562	Houston	TX	77251	713-837-0311		mayor@houstontx.gov

North Houston Highway Improvement Project

Glossary of Terms

Alternative: General term that refers to possible approaches to meeting the need for and purpose of the project including corridor, transportation mode, and alignment. Typically refers to the No Build and the Build Alternatives.

Ambient Air Quality: The state of quality of the air in the surrounding environment.

Area of Influence (AOI): The geographic boundary within which possible indirect development and potential indirect impacts could occur.

Area of Potential Effect (APE): The geographic area within which an undertaking may cause changes in the character or use of any resources present.

At-Grade: Describes a roadway that will be relatively close to the existing ground elevation and not elevated on a bridge structure.

Attainment: Status of the various pollutants described in the National Ambient Air Quality Standards (NAAQS); a condition where a pollutant meets NAAQS.

Average Daily Traffic (ADT): Average traffic volume in a 24-hour period on a particular roadway.

Build Alternative: The Build Alternative consists of a roadway constructed or reconstructed on a new or existing location within the project area.

Carbon Monoxide (CO): A colorless, odorless, poisonous gas that is formed as a product of the incomplete combustion of carbon and is emitted directly by automobiles and trucks.

Community Cohesion: The connections between and within communities which are essential for serving the needs of the residents.

Control-Section-Job (CSJ) Numbers: CSJ numbers are numbers assigned to all on-system public highways in Texas. The CSJ is a unique, nine-digit identification for a project.

Corridor: General location of a highway and its surrounding areas.

Cultural Resources: Patterned physical remains of human activity distributed over the landscape through time.

Cumulative Effect/Impact: An impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions, regardless of what agency (federal or non-federal) or person undertakes such other actions.

North Houston Highway Improvement Project

Glossary of Terms

Detention Basin (detention pond): A detention pond is a man-made feature built to hold and store flood water or other surface runoff for later release.

Diamond Lanes: A class of HOV lanes that operate without the physical barriers, generally pavement markings, to separate HOV traffic from general traffic.

Direct Impact: Direct effects are caused by the action and occur at the same time and place (40 CFR 1508.8).

Endangered Species: Species defined through the Endangered Species Act as being in danger of extinction throughout all or a significant portion of its range and published in the *Federal Register*.

Environmental Constraints/Sensitive Resources: Ecological, socio-economic, or cultural areas that may restrict or confine the placement of a project. Examples include areas of sensitive habitat, wetlands, cemeteries, or parks.

Environmental Impact Statement (EIS): A formal document prepared under the requirements of the National Environmental Policy Act of 1969 (NEPA), Section 102(2)(c) that considers significant environmental impacts expected from implementation of a major federal action. The EIS process includes both a draft and final statement (DEIS and FEIS), and extensive public involvement.

Environmental Justice: In accordance with Executive Order 12898, the avoidance of actions that cause disproportionately high and adverse impacts on minority and low income populations with respect to human health and the environment.

Flood Hazard Zone: The area inundated during a 100-year flood event.

Floodplain: The portion of a river or stream valley, adjacent to the channel, which is covered with water when the river or stream overflows its banks at flood stage. It is also defined as lowland and relatively flat areas adjoining inland and coastal waters including, at a minimum, that area subject to a one percent or greater chance of flooding in any given year (the 100-year floodplain).

Floodway: The channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than a designated height.

Grade Separated Intersection: A point where two highways or a highway and railroad meet and the through traffic/train from each facility is separated by an overpass/underpass.

High Occupancy Toll (HOT) Lanes: HOT lanes charge low occupancy vehicles a toll, while high-occupancy vehicles are allowed to use the lanes free or at a discounted toll rate.

North Houston Highway Improvement Project

Glossary of Terms

High Occupancy Vehicle (HOV) Lanes: Lanes used for carpools, vanpools, and buses that are usually separated from general-purpose lanes by concrete traffic barriers.

Historic Archeological Site: Any subsurface cultural manifestation dated post-European.

Impact/Effect: In environment analyses, the words “impact” or “effect” are used to express the extent or severity of an environmental problem, e.g., the number of persons displaced by a new transportation facility. As indicated in CEQ 1500 (Section 1508.8), impacts and effects are considered to be synonymous. Impacts or effects may be ecological, aesthetic, historic, cultural, economic, social, or health related, and they may be direct, indirect, or cumulative.

Indirect Effect/Impact: An impact that is caused by an action, and is later in time or farther in distance but is still reasonably foreseeable.

Intelligent Transportation Systems (ITS): A broad range of activities and systems that use advanced technology to increase overall transportation system efficiency. ITS technologies are applied to infrastructure, vehicles, travelers, and the operators of transportation system components.

Interchange: Interchange is a system of interconnecting roadways in conjunction with one or more grade separations that provides for the movement of traffic between two or more roadways or highways on different levels. A proposed interchange will be designated as an interchange when the construction contract has been awarded, regardless of whether it is open to the public.

Interstate Highways (IHs)/Freeways: These are divided highways with two or more lanes designated for the exclusive use of vehicular traffic. These roadways are intended to provide uninterrupted flow. There are no signalized or stop-controlled at-grade intersections. Direct access from adjacent properties is not permitted. Access is limited to ramp locations, and opposing directions are separated by a raised barrier, a median, or a raised traffic island. Examples of IHs are IH 10, IH 45, and IH 610.

Level of Service (LOS): Operating conditions within a stream of traffic describing safety, traffic interruptions, speed, freedom to maneuver, comfort, and convenience. Six levels of service are defined, designated A through F, with A representing the best conditions and F the worst.

Light Rail Transit (LRT): Typically a “light” vehicle that may operate in an open ROW or within a street in mixed-flow with traffic. Overhead wires often supply power to the transit vehicle. Light rail can carry medium-to-heavy passenger volumes.

Logical Termini: The Federal Highway Association (FHWA) memorandum *Guidance on the Development of Logical Project Termini* (FHWA, 1993) defines termini as: (1) rational end points for a transportation improvement, and (2) rational end points for a review of environmental impacts.

North Houston Highway Improvement Project

Glossary of Terms

Low-Income Population: A population whose household income is below the Department of Health and Human Services poverty guidelines.

Major Facilities: Roadways that carry a large number of vehicles, possibly serving more regional traffic.

Managed Lane Facility: A separate facility within a freeway that combines several desirable features to optimize capacity, LOS, and air quality benefits; one feature is that the facilities have limited entry and exit opportunities. The second feature of a managed facility is the possible collection of tolls as a means of value pricing. Value pricing means that tolls would change based on peak-hour trips or vehicle occupancy.

Median: The median is the portion of a divided highway separating the opposing traffic flows. A median may be traversable or non-traversable.

Median, non-traversable: A non-traversable median is a physical barrier in a roadway or driveway that separates vehicular traffic traveling in opposite directions. Non-traversable medians include physical barriers (such as a concrete barrier, a raised concrete curb and/or island, and a grass or a swale median) that prohibit movement of traffic across the median.

Median, raised: A raised median is one that is higher in elevation than the traveled way and usually outlined with a curb.

Median, traversable: 1. A traversable median is a median that by its design does not physically discourage vehicles from entering or crossing over it. This may include painted medians. 2. A traversable median, whether raised, depressed or flush, consists of a visible separation without any physical obstruction and which can be crossed with ease and comfort.

Median barrier, concrete: A concrete median barrier is a type of median providing a physical obstruction to crossing.

Metropolitan Planning Organization (MPO): The MPO is a federally designated, regional agency that works with state and local governments, the private sector, and the region's citizens to plan coordinated transportation systems designed to move goods and people affordably, efficiently, and safely. Major products produced by the MPO include a long-range Regional Transportation Plan (RTP), a shorter-term Transportation Improvement Program (TIP), a Congestion Management System (CMS), and a Unified Planning Work Program (UPWP). The Houston-Galveston Area Council (H-GAC) is the MPO in the Houston region.

Minor Arterials: These roadways interconnect and supplement the principal arterial system with a greater emphasis on land access and a lower level of traffic mobility. They provide intra-community service and connect rural collector roadways to the urban highway system.

North Houston Highway Improvement Project

Glossary of Terms

Mobile Source Air Toxics (MSATs): A category of substances in the air that are known or suspected of causing cancer or other health problems in humans, and for which a National Ambient Air Quality standard (NAAQS) does not exist (i.e., excluding ozone, carbon monoxide, particulate matter, sulfur dioxide, nitrogen oxide).

Mobility: Refers to the movement of people or goods.

Mode (Transportation): Types of transportation uses that might include bus transit, HOV lanes, rail, bicycle, and pedestrian.

National Register: The National Register of Historic Places (NRHP), as maintained by the United States Department of the Interior, pursuant to 16 USC § 470a. Properties listed in the Register include districts, sites, buildings, structures, and objects that are significant in American history, architecture, archeology, engineering, and culture. It is the nation's official list of cultural resources worthy of preservation.

NEPA Document: Any document or report prepared by or on behalf of a federal agency pursuant to the National Environmental Policy Act (NEPA) for a project including, but not necessarily limited to, any Environmental Assessment (EA), Finding of No Significant Impact, Draft EIS (DEIS), Final EIS (FEIS), or Record of Decision, but not including any pre-decisional, deliberative, or privileged materials.

No Build Alternative: This alternative represents a continuation of the existing transportation facilities, which incorporates the execution of planned and/or committed roadway improvements, TSM, TDM, and modal transportation improvements, new planned roadway construction, ITS, and Smart Streets/Access Management (operational management techniques to reduce delay, improved traffic flow and reduce crashes, including traffic light synchronization; deployment of roundabouts; medians; constructing or extending, as needed, turn bays; consolidation of duplicate driveways; and partial grade separation of some traffic lanes at major intersections).

Nonattainment: An area that does not meet (or that contributes to ambient air quality in a nearby area that does not meet) the national primary or secondary ambient air quality standard for criteria pollutants.

Notice of Intent (NOI): An NOI is published in the *Federal Register* to notify the public that an agency is preparing an EIS.

Potential Archeological Liability Map (Houston District of PALM): A geoarcheological model designed as a decision-support tool for use by TxDOT in the compliance process. It allows a prior assessment of geoarcheological potential and the potential impact on archeological resources by transportation activities without requiring a field visit.

North Houston Highway Improvement Project

Glossary of Terms

Preferred Alternative: The alternative that the proponent (FHWA/TxDOT) believes would fulfill its statutory mission and responsibilities and is consistent with the need for and purpose of the project, while giving consideration to economic, environmental, technical, and other factors, including public and agency comments received in response to the DEIS. This alternative may or may not be the same as the Recommended Alternative identified in the DEIS.

Prehistoric Archeological Site: Any cultural manifestation predating European contact.

Principal Arterials: These roadways provide an integrated network of roads that connect principal metropolitan areas and serve virtually all urban areas with a population greater than 25,000. They serve long distance travel demands such as statewide and interstate travel. Principal arterials can be grouped into freeway principal arterials and non-freeway principal arterials.

Project Area: The area that encompasses alternatives. For the North Houston Highway Improvement Project, the project area includes the IH 45 corridor from near downtown Houston to the North Sam Houston Tollway, also known as Beltway 8, the Beltway 8 connector from IH 45 to the Hardy Toll Road, the IH 610 connector from IH 45 to the Hardy Toll Road corridor, the Hardy Toll Road corridor from IH 610 (the North Loop) to Beltway 8, and US Highway 59 and IH 10 near downtown Houston. To assist in the design and analysis of alternatives for this project, it has been divided into three study segments:

- Segment 1 is from Beltway 8 to IH 610
- Segment 2 is from IH 610 to IH 10
- Segment 3 is the Downtown Loop System

Project Coordination Plan (PCP): In an effort to provide more efficient environmental reviews for project decision making, Section 6002 of Public Law 109-59, "Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users," (SAFETEA-LU), enacted August 10, 2005, implemented the development of a coordination plan for all projects for which an Environmental Impact Statement (EIS) is prepared under the National Environmental Policy Act of 1969 (NEPA). The purpose of the SAFETEA-LU Coordination Plan, commonly referred to as the PCP, is to describe the roles of the lead agencies and the cooperating and participating agencies and to coordinate public and agency participation in and comment on the environmental review process for the project.

Recommended Alternative: Refers to the recommended Build Alternative at the time of the publication of the DEIS. Selection of this alignment is based on public and agency outreach results and an analysis and comparison of the potential effects on the physical, biological, and human environment of each Alternative.

Resource Study Area (RSA): A geographic area identified for each resource that will be evaluated during the cumulative effects analysis. The health of the resource is evaluated within the entire RSA.

North Houston Highway Improvement Project

Glossary of Terms

Right of Way (ROW) (also Right-of-Way):

1. Right of way is a general term denoting land, property or interest therein, acquired for or devoted to transportation purposes.
2. Right of way is a general term denoting land, property or interest therein, acquired for or devoted to a highway for the construction of the roadway. Right of way is the entire width of land between the public boundaries or property lines of a highway. This may include purchase for drainage.

Riparian: Pertaining to anything connected with or immediately adjacent to the banks of a stream.

Section 106: Section 106 of the National Historic Preservation Act of 1966, 16 USC § 470(f). Pertains to the protection and preservation of historic properties.

Section 4(f): Section 4(f) of the Department of Transportation Act of 1966, 49 USC § 303(c). Pertains to the protection of a Section 4(f) resource.

Section 4(f) Resource: Any park, recreation area, wildlife or waterfowl refuge or historic site that is protected under Section 4(f).

Study Area: The large area within which corridor selection took place for the development of alternatives to address the need for and purpose of the project.

T & E Species: Threatened and endangered species defined through the Endangered Species Act and published in the Federal Register. (See Threatened Species and Endangered Species in this list)

Threatened Species: Species defined through the Endangered Species Act as likely to become endangered within the foreseeable future throughout all or a significant portion of its range and published in the *Federal Register*.

Toll Lane: A toll lane is a lane for use of which a toll, or fare, is collected from users. The toll may be collected 24 hours each day or during peak traffic periods only. A toll lane may also be used in conjunction with an HOV lane to allow motorists not meeting the HOV passenger requirements to pay a toll to use the dedicated lane. This is typically referred to as a HOT lane.

Traffic Analysis Zone (TAZ): A traffic analysis zone is the unit of geography most commonly used in conventional transportation planning models. The size of a zone varies, but for typical metropolitan planning software, a zone of under 3,000 people is common. The spatial extent of zones typically varies in models, ranging from very large areas in the suburban areas to as small as city blocks or buildings in central business districts.

North Houston Highway Improvement Project

Glossary of Terms

Transportation Demand Management (TDM) Alternatives: Behavioral changes to commuters' travel habits that result in fewer vehicles during peak hours. Examples would be carpooling/vanpooling, employee trip reduction programs, compressed work weeks, telecommuting, flex-time, and employer incentives.

Transportation System Management (TSM) Alternatives: Management to make the existing transportation system as efficient as possible. Examples would be park and ride lots, ridesharing, HOV facilities, traffic signal coordination, and intersection improvements.

Travel Demand: The number of users desiring to travel the highway system based on the available roadway network.

Upland Habitat: Land that has sufficient dry conditions for hydrophytic vegetation, hydric soils, and/or wetland hydrology to be lacking. Any area that is not a wetland, deepwater aquatic habitat, or other special aquatic site is considered upland habitat.

Volume to Capacity (V/C): The ratio of current traffic flow rate to capacity of a specified roadway or section of roadway.

Vehicle Hours Traveled (VHT): The time (in hours) that users spend on the roadway system during a specific time period.

Viewshed: All land seen from one static point.

Watershed: A specific geographic area drained by a major stream or river.

Wetlands: Those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and under normal conditions do support, a prevalence of vegetation typically adapted for life in saturated conditions.

COUNCIL ON ENVIRONMENTAL QUALITY
EXECUTIVE OFFICE OF THE PRESIDENT

A Citizen's Guide to the NEPA

*Having Your
Voice Heard*



DECEMBER 2007

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This guide is based on research and consultations undertaken by the Council on Environmental Quality (CEQ) concerning the need for a Citizen's Guide to the National Environmental Policy Act (NEPA). Participants in the NEPA Regional Roundtables held in 2003-2004 clearly voiced the need for a guide that provides an explanation of NEPA, how it is implemented, and how people outside the Federal government — individual citizens, private sector applicants, members of organized groups, or representatives of Tribal, State, or local government agencies — can better participate in the assessment of environmental impacts conducted by Federal agencies (see <http://ceq.eh.doe.gov/ntf>). This guide is informational and does not establish new requirements. It is not and should not be viewed as constituting formal CEQ guidance on the implementation of NEPA, nor are recommendations in this guide intended to be viewed as legally binding.

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List of Acronyms

CE:	Categorical Exclusion
CEQ:	Council on Environmental Quality
CFR:	Code of Federal Regulations
EA:	Environmental Assessment
EIS:	Environmental Impact Statement
EMS:	Environmental Management System
EPA:	The Environmental Protection Agency
FONSI:	Finding of No Significant Impact
NEPA:	The National Environmental Policy Act
NOI:	Notice of Intent
ROD:	Record of Decision

Purpose of the Guide

This guide has been developed to help citizens and organizations who are concerned about the environmental effects of federal decisionmaking to effectively participate in Federal agencies' environmental reviews under the National Environmental Policy Act (NEPA).¹ With some limited exceptions, all Federal agencies in the executive branch have to comply with NEPA before they make final decisions about federal actions that could have environmental effects. Thus, NEPA applies to a very wide range of federal actions that include, but are not limited to, federal construction projects, plans to manage and develop federally owned lands, and federal approvals of non-federal activities such as grants, licenses, and permits. The Federal Government takes hundreds of actions every day that are, in some way, covered by NEPA.

The environmental review process under NEPA provides an opportunity for you to be involved in the Federal agency decisionmaking process. It will help you understand what the Federal agency is proposing, to offer your thoughts on alternative ways for the agency to accomplish what it is proposing, and to offer your comments on the agency's analysis of the environmental effects of the proposed action and possible mitigation of potential harmful effects of such actions. NEPA requires Federal agencies to consider environmental effects that include, among others, impacts on social, cultural, and economic resources, as well as natural resources. Citizens often have valuable information about places and resources that they value and the potential environmental, social, and economic effects that proposed federal actions may have on those places and resources. NEPA's requirements provide you the means to work with the agencies so they can take your information into account.

¹ National Environmental Policy Act of 1969, as amended, 42 U.S.C. §§ 4321-4347, available at www.nepa.gov.

History and Purpose of NEPA

Congress enacted NEPA in December, 1969, and President Nixon signed it into law on January 1, 1970. NEPA was the first major environmental law in the United States and is often called the “Magna Carta” of environmental laws. Importantly, NEPA established this country’s national environmental policies.

To implement these policies, NEPA requires agencies to undertake an assessment of the environmental effects of their proposed actions prior to making decisions. Two major purposes of the environmental review process are better informed decisions and citizen involvement, both of which should lead to implementation of NEPA’s policies.

Who is Responsible for Implementing NEPA?

Every agency in the executive branch of the Federal Government has a responsibility to implement NEPA. In NEPA, Congress directed that, to the fullest extent possible, the policies, regulations, and public laws of the United States shall be interpreted and administered in accordance with the policies set forth in NEPA.² To implement NEPA’s policies, Congress prescribed a procedure, commonly referred to as “the NEPA process” or “the environmental impact assessment process.”

NEPA’s procedural requirements apply to all Federal agencies in the executive branch. NEPA does not apply to the President, to Congress, or to the Federal courts.³

Because NEPA implementation is an important responsibility of the Federal Government, many Federal agencies have established offices dedicated to NEPA policy and program oversight. Employees in these offices prepare NEPA guidance, policy, and procedures for the agency, and often make this information available to the public through sources such as Internet websites. Agencies are required to develop their own capacity within a NEPA program in order to develop analyses and documents (or review those prepared by others) to ensure informed decisionmaking.⁴ Most agency NEPA procedures are available on-line at the NEPA net website <http://ceq.eh.doe.gov/nepa/regs/agency/agencies.cfm>). Agency NEPA procedures are published in

² Section 102 of the National Environmental Policy Act of 1969, 42 U.S.C. §4332.

³ CEQ NEPA Regulations 40 C.F.R. §1508.12.

⁴ Council on Environmental Quality, “Regulations for Implementing the Procedural Provisions of the National Environmental Policy Act” 40 C.F.R. section 1507.2, available at www.nepa.gov. Future references to the CEQ NEPA Regulations will be cited as : CEQ NEPA Regulations, 40 C.F.R. §1507.2.

National Environmental Policy Act Sec. 101
[42 USC § 4331]

(a) The Congress, recognizing the profound impact of man's activity on the interrelations of all components of the natural environment, particularly the profound influences of population growth, high-density urbanization, industrial expansion, resource exploitation, and new and expanding technological advances and recognizing further the critical importance of restoring and maintaining environmental quality to the overall welfare and development of man, declares that it is the continuing policy of the Federal Government, in cooperation with State and local governments, and other concerned public and private organizations, to use all practicable means and measures, including financial and technical assistance, in a manner calculated to foster and promote the general welfare, to create and maintain conditions under which man and nature can exist in productive harmony, and fulfill the social, economic, and other requirements of present and future generations of Americans.

(b) In order to carry out the policy set forth in this Act, it is the continuing responsibility of the Federal Government to use all practicable means, consistent with other essential considerations of national policy, to improve and coordinate Federal plans, functions, programs, and resources to the end that the Nation may —

1. fulfill the responsibilities of each generation as trustee of the environment for succeeding generations;
2. assure for all Americans safe, healthful, productive, and aesthetically and culturally pleasing surroundings;
3. attain the widest range of beneficial uses of the environment without degradation, risk to health or safety, or other undesirable and unintended consequences;
4. preserve important historic, cultural, and natural aspects of our national heritage, and maintain, wherever possible, an environment which supports diversity, and variety of individual choice;
5. achieve a balance between population and resource use which will permit high standards of living and a wide sharing of life's amenities; and
6. enhance the quality of renewable resources and approach the maximum attainable recycling of depletable resources.

(c) The Congress recognizes that each person should enjoy a healthful environment and that each person has a responsibility to contribute to the preservation and enhancement of the environment.

the Federal Register for public review and comment when first proposed and some are later codified and published in the Code of Federal Regulations.⁵ If you experience difficulty locating an agency's NEPA procedures, you can write or call the agency NEPA point of contacts and ask for a copy of their procedures.⁶

To What Do the Procedural Requirements of NEPA Apply?

In NEPA, Congress recognized that the Federal Government's actions may cause significant environmental effects. The range of actions that cause significant environmental effects is broad and includes issuing regulations, providing permits for private actions, funding private actions, making federal land management decisions, constructing publicly-owned facilities, and many other types of actions. Using the NEPA process, agencies are required to determine if their proposed actions have significant environmental effects and to consider the environmental and related social and economic effects of their proposed actions.

NEPA's procedural requirements apply to a Federal agency's decisions for actions, including financing, assisting, conducting, or approving projects or programs; agency rules, regulations, plans, policies, or procedures; and legislative proposals.⁷ NEPA applies when a Federal agency has discretion to choose among one or more alternative means of accomplishing a particular goal.⁸

Frequently, private individuals or companies will become involved in the NEPA process when they need a permit issued by a Federal agency. When a company applies for a permit (for example, for crossing federal lands or impacting waters of the United States) the agency that is being asked to issue the permit must evaluate the environmental effects of the permit decision under NEPA. Federal agencies might require the private company or developer to pay for the preparation of analyses, but the agency remains responsible for the scope and accuracy of the analysis.

⁵ The draft agency implementing procedures, or regulations, are published in the Federal Register, and a public comment period is required prior to CEQ approval. Commenting on these agency regulations is one way to be involved in their development. Most agencies already have implementing procedures; however, when they are changed, the agency will again provide for public comment on the proposed changes.

⁶ See Appendices A and D for information on how to access agency points of contact and agency websites.

⁷ CEQ NEPA Regulations, 40 C.F.R. § 1508.18. Note that this section applies only to legislation drafted and submitted to Congress by federal agencies. NEPA does not apply to legislation initiated by members of Congress.

⁸ CEQ NEPA Regulations, 40 C.F.R. § 1508.23.

When Does NEPA Apply?

NEPA requires agency decisionmakers to make informed decisions. Therefore, the NEPA process must be completed before an agency makes a final decision on a proposed action. Good NEPA analyses should include a consideration of how NEPA's policy goals (Section 101) will be incorporated into the decision to the extent consistent with other considerations of national policy. NEPA does not require the decisionmaker to select the environmentally preferable alternative or prohibit adverse environmental effects. Indeed, decisionmakers in Federal agencies often have other concerns and policy considerations to take into account in the decisionmaking process, such as social, economic, technical or national security interests. But NEPA does require that decisionmakers be informed of the environmental consequences of their decisions.

The NEPA process can also serve to meet other environmental review requirements. For instance, actions that require the NEPA process may have an impact on endangered species, historic properties, or low income communities. The NEPA analysis, which takes into account the potential impacts of the proposed action and investigates alternative actions, may also serve as a framework to meet other environmental review requirements, such as the Endangered Species Act, the National Historic Preservation Act, the Environmental Justice Executive Order, and other Federal, State, Tribal, and local laws and regulations.⁹

Who Oversees the NEPA Process?

There are three Federal agencies that have particular responsibilities for NEPA. Primary responsibility is vested in the Council on Environmental Quality (CEQ), established by Congress in NEPA. Congress placed CEQ in the Executive Office of the President and gave it many responsibilities, including the responsibility to ensure that Federal agencies meet their obligations under the Act. CEQ oversees implementation of NEPA, principally through issuance and interpretation of NEPA regulations that implement the procedural requirements of NEPA. CEQ also reviews and approves Federal agency NEPA procedures, approves of alternative arrangements for compliance with NEPA in the case of emergencies, and helps to resolve disputes between Federal agencies and with other governmental entities and members of the public.

⁹ CEQ NEPA Regulations, 40 C.F.R. § 1502.25.

In 1978, CEQ issued binding regulations directing agencies on the fundamental requirements necessary to fulfill their NEPA obligations.¹⁰ The CEQ regulations set forth minimum requirements for agencies. The CEQ regulations also called for agencies to create their own implementing procedures that supplement the minimum requirements based on each agency's specific mandates, obligations, and missions.¹¹ These agency-specific NEPA procedures account for the slight differences in agencies' NEPA processes.

The Environmental Protection Agency's (EPA) Office of Federal Activities reviews environmental impact statements (EIS) and some environmental assessments (EA) issued by Federal agencies.¹² It provides its comments to the public by publishing summaries of them in the Federal Register, a daily publication that provides notice of Federal agency actions.¹³ EPA's reviews are intended to assist Federal agencies in improving their NEPA analyses and decisions.¹⁴

Another government entity involved in NEPA is the U.S. Institute for Environmental Conflict Resolution, which was established by the Environmental Policy and Conflict Resolution Act of 1998 to assist in resolving conflict over environmental issues that involve Federal agencies.¹⁵ While part of the Federal Government (it is located within the Morris K. Udall Foundation, a Federal agency located in Tucson, Arizona), it provides an independent, neutral, place for Federal agencies to work with citizens as well as State, local, and Tribal governments, private organizations, and businesses to reach common ground. The Institute provides dispute resolution alternatives to litigation and other adversarial approaches. The Institute is also charged with assisting the Federal Government in the implementation of the substantive policies set forth in Section 101 of NEPA.¹⁶

¹⁰ CEQ NEPA Regulations, 40 C.F.R. parts 1500-1508, available at www.nepa.gov.

¹¹ CEQ NEPA Regulations, 40 C.F.R. § 1507.3.

¹² Clean Air Act, 42 U.S.C. § 7609.

¹³ See Appendix B for information on the Federal Register.

¹⁴ For additional information see <http://www.epa.gov/compliance/nepa/index.htm>.

¹⁵ Environmental Policy and Conflict Resolution Act of 1998, 20 U.S.C. §§ 5601-5609.

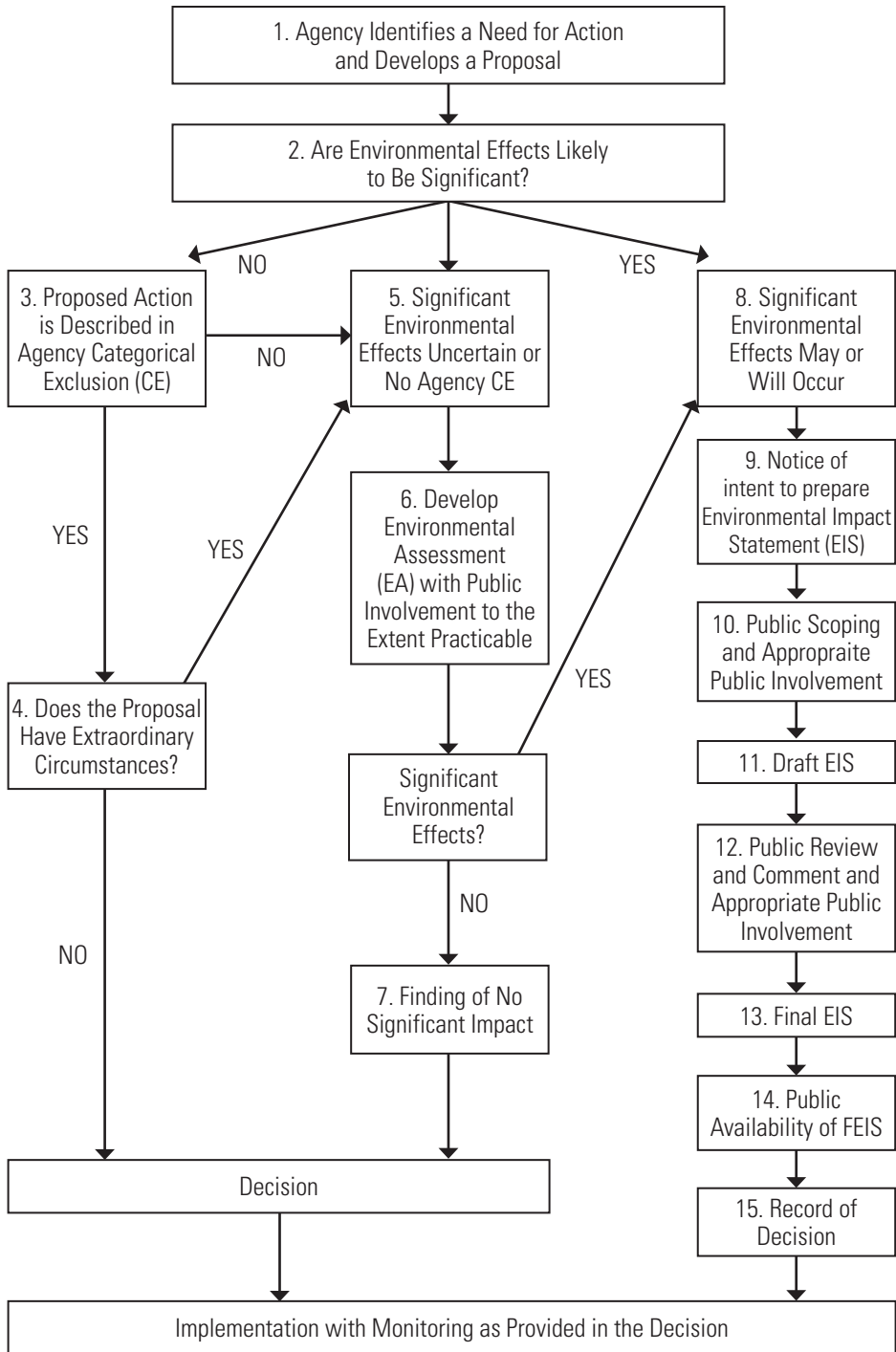
¹⁶ For a discussion of the relationship between Section 101 of NEPA and conflict resolution, including specific case examples and recommendations for strengthening that relationship see the National Environmental Conflict Resolution Advisory Committee, "Final Report — Submitted to the U.S. Institute for Environmental Conflict Resolution of the Morris K. Udall Foundation," (April 2005), available at <http://www.ecr.gov> by clicking on "Resources" and "NEPA and ECR."

Navigating the NEPA Process

Each year, thousands of Environmental Assessments (EAs) and hundreds of Environmental Impact Statements (EISs) are prepared by Federal agencies. These documents provide citizens and communities an opportunity to learn about and be involved in each of those environmental impact assessments that are part of the Federal agency decisionmaking process. It is important to understand that commenting on a proposal is not a “vote” on whether the proposed action should take place. Nonetheless, the information you provide during the EA and EIS process can influence the decisionmakers and their final decisions because NEPA does require that federal decisionmakers be informed of the environmental consequences of their decisions.

This guide will help you better navigate through the NEPA process and better understand the roles of the various other actors. While reading the guide, please refer to the following flowchart, “The NEPA Process,” which details the steps of the NEPA process. For ease of reference, each step of the process is designated with a number which is highlighted in the text discussing that particular step. While agencies may differ slightly in how they comply with NEPA, understanding the basics will give you the information you need to work effectively with any agency’s process.

The NEPA Process



**Significant new circumstances or information relevant to environmental concerns or substantial changes in the proposed action that are relevant to environmental concerns may necessitate preparation of a supplemental EIS following either the draft or final EIS or the Record of Decision (CEQ NEPA Regulations, 40 C.F.R. § 1502.9(c)).*

The NEPA process begins when an agency develops a proposal to address a need to take an action.

The need to take an action may be something the agency identifies itself, or it may be a need to make a decision on a proposal brought to it by someone outside of the agency, for example, an applicant for a permit. Based on the need, the agency develops a proposal for action (Number 1 in Figure 1). If it is the only Federal agency involved, that agency will automatically be the “lead agency,” which means it has the primary responsibility for compliance with NEPA.

Some large or complex proposals involve multiple Federal agencies along with State, local, and Tribal agencies. If another Federal, State, local, or Tribal agency has a major role in the proposed action and also has NEPA responsibilities or responsibilities under a similar NEPA-like law¹⁷, that agency may be a “joint lead agency.” A “joint lead agency” shares the lead agency’s responsibility for management of the NEPA process, including public involvement and the preparation of documents. Other Federal, State, Tribal, or local government agencies may have a decision or special expertise regarding a proposed action, but less of a role than the lead agency. In that case, such a Federal, State, Tribal, or local government agency may be a “cooperating agency.”

A “cooperating agency” is an agency that has jurisdiction by law or special expertise with respect to any environmental impact involved in a proposal (or a reasonable alternative). Thus, a “cooperating agency” typically will have some responsibilities for the analysis related to its jurisdiction or special expertise.

Once it has developed a proposed action, the agency will enter the initial analytical approach (Number 2 in Figure 1) to help it determine whether the agency will pursue the path of a Categorical Exclusion (CE), an Environmental Assessment (EA), or an Environmental Impact Statement (EIS).

¹⁷ About a quarter of the states have such laws; for example, New York, Montana, Washington, and California all have such laws. New York City also has such a law. A list with references is available at www.nepa.gov by clicking on “State Information” or directly at <http://ceq.eh.doe.gov/nepa/states.html>.

Special Situations

- ❖ On rare occasions, Congress may exempt an action from NEPA.
- ❖ If the agency needs to take an action that would typically require preparation of an environmental impact statement in response to an emergency, and there is insufficient time to follow the regular NEPA process, then the agency can proceed immediately to mitigate harm to life, property, or important resources, and work with CEQ to develop alternative arrangements for compliance with NEPA (40 C.F.R. §1506.11).
- ❖ The NEPA analyses and document may involve classified information. If the entire action is classified, the agency will still comply with the analytical requirements of NEPA, but the information will not be released for public review. If only a portion of the information is classified, the agency will organize the classified material so that the unclassified portions can be made available for review (40 C.F.R. §1507.3(c)).

Implementing the NEPA Process

Categorical Exclusions (CEs) (Number 3 in Figure 1)

A CE is a category of actions that the agency has determined does not individually or cumulatively have a significant effect on the quality of the human environment.¹⁸ Examples include issuing administrative personnel procedures, making minor facility renovations (such as installing energy efficient lighting), and reconstruction of hiking trails on public lands. Agencies develop a list of CEs specific to their operations when they develop or revise their NEPA implementing procedures in accordance with CEQ's NEPA regulations.

A CE is based on an agency's experience with a particular kind of action and its environmental effects. The agency may have studied the action in previous EAs, found no significant impact on the environment based on the analyses, and validated the lack of significant impacts after the implementation. If this is the type of action that will be repeated over time, the agency may decide to amend their implementing regulations to include the action as a CE. In these cases, the draft agency procedures are published in the *Federal Register*, and a public comment period is required. Participation in these comment periods is an important way to be involved in the development of a particular CE.

¹⁸ CEQ NEPA Regulations, 40 C.F.R. § 1508.4.

If a proposed action is included in the description provided for a listed CE established by the agency, the agency must check to make sure that no extraordinary circumstances exist that may cause the proposed action to have a significant effect in a particular situation. Extraordinary circumstances typically include such matters as effects to endangered species, protected cultural sites, and wetlands (Number 4 in Figure 1). If there are no extraordinary circumstances indicating that the effects of the action may be significant, then the agency can proceed with the action.

If the proposed action is not included in the description provided in the CE established by the agency, or there are extraordinary circumstances, the agency must prepare an EA or an EIS, or develop a new proposal that may qualify for application of a CE. When the agency does not know or is uncertain whether significant impacts are expected, the agency should prepare an EA to determine if there are significant environmental effects.

Environmental Assessments (EA) (Number 5 in Figure 1)

The purpose of an EA is to determine the significance of the environmental effects and to look at alternative means to achieve the agency's objectives. The EA is intended to be a concise document that (1) briefly provides sufficient evidence and analysis for determining whether to prepare an EIS; (2) aids an agency's compliance with NEPA when no environmental impact statement is necessary; and (3) facilitates preparation of an Environmental Impact Statement when one is necessary.¹⁹

An EA should include brief discussions of:

- ❖ the need for the proposal,
- ❖ alternative courses of action for any proposal which involves unresolved conflicts concerning alternative uses of available resources,
- ❖ the environmental impacts of the proposed action and alternatives, and
- ❖ a listing of agencies and persons consulted.²⁰

¹⁹ CEQ NEPA Regulations, 40 C.F.R. § 1508.9.

²⁰ CEQ NEPA Regulations, 40 C.F.R. § 1508.9(b).

Because the EA serves to evaluate the significance of a proposal for agency actions, it should focus on the context and intensity of effects that may “significantly” affect the quality of the human environment.²¹ Often the EA will identify ways in which the agency can revise the action to minimize environmental effects.

When preparing an EA, the agency has discretion as to the level of public involvement (Number 6 in Figure 1). The CEQ regulations state that the agency shall involve environmental agencies, applicants, and the public, to the extent practicable, in preparing EAs.²² Sometimes agencies will choose to mirror the scoping and public comment periods that are found in the EIS process. In other situations, agencies make the EA and a draft FONSI available to interested members of the public.

Some agencies, such as the Army, require that interested parties be notified of the decision to prepare an EA, and the Army also makes the EA publicly available. Some agencies keep a notification list of parties interested in a particular kind of action or in all agency actions. Other agencies simply prepare the EA. Not all agencies systematically provide information about individual EAs, so it is important that you read the specific implementing procedures of the proposing agency or ask the local NEPA point of contact working on the project about the process and let the appropriate agency representative know if you are interested in being notified of all NEPA documents or NEPA processes related to a particular type of action.

The EA process concludes with either a Finding of No Significant Impact (FONSI) (Number 7 in Figure 1) or a determination to proceed to preparation of an EIS. A FONSI is a document that presents the reasons why the agency has concluded that there are no significant environmental impacts projected to occur upon implementation of the action.²³ The EA is either summarized in the FONSI or attached to it.

In two circumstances, the CEQ regulations require agencies to make the proposed FONSI available for public review for 30 days. Those situations are:

- ❖ if the type of proposed action hasn’t been done before by the particular agency, or

²¹ CEQ NEPA Regulations 40 C.F.R. § 1508.27.

²² CEQ NEPA Regulations, 40 C.F.R. § 1501.4(e)(2).

²³ Government Printing Office Electronic Information Enhancement Act of 1993, 44 U.S.C. §§ 4101-4104.

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- ❖ if the action is something that typically would require an EIS under the agency NEPA procedures.²⁴

If this is the case, the FONSI is usually published in the *Federal Register*,²⁵ and the notice of availability of the FONSI will include information on how and where to provide your comments. If the requirement for a 30 day review is not triggered the FONSI often will not be published in the Federal Register. It may be posted on the agency's website, published in local newspapers or made available in some other manner. If you are interested in a particular action that is the subject of an EA, you should find out from the agency how it will make the FONSI available.

Environmental Impact Statements (EIS) (Number 8 in Figure 1)

A Federal agency must prepare an EIS if it is proposing a major federal action significantly affecting the quality of the human environment.²⁶ The regulatory requirements for an EIS are more detailed than the requirements for an EA or a categorical exclusion and are explained below.

Notice of Intent and Scoping (Numbers 9 and 10 in Figure 1)

The EIS process begins with publication of a Notice of Intent (NOI), stating the agency's intent to prepare an EIS for a particular proposal. (Number 9 in Figure 1). The NOI is published in the Federal Register, and provides some basic information on the proposed action in preparation for the scoping process (Number 10 in Figure 1).²⁷ The NOI provides a brief description of the proposed action and possible alternatives. It also describes the agency's proposed scoping process, including any meetings and how the public can get involved. The NOI will also contain an agency point of contact who can answer questions about the proposed action and the NEPA process.

The scoping process is the best time to identify issues, determine points of contact, establish project schedules, and provide recommendations to the agency. The overall goal is to define the scope of issues to be addressed in depth in the analyses that will be included in the EIS. Specifically, the scoping process will:

²⁴ 42 U.S.C. § 4332(C).

²⁵ Scoping is a NEPA term of art that describes one major public involvement aspect of the NEPA EIS process (CEQ NEPA Regulations, 40 C.F.R. § 1501.7).

²⁶ CEQ NEPA Regulations, 40 C.F.R. § 1501.7. More information on scoping can be found in CEQ's guidance on scoping at www.nepa.gov.

²⁷ Public hearings are run in a formal manner, with a recording or minutes taken of speakers' comments. Public meetings may be held in a variety of formats, and may be much more informal than hearings.

-
- ❖ Identify people or organizations who are interested in the proposed action;
 - ❖ Identify the significant issues to be analyzed in the EIS;
 - ❖ Identify and eliminate from detailed review those issues that will not be significant or those that have been adequately covered in prior environmental review;
 - ❖ Determine the roles and responsibilities of lead and cooperating agencies;
 - ❖ Identify any related EAs or EISs;
 - ❖ Identify gaps in data and informational needs;
 - ❖ Set time limits for the process and page limits for the EIS;
 - ❖ Identify other environmental review and consultation requirements so they can be integrated with the EIS; and
 - ❖ Indicate the relationship between the development of the environmental analysis and the agency's tentative decisionmaking schedule.²⁸

As part of the process, agencies are required to identify and invite the participation of interested persons. The agency should choose whatever communications methods are best for effective involvement of communities, whether local, regional, or national, that are interested in the proposed action. Video conferencing, public meetings, conference calls, formal hearings, or informal workshops are among the legitimate ways to conduct scoping. It is in your interest to become involved as soon as the EIS process begins and to use the scoping opportunity to make thoughtful, rational presentations on impacts and alternatives. Some of the most constructive and beneficial interaction between the public and an agency occurs when citizens identify or develop reasonable alternatives that the agency can evaluate in the EIS.

²⁸ CEQ NEPA Regulations, 40 C.F.R. § 1501.7. More information on scoping can be found in CEQ's guidance on scoping at www.nepa.gov by clicking on "CEQ Guidance."

NEPA is About People and Places



Tent Rocks, Jemez Mountains.



Southern Regional NEPA Roundtable discussion on the NEPA Task Force report *Modernizing NEPA Implementation*



US District Courthouse, Sioux Falls, SD

From top left: Tent Rocks photo courtesy of Michael Dechter; Courthouse, Sioux Falls, South Dakota, photo courtesy of General Services Administration, <http://rmrpbs.gsa.gov/internet/PBSWeb.nsf/0/a704c21a7427f8d4872569b50079ac3d?OpenDocument>

Draft EIS (Number 11 in Figure 1)

The next major step in the EIS process that provides an opportunity for your input is when the agencies submit a draft EIS for public comment. The Environmental Protection Agency (EPA) publishes a Notice of Availability in the Federal Register informing you and other members of the public that the draft is available for comment (Number 12 in Figure 1). The EPA notices are also available at <http://www.epa.gov/compliance/nepa/eisdata.html>. Based on the communication plan established by the agency, websites, local papers, or other means of public notice may also be used. The comment period is at least 45 days long; however, it may be longer based on requirements spelled out in the agency specific NEPA procedures or at the agency's discretion. During this time, the agency may conduct public meetings or hearings as a way to solicit comments.²⁹ The agency will also request comments from other Federal, State, Tribal, and local agencies that may have jurisdiction or interest in the matter.

One key aspect of a draft EIS is the statement of the underlying purpose and need.³⁰ Agencies draft a "Purpose and Need" statement to describe what they are trying to achieve by proposing an action. The purpose and need statement explains to the reader why an agency action is necessary, and serves as the basis for identifying the reasonable alternatives that meet the purpose and need.

The identification and evaluation of alternative ways of meeting the purpose and need of the proposed action is the heart of the NEPA analysis. The lead agency or agencies must, "objectively evaluate all reasonable alternatives, and for alternatives which were eliminated from detailed study, briefly discuss the reasons for their having been eliminated."³¹ Reasonable alternatives are those that substantially meet the agency's purpose and need. If the agency is considering an application for a permit or other federal approval, the agency must still consider all reasonable alternatives. Reasonable alternatives include those that are practical or feasible from the technical and economic standpoint and using common sense, rather than simply desirable from the standpoint of the applicant. Agencies are obligated to evaluate all reasonable alternatives or a range of reasonable alternatives in enough detail so that a reader can compare and contrast the environmental effects of the various alternatives.

²⁹ Public hearings are run in a formal manner, with a recording or minutes taken of speakers' comments. Public meetings may be held in a variety of formats, and may be much more informal than hearings.

³⁰ CEQ NEPA Regulations, 40 C.F.R. § 1502.13.

³¹ CEQ NEPA Regulations, 40 C.F.R. § 1502.14.

Agencies must always describe and analyze a “no action alternative.” The “no action” alternative is simply what would happen if the agency did not act upon the proposal for agency action. For example, in the case of an application to the U.S. Army Corps of Engineers for a permit to place fill in a particular area, the “no action” alternative is no permit. But in the case of a proposed new management plan for the National Park Service’s management of a national park, the “no action” alternative is the continuation of the current management plan.

If an agency has a preferred alternative when it publishes a draft EIS, the draft must identify which alternative the agency prefers. All agencies must identify a preferred alternative in the final EIS, unless another law prohibits it from doing so.³²

The agency must analyze the full range of direct, indirect, and cumulative effects of the preferred alternative, if any, and of the reasonable alternatives identified in the draft EIS. For purposes of NEPA, “effects” and “impacts” mean the same thing. They include ecological, aesthetic, historic, cultural, economic, social, or health impacts, whether adverse or beneficial.³³ It is important to note that human beings are part of the environment (indeed, that’s why Congress used the phrase “human environment” in NEPA), so when an EIS is prepared and economic or social and natural or physical environmental effects are interrelated, the EIS should discuss all of these effects.³⁴

CEQ NEPA Regulation Section 1508.8
[40 C.F.R. § 1508.8.]

“Effects” include:

- (a) Direct effects, which are caused by the action and occur at the same time and place.
- (b) Indirect effects, which are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable. Indirect effects may include growth inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rate, and related effects on air and water and other natural systems, including ecosystems.

Effects and impacts as used in these regulations are synonymous. Effects includes ecological (such as the effects on natural resources and on the components, structures, and functioning of affected ecosystems), aesthetic, historic, cultural, economic, social, or health, whether direct, indirect, or cumulative. Effects may also include those resulting from actions which may have both beneficial and detrimental effects, even if on balance the agency believes that the effect will be beneficial.

³² CEQ NEPA Regulations, 40 C.F.R. § 1502.14(e).

³³ CEQ NEPA Regulations, 40 C.F.R. §§ 1508.7, 1508.8.

³⁴ CEQ NEPA Regulations, 40 C.F.R. § 1508.14.

In addition to the purpose and need, identification of reasonable alternatives, and the environmental effects of the alternatives, the draft EIS will contain a description of the environment that would be affected by the various alternatives.

The EIS will also have a list of who prepared the document and their qualifications,³⁵ a table of contents, and an index.³⁶ The agency may choose to include technical information in appendices that are either circulated with the draft or readily available for review.³⁷

Final EIS (Number 13 in Figure 1)

When the public comment period is finished, the agency analyzes comments, conducts further analysis as necessary, and prepares the final EIS. In the final EIS, the agency must respond to the substantive comments received from other government agencies and from you and other members of the public.³⁸ The response can be in the form of changes in the final EIS, factual corrections, modifications to the analyses or the alternatives, new alternatives considered, or an explanation of why a comment does not require the agency's response.³⁹ Often the agency will meet with other agencies that may be affected by the proposed action in an effort to resolve an issue or mitigate project effects. A copy or a summary of your substantive comments and the response to them will be included in the final EIS.⁴⁰

When it is ready, the agency will publish the final EIS and EPA will publish a Notice of Availability in the Federal Register. The Notice of Availability marks the start of a waiting period (Number 14 in Figure 1). A minimum of 30 days must pass before the agency can make a decision on their proposed action unless the agency couples the 30 days with a formal internal appeals process.⁴¹ This provides time for the agency decisionmaker to consider the purpose and need, weigh the alternatives, balance their objectives, and make a decision.

There is an additional (but rarely used) procedure worth noting: pre-decision referrals to CEQ.⁴² This referral process takes place when

³⁵ CEQ NEPA Regulations, 40 C.F.R. § 1502.17.

³⁶ CEQ NEPA Regulations, 40 C.F.R. § 1502.10.

³⁷ CEQ NEPA Regulations, 40 C.F.R. § 1502.18.

³⁸ CEQ NEPA Regulations, 40 C.F.R. § 1503.4.

³⁹ CEQ NEPA Regulations, 40 C.F.R. § 1503.4(a).

⁴⁰ CEQ NEPA Regulations, 40 C.F.R. § 1503.4(b).

⁴¹ CEQ NEPA Regulations, 40 C.F.R. § 1506.10. If the end of the 30 day wait period is less than 90 days after the notice of availability of the Draft EIS, was published in the Federal Register, then the decision must await the expiration of the 90 days.

⁴² CEQ NEPA Regulations, 40 C.F.R. part 1504.

EPA or another Federal agency determines that proceeding with the proposed action is environmentally unacceptable. If an agency reaches that conclusion, the agency can refer the issue to CEQ within 25 days after the Notice of Availability for the final EIS is issued. CEQ then works to resolve the issue with the agencies concerned. CEQ might also refer the agencies to the U.S. Institute for Environmental Conflict Resolution to try to address the matter before formal elevation.⁴³ There is no provision for citizens to formally refer an action to CEQ; however, CEQ typically provides an opportunity for public involvement in a referral.

Record of Decision (ROD) (Number 15 in Figure 1)

The ROD is the final step for agencies in the EIS process. The ROD is a document that states what the decision is; identifies the alternatives considered, including the environmentally preferred alternative; and discusses mitigation plans, including any enforcement and monitoring commitments.⁴⁴ In the ROD, the agency discusses all the factors, including any considerations of national policy, that were contemplated when it reached its decision on whether to, and if so how to, proceed with the proposed action. The ROD will also discuss if all practical means to avoid or minimize environmental harm have been adopted, and if not, why they were not.⁴⁵ The ROD is a publicly available document. Sometimes RODs are published in the Federal Register or on the agency's website, but if you are interested in receiving the ROD you should ask the agency's point of contact for the EIS how to obtain a copy of the ROD.

⁴³ The U.S. Institute reports disputes it is involved with to CEQ and requests concurrence from CEQ to engage in those disputes involving two or more federal agencies.

⁴⁴ CEQ NEPA Regulations, 40 C.F.R. § 1505.2.

⁴⁵ CEQ NEPA Regulations, 40 C.F.R. § 1505.2(c).

Environmental Management Systems (EMS)

Executive Order (EO 13423) and a subsequent memorandum issued from the Office of Management and Budget and CEQ direct all agencies to adopt an Environmental Management System (EMS). “An EMS is a systematic approach to identifying and managing an organization’s environmental obligations and issues that can complement many aspects of the NEPA review process.” (Boling, E.A. 2005. *Environmental Management Systems and NEPA: A Framework for Productive Harmony*. The Environmental Law Reporter. 35 ELR 10022. Environmental Law Institute). EMSs are typically used by organizations and agencies to set up the procedures that will help them comply with the specific requirements of environmental laws and regulations, such as air and water permits. EMSs can be particularly useful in NEPA in the context of post-decision monitoring and mitigation. Using the procedures provided by an EMS, agencies can better ensure they are proper implementation of mitigation measures and provide a mechanism for monitoring the actual effects of the mitigation. (CEQ, *Aligning National Environmental Policy Act Processes with Environmental Management Systems — A Guide for NEPA and EMS Practitioners* (April 2007) available at www.nepa.gov by clicking on “Aligning NEPA Processes with Environmental Mangement Systems.”

Supplemental EIS (Asterisk in Figure 1)

Sometimes a Federal agency is obligated to prepare a supplement to an existing EIS. An agency must prepare a supplement to either a draft or final EIS if it makes substantial changes in the proposed action that are relevant to environmental concerns, or if there are significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts. An agency may also prepare a supplemental EIS if it determines that doing so will further the purposes of NEPA.⁴⁶ A supplemental EIS is prepared in the same way as a draft or final EIS, except that scoping is not required. If a supplement is prepared following a draft EIS, the final EIS will address both the draft EIS and supplemental EIS.

⁴⁶ CEQ NEPA Regulations, 40 C.F.R. § 1502.9(c).

EPA's Review

EPA plays a critical role in other agencies' NEPA processes. EPA is required to review and provide comments on the adequacy of the analysis and the impact to the environment.⁴⁷ EPA uses a rating system that summarizes its recommendations to the lead agency (see Appendix C). If EPA determines that the action is environmentally unsatisfactory, it is required by law to refer the matter to CEQ.

The Office of Federal Activities in EPA is the official recipient of all EISs prepared by Federal agencies, and publishes the notices of availability in the Federal Register for all draft, final, and supplemental EISs. The publication of these notices start the official clock for public review and comment periods and wait periods.⁴⁸ In addition to the Federal Register, the notices and summaries of the EPA comments are available at <http://www.epa.gov/compliance/nepa/eisdata.html>.

When and How to Get Involved

It Depends on the Agency

To determine the specific steps in the process where public involvement will be the most effective, it is very important to review the agency's NEPA implementing procedures. As previously mentioned, NEPA processes differ among agencies. For example, the Federal Highway Administration provides a 30 day comment period (with or without a public meeting) on all EAs that they develop before a FONSI is issued while some other agencies have no required comment periods for EAs.⁴⁹

In addition, new legislation can change the way NEPA is implemented in agencies. For example, after the passage of the "Safe, Accountable, Flexible, Efficient Transportation Equity Act", which is transportation legislation that Congress passed in August 2005, the Department of Transportation updated its NEPA processes to implement the new transportation legislation. The Federal Highway Administration and Federal Transit Administration have kept websites up to date and are tracking the evolving guidance at <http://www.environment.fhwa.dot.gov/strmlng/index.asp> by clicking on "SAFETEA-LU."

⁴⁷ Clean Air Act, 42 U.S.C. § 7609.

⁴⁸ CEQ NEPA Regulations, 40 C.F.R. § 1506.10.

⁴⁹ Federal Highway Administration NEPA Regulations, 23 C.F.R. § 771.119 (2005).

**Safe, Accountable, Flexible, Efficient
Transportation Equity Act:
A Legacy for Users
(SAFETEA-LU), Public Law 109-59**

Congress included some modifications to the regular NEPA process for proposed actions that require preparation of EISs in SAFETEA-LU. For example, SAFETEA-LU requires the lead agency to provide an opportunity as early as practicable during the environmental review process for the public to weigh in on both defining the purpose and need for a proposal and determining the range of alternatives to be considered. Congress provided for a process whereby some states could assume responsibilities for all environmental compliance, including NEPA. Congress also established a 180 day statute of limitations for lawsuits challenging agency approvals of projects.

If you are involved or anticipate becoming involved in the NEPA process for a proposed highway or federal mass transit proposal, you should become familiar with the specific requirements of SAFETEA-LU for the NEPA process. One good way to do this is check information on the Federal Highway Administration's website at www.fhwa.dot.gov/safetealu. By clicking on "Cross Reference" you will find both the requirements of the law and FHWA regulations and implementing guidance.

You should also be aware that in the context of highway planning, much work is done at a pre-NEPA stage through statewide, municipal, and rural planning processes. These processes often set the stage for the NEPA process and you should be aware of your opportunities to get involved at that earlier stage. You can learn more about these processes by going to the Federal Highway Administration's website listed above, or by obtaining a copy of "A Citizen's Guide to Transportation Decisionmaking", available at www.fhwa.dot.gov/planning/citizen/index.htm or by writing to the Federal Highway Administration at 1200 New Jersey Avenue, S.E., HEPP-20, Washington, D.C. 20590, Attention: Transportation Planning Capacity Building Team; or calling 202 366-0106. Another publication that may be of assistance is "The Metropolitan Transportation Planning Process: Key Issues. A Briefing Notebook for Transportation Decisionmakers, Officials, and Staff." That publication is being updated to reflect the changes in the SAFETEA-LU law, and should be available through the same website and addresses above.

Be Informed of Actions

Sometimes citizens are generally interested in actions taking place in a particular area (for example, in your community or in an ecosystem or a facility that affects you). If this is the case, you can inform the appropriate agency or agencies that you would like to be notified of any proposed action or any environmental impact analysis that might be prepared in that area. In addition, many agencies now have websites where they post notices for actions they are proposing.

Active Involvement

Being active in the NEPA process requires you to dedicate your resources to the effort. Environmental impact analyses can be technical and lengthy. Active involvement in the NEPA process requires a commitment of time and a willingness to share information with the decisionmaking agency and other citizens. You may participate as an individual, get involved by working with other interested individuals or organizations, or by working through your local, Tribal, or State government. For example, if an agency is taking an action for which your local, State or Tribal government has special expertise or approval authority, the appropriate State, local or Tribal agency can become a “cooperating agency” with the Federal agency.⁵⁰ This formal status does not increase their role in decisionmaking, but it does allow the governments to use their knowledge and authorities to help shape the federal decisionmaking.

Another way to participate is to check with local experts such as biologists or economists at a university to assist with your review of the NEPA analyses and documents. You can also form study groups to review environmental impact analyses and enlist experts to review your comments on the documents. There are many examples, such as the one in the following box, of situations where citizen groups have worked with agencies to develop an alternative to a proposal where the agency adopted that alternative.

⁵⁰ CEQ NEPA Regulations, 40 C.F.R. §§ 1501.6, 1508.5.

Forest Service Herbicide Use in the Pacific Northwest

In many cases, cooperation isn't the first experience that communities and agencies share with one another. In the case of aerial herbicide spraying by the Forest Service in the 1980's across Washington and Oregon, litigation gave way to collaboration that yielded a better decision for all parties.

At issue was the use of 2,4-D, a herbicide comprising half of the well known Agent Orange, which was being sprayed on large tracts of clear-cut forest in an effort to suppress competition with the replanted conifers from all other plants, including native trees and grasses. In 1984, as a result of a citizen lawsuit, a federal judge ordered the Forest Service to stop herbicide use until the agency addressed the problems associated with its use. The Forest Service decided to draft a new EIS for vegetation management and thereby opened the door for public involvement in their decision.

A coalition of tree planters, scientists, rural residents, and herbicide reform activists volunteered to work with the Forest Service to develop an alternative that didn't rely on herbicides for vegetation management. The group identified several simple alternatives such as planting two-year old trees rather than planting seedlings, because the trees are better able to deal with encroachment. Likewise, letting native red alders grow will actually benefit new conifer growth because the alders fix nitrogen in the soils. Much to the coalition's surprise the forest supervisor selected most of the "least-herbicide" approaches for implementation.

Through NEPA, citizens were able to educate and assist the decision-makers in developing their alternatives. Central to their approach was bringing to the table alternatives that met their goals of reducing herbicide use and the goals of the decision-maker to effectively manage vegetation.

Information taken from "Standing Up for This World" by Mary O'Brien in September/October 2004 issue of *Orion*, pages 56-64.

Your involvement in the NEPA process does not have to be confined to commenting on the analysis. If the agency adopts monitoring and mitigation in the ROD, upon request, it must make available to the public the results of relevant monitoring.⁵¹ It must also, upon request,

⁵¹ CEQ NEPA Regulations, 40 C.F.R. §1505.3(d).

inform cooperating or commenting agencies on progress in carrying out mitigation measures which they have proposed and which were adopted by the agency making the decision.⁵² Community groups can also be involved in monitoring.⁵³

In summary, there are several opportunities to get involved in the NEPA process:

- ❖ when the agency prepares its NEPA procedures,
- ❖ prior to and during preparation of a NEPA analysis,
- ❖ when a NEPA document is published for public review and comment, and
- ❖ when monitoring the implementation of the proposed action and the effectiveness of any associated mitigation.

Other Processes that Require Public Involvement

When a proposed action is part of a permitting process there may also be opportunities to comment provided in the statute or regulations for that permitting process in addition to the NEPA public involvement opportunities discussed above. For example, public involvement is required by most Federal agency land use planning regulations. While this guide does not explore all of those additional possibilities for comment, the NEPA team working on a particular proposal will be familiar with the various comment periods and will be able to inform you of those opportunities. Note that the permitting and NEPA processes should be integrated or run concurrently in order to have an effective and efficient decisionmaking process.

⁵² CEQ NEPA Regulations, 40 C.F.R. §1505.3(c).

⁵³ See www.malpaiborderlandsgroup.org/science.asp for discussion of work undertaken by the Science Advisory Committee of the Malpai Borderlands Group in southeastern Arizona and southwestern New Mexico.

Public Comment Periods

Agencies are required to make efforts to provide meaningful public involvement in their NEPA processes.⁵⁴ Citizens involved in the process should ensure that they know how agencies will inform the public that an action is proposed and the NEPA process is beginning (via Federal Register, newspapers, direct mailing, etc.); that certain documents are available; and that preliminary determinations have been made on the possible environmental effects of the proposal (e.g., what level of analysis the agency will initially undertake).

Agencies solicit different levels of involvement when they prepare an EA versus an EIS. In preparing an EIS, agencies are likely to have public meetings and are required to have a 45 day comment period after the draft EIS is made available. In the case of an agency preparing an EA, the CEQ regulations require the agency to involve the public to the extent practicable, but each agency has its own guidelines about how to involve the public for EAs. In any case, citizens are entitled to receive “environmental documents”, such as EAs, involved in the NEPA process.⁵⁵

In terms of a specific agency, required public comment periods associated with an EA or an EIS can be found in its NEPA implementing procedures. In some cases, the draft EIS that an agency prepares may be extremely long. In such cases, an agency may grant requests to extend the comment period to ensure enough time for the public and other agencies to review and comment.

Citizens who want to raise issues with the agency should do so at the earliest possible stage in the process. Agencies are much more likely to evaluate a new alternative or address a concern if it is raised in a timely manner. And the Supreme Court has held in two NEPA cases that if a person or organization expects courts to address an issue, such as evaluating a particular alternative, the issue must have been raised to the agency at a point in the administrative process when it can be meaningfully considered unless the issue involves a flaw in the agency’s analysis that is so obvious that there is no need for a commentator to point it out specifically.

⁵⁴ CEQ NEPA Regulations, 40 C.F.R. §§ 1501.4(b), 1506.6(b).

⁵⁵ CEQ NEPA Regulations, 40 C.F.R. §§ 1506.6, 1508.10.

How to Comment

Comments may be the most important contribution from citizens. Accordingly, comments should be clear, concise, and relevant to the analysis of the proposed action. Take the time to organize thoughts and edit the document submitted.⁵⁶ As a general rule, the tone of the comments should be polite and respectful. Those reviewing comments are public servants tasked with a job, and they deserve the same respect and professional treatment that you and other citizens expect in return. Comments that are solution oriented and provide specific examples will be more effective than those that simply oppose the proposed project. Comments that contribute to developing alternatives that address the purpose and need for the action are also effective. They are particularly helpful early in the NEPA process and should be made, if at all possible, during scoping, to ensure that reasonable alternatives can be analyzed and considered early in the process.

In drafting comments, try to focus on the purpose and need of the proposed action, the proposed alternatives, the assessment of the environmental impacts of those alternatives, and the proposed mitigation. It also helps to be aware of what other types of issues the decisionmaker is considering in relationship to the proposed action.

Commenting is not a form of “voting” on an alternative. The number of negative comments an agency receives does not prevent an action from moving forward. Numerous comments that repeat the same basic message of support or opposition will typically be responded to collectively. In addition, general comments that state an action will have “significant environmental effects” will not help an agency make a better decision unless the relevant causes and environmental effects are explained.

Finally, remember that decisionmakers also receive other information and data such as operational and technical information related to implementing an action that they will have to consider when making a final decision.

⁵⁶ There are many reference books for how to research issues, review documents, and write comments. One in particular is “The Art of Commenting” by Elizabeth Mullin from the Environmental Law Institute (Mullin, Elizabeth D. 2000. *The Art of Commenting: How to Influence Environmental Decisionmaking with Effective Comments*, Environmental Law Institute. Washington, DC). Another useful reference for those involved in commenting on transportation projects is the American Association of State Highway and Transportation Officials (AASHTO) Practitioner’s Handbook 05-Utilizing Community Advisory Committees for NEPA Studies, December, 2006, available at <http://environment.transportation.org> or available through AASHTO’s Center for Environmental Excellence by calling (202) 624-3635.

What If Involvement Isn't Going Well?

For the purposes of this discussion, “not going well” means that you or your organization believes that the lead agency isn't giving the public sufficient opportunity to get involved or isn't using that involvement effectively. Perhaps you think that the agency should hold a public meeting, and it refuses to do so. Or you or your community or group has developed an alternative that you think meets the purpose and need of the proposed action and reflects the policies set forth in NEPA, but the agency says it won't analyze it in the NEPA document. Maybe you want an extension of the comment period because the document is very lengthy, and you simply need more time to review it. Or maybe you feel that communications between your organization and the lead agency have, for some reason, not been constructive.

The most appropriate steps to take if you find yourself in these kinds of situations always depend, of course, on the particular people, timing and proposal at hand. Nonetheless, here are some possible factors and courses of action to consider.

Don't Wait Too Long

First, don't wait too long to raise your concerns; raise them as soon as practicable. If you just sit back and hope that things will get “better” or that your comments will have greater effect later, you may hear that “you should have raised this sooner.” At times, waiting can be detrimental to you as well as to the rest of the public and the agency involved. For example, if you feel strongly that a particular alternative should be addressed and do not raise it during the scoping process, then it will not get the benefit of comparative analysis with the other alternatives. In addition, it could result in a more expensive and lengthy process (costing taxpayers, including yourself, more) if your delayed suggestion results in the agency deciding to issue a supplemental EIS analyzing that alternative. Or if you, or your organization, later go to court to argue that a certain alternative should have been analyzed in the NEPA document, the judge may find that the court won't consider that information because you should have raised your concern earlier during the NEPA process.

Contact the Agency

Your first line of recourse should be with the individual that the agency has identified as being in charge of this particular process.

See if you can sit down with him or her to discuss your concern(s). You may be pleasantly surprised at the response.

Other Assistance

If, for some reason, you believe that the process ahead may be particularly contentious or challenging, given a past history of community conflict or deeply divided interests, consider raising with the lead agency the possibility of designing a collaborative process with outside assistance.

One source of such assistance is the U.S. Institute for Environmental Conflict Resolution. Located in Tucson, Arizona, as part of the Morris K. Udall Foundation, the Institute is a Federal entity that offers neutral environmental conflict resolution design, facilitation, education, training, and mediation. Anyone, whether in or out of government, can call the Institute and ask to speak to a professional staff person to discuss the potential for the Institute's involvement in a proposed federal action. You might want to look at its website at www.ecr.gov or contact the Institute to get a better sense of who they are and what they do.⁵⁷ There may also be an environmental conflict resolution office in your state that can provide assistance, and there are also many other individuals and organizations in the private sector that provide various types of conflict resolution services. The U.S. Institute also maintains a publicly accessible roster of environmental mediators and facilitators (available at www.ecr.gov by clicking on "Resources").

NEPA's Requirements

Perhaps your concern involves understanding a legal requirement. There are, of course, many ways to obtain the advice of lawyers knowledgeable about the NEPA process: the lead agency, private attorneys, and public interest attorneys. Build your own understanding by reading information on the NEPA net website at <http://www.NEPA.gov>. You may also call the General Counsel's office or the Associate Director for NEPA Oversight at the Council on Environmental Quality for assistance in interpreting NEPA's legal requirements or for advice and assistance if you have tried to work with the lead agency but feel those efforts have been unsuccessful (see Appendix D for contact information).

⁵⁷ The Institute can be contacted via mailing address: U.S. Institute for Environmental Conflict Resolution, 130 S. Scott Ave. Tucson, AZ 85701; phone: (520) 901-8501; or electronic mail: usiecr@ecr.gov. You might also be interested in reviewing the April 2005 report of the National Environmental Conflict Resolution Advisory Committee that discusses the linkages between NEPA's policies and environmental conflict resolution and is available at <http://www.ecr.gov> by clicking on "Resources" and "NEPA and ECR".

Remedies Available

Finally, of course, there are both administrative and judicial remedies available. A few Federal agencies, such as the Bureau of Land Management and the Forest Service, have an administrative appeals process. Each process is specific to that agency. If an appeal is available, you may find it beneficial to invoke it to try to resolve your concerns with the agency's decisions without the need for a legal challenge. Moreover, a statute or agency regulation may require you to exhaust such an appeal procedure before seeking judicial review. Citizens who believe that a Federal agency's actions violate NEPA may seek judicial review (after any required administrative appeals) in Federal court under the Administration Procedures Act. If you are represented by a lawyer, you should consult with him or her about appropriate options and about communicating with the Federal agencies.

Final Thoughts

This guide was developed to explain the National Environmental Policy Act (NEPA), how it is implemented, and how people outside the Federal government — individual citizens, private sector applicants, members of organized groups, or representatives of Tribal, State, or local government agencies — can better participate in the assessment of environmental impacts conducted by Federal agencies. To learn more about CEQ and NEPA, visit our web sites at <http://www.whitehouse.gov/ceq> and <http://www.nepa.gov> or contact the CEQ Associate Director for NEPA Oversight at (202) 395-5750. Your thoughts and comments on improving this Guide for future editions are always welcome and can be addressed to:

CEQ NEPA Citizens Guide
722 Jackson Place, NW
Washington, DC 20503

Appendix A

NEPAnet and How to Use It

NEPAnet
<http://www.NEPA.gov>

NEPAnet is the Council on Environmental Quality's NEPA website which is supported by the Department of Energy. It contains a wealth of information related to NEPA as it has developed over the years in agencies and through the courts. Guidance as well as studies and reports from CEQ can be accessed from the site; and information on NEPA training can also be found.

Under the "National Environmental Policy Act (NEPA)" section there are several useful links including:

- ❖ The NEPA Statute
- ❖ Executive Orders
- ❖ CEQ Regulations for Implementing NEPA
- ❖ Individual Federal Agency Procedures for Implementing NEPA*
- ❖ CEQ Guidance; topics include:
 - Environmental Conflict Resolution
 - Emergency Actions
 - Cumulative Effects Analysis
 - Cooperating Agencies

** The agency implementing procedures can be accessed here and are mentioned throughout the Citizen's Guide as an important part of the process.*

-
- Purpose and Need
 - Forest Health Projects
 - Environmental Justice
 - Transboundary Impacts
 - Pollution Prevention
 - Scoping
 - Forty Most Asked Questions Concerning CEQ's NEPA Regulations
 - Wetlands
 - Prime Agricultural Land
 - Wild and Scenic Rivers
 - ❖ Federal Agency NEPA Web Sites
 - ❖ Federal NEPA Contacts
 - ❖ State Information
 - ❖ Tribal Information

The other sections provide information about:

- ❖ CEQ NEPA Studies
- ❖ CEQ NEPA Reports
- ❖ Environmental Impact Statements
- ❖ Environmental Impact Analysis
- ❖ Environmental Impact Assessment Professional Organizations
- ❖ International Environmental Impact Assessments
- ❖ NEPA Litigation
- ❖ NEPA Case law
- ❖ NEPA Training Information

Appendix B

The Federal Register and How to Use It

<http://www.gpoaccess.gov/fr/index.html>

The Federal Register is the official daily publication for rules, proposed rules, and notices of Federal agencies and organizations, as well as executive orders and other presidential documents. It is updated daily by 6 a.m. and is published Monday through Friday, except Federal holidays.

This is where you'll find notices from Federal agencies regarding their NEPA actions. Information on the availability of documents, schedule of meetings, and notices of intent to prepare EISs are also published in the Federal Register. In addition, EPA publishes a list of EISs that they have received from agencies each week, and a summary of ratings on EISs that they have reviewed.

The easiest way to pull up notices is to have as much information as possible. Key words such as the name of the agency, location of the action, date or date ranges of the publication are all helpful in the search.

Appendix C

EPA's EIS Rating System

EPA's Environmental Impact Statement Rating System Criteria

<http://www.epa.gov/compliance/nepa/comments/ratings.html>

This website includes information about EISs that have been filed with EPA, EISs that are available for public comment, and information about EPA's review and rating of individual EISs.

EPA has developed a set of criteria for rating draft EISs. The rating system provides a basis upon which EPA makes recommendations to the lead agency for improving the draft EIS.

- ❖ Rating the Environmental Impact of the Action
- ❖ Rating the Adequacy of the Draft Environmental Impact Statement (EIS)

Rating The Environmental Impact of The Action

- ❖ **LO (Lack of Objections):** The review has not identified any potential environmental impacts requiring substantive changes to the preferred alternative. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposed action.
- ❖ **EC (Environmental Concerns):** The review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce the environmental impact.

❖ **EO (Environmental Objections):** The review has identified significant environmental impacts that should be avoided in order to adequately protect the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no action alternative or a new alternative). The basis for environmental Objections can include situations:

1. Where an action might violate or be inconsistent with achievement or maintenance of a national environmental standard;
2. Where the Federal agency violates its own substantive environmental requirements that relate to EPA's areas of jurisdiction or expertise;
3. Where there is a violation of an EPA policy declaration;
4. Where there are no applicable standards or where applicable standards will not be violated but there is potential for significant environmental degradation that could be corrected by project modification or other feasible alternatives; or
5. Where proceeding with the proposed action would set a precedent for future actions that collectively could result in significant environmental impacts.

❖ **EU (Environmentally Unsatisfactory):** The review has identified adverse environmental impacts that are of sufficient magnitude that EPA believes the proposed action must not proceed as proposed. The basis for an environmentally unsatisfactory determination consists of identification of environmentally objectionable impacts as defined above and one or more of the following conditions:

1. The potential violation of or inconsistency with a national environmental standard is substantive and/or will occur on a long-term basis;
2. There are no applicable standards but the severity, duration, or geographical scope of the impacts associated with the proposed action warrant special attention; or

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3. The potential environmental impacts resulting from the proposed action are of national importance because of the threat to national environmental resources or to environmental policies.

Rating The Adequacy of The Draft Environmental Impact Statement (EIS)

- ❖ **1 (Adequate):** The draft EIS adequately sets forth the environmental impact(s) of the preferred alternative and those of the alternatives reasonably available to the project or action. No further analysis or data collection is necessary, but the reviewer may suggest the addition of clarifying language or information.
- ❖ **2 (Insufficient Information):** The draft EIS does not contain sufficient information to fully assess environmental impacts that should be avoided in order to fully protect the environment, or the reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analyzed in the draft EIS, which could reduce the environmental impacts of the proposal. The identified additional information, data, analyses, or discussion should be included in the final EIS.
- ❖ **3 (Inadequate):** The draft EIS does not adequately assess the potentially significant environmental impacts of the proposal, or the reviewer has identified new, reasonably available, alternatives that are outside of the spectrum of alternatives analyzed in the draft EIS, which should be analyzed in order to reduce the potentially significant environmental impacts. The identified additional information, data, analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. This rating indicates EPA's belief that the draft EIS does not meet the purposes of NEPA and/or the Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS.

Appendix D

Agency NEPA Contacts

*<http://www.NEPA.gov>
<http://ceq.eh.doe.gov/nepa/contacts.cfm>*

The list of Federal NEPA Contacts is maintained on NEPAnet (*<http://www.NEPA.gov>*) under the heading “National Environmental Policy Act (NEPA)” and is periodically updated.

The complete list is available via the link entitled “Federal NEPA Contacts” or available directly at *<http://ceq.eh.doe.gov/nepa/contacts.cfm>*. If you do not have computer access, call CEQ at (202) 395-5750 for assistance.

The CEQ NEPA Contacts are:

Council on Environmental Quality
722 Jackson Place, NW
Washington, DC 20503
Phone: 202-395-5750
Fax: 202-456-6546

Mr. Horst Greczmiel, Associate Director for NEPA Oversight
Ms. Dinah Bear, General Counsel
Mr. Edward (Ted) Boling, Deputy General Counsel

Appendix E

Some Useful Definitions from the Council on Environmental Quality NEPA Implementing Regulations

Excerpts from 40 CFR part 1508
http://ceq.eh.doe.gov/nepa/regs/ceq/toc_ceq.htm

Section 1508.4 Categorical exclusion.

“Categorical exclusion” means a category of actions which do not individually or cumulatively have a significant effect on the human environment and which have been found to have no such effect in procedures adopted by a Federal agency in implementation of these regulations (Sec. 1507.3) and for which, therefore, neither an environmental assessment nor an environmental impact statement is required. An agency may decide in its procedures or otherwise, to prepare environmental assessments for the reasons stated in Sec. 1508.9 even though it is not required to do so. Any procedures under this section shall provide for extraordinary circumstances in which a normally excluded action may have a significant environmental effect.

Section 1508.5 Cooperating agency.

“Cooperating agency” means any Federal agency other than a lead agency which has jurisdiction by law or special expertise with respect to any environmental impact involved in a proposal (or a reasonable alternative) for legislation or other major Federal action significantly affecting the quality of the human environment. The selection and responsibilities of a cooperating agency are described in Sec. 1501.6. A State or local agency of similar qualifications or, when the effects are on a reservation, an Indian Tribe, may by agreement with the lead agency become a cooperating agency.

Section 1508.7 Cumulative impact.

“Cumulative impact” is the impact on the environment which results from the incremental impact of the action when added to other past,

present, and reasonably foreseeable future actions regardless of what agency (Federal or non-federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.

Section 1508.8 Effects.

“Effects” include:

- (a) Direct effects, which are caused by the action and occur at the same time and place.
- (b) Indirect effects, which are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable. Indirect effects may include growth inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rate, and related effects on air and water and other natural systems, including ecosystems.

Effects and impacts as used in these regulations are synonymous. Effects includes ecological (such as the effects on natural resources and on the components, structures, and functioning of affected ecosystems), aesthetic, historic, cultural, economic, social, or health, whether direct, indirect, or cumulative. Effects may also include those resulting from actions which may have both beneficial and detrimental effects, even if on balance the agency believes that the effect will be beneficial.

Section 1508.9 Environmental assessment.

“Environmental assessment”:

- (a) Means a concise public document for which a Federal agency is responsible that serves to:
 - 1. Briefly provide sufficient evidence and analysis for determining whether to prepare an environmental impact statement or a finding of no significant impact.
 - 2. Aid an agency’s compliance with the Act when no environmental impact statement is necessary.
 - 3. Facilitate preparation of a statement when one is necessary.

(b) Shall include brief discussions of the need for the proposal, of alternatives as required by section 102(2)(E), of the environmental impacts of the proposed action and alternatives, and a listing of agencies and persons consulted.

Section 1508.11 Environmental impact statement.

“Environmental impact statement” means a detailed written statement as required by section 102(2)(C) of the Act.

Section 1508.12 Federal agency.

“Federal agency” means all agencies of the Federal Government. It does not mean the Congress, the Judiciary, or the President, including the performance of staff functions for the President in his Executive Office. It also includes for purposes of these regulations States and units of general local government and Indian Tribes assuming NEPA responsibilities under section 104(h) of the Housing and Community Development Act of 1974.

Section 1508.13 Finding of no significant impact.

“Finding of no significant impact” means a document by a Federal agency briefly presenting the reasons why an action, not otherwise excluded (Sec. 1508.4), will not have a significant effect on the human environment and for which an environmental impact statement therefore will not be prepared. It shall include the environmental assessment or a summary of it and shall note any other environmental documents related to it (Sec. 1501.7(a)(5)). If the assessment is included, the finding need not repeat any of the discussion in the assessment but may incorporate it by reference.

Section 1508.14 Human environment.

“Human environment” shall be interpreted comprehensively to include the natural and physical environment and the relationship of people with that environment. (See the definition of “effects” (Sec. 1508.8).) This means that economic or social effects are not intended by themselves to require preparation of an environmental impact statement. When an environmental impact statement is prepared and economic or social and natural or physical environmental effects are interrelated, then the environmental impact statement will discuss all of these effects on the human environment.

Section 1508.16 Lead agency.

“Lead agency” means the agency or agencies preparing or having taken primary responsibility for preparing the environmental impact statement.

Section 1508.18 Major federal action.

“Major federal action” includes actions with effects that may be major and which are potentially subject to federal control and responsibility. Major reinforces but does not have a meaning independent of significantly (Sec. 1508.27). Actions include the circumstance where the responsible officials fail to act and that failure to act is reviewable by courts or administrative tribunals under the Administrative Procedure Act or other applicable law as agency action.

(a) Actions include new and continuing activities, including projects and programs entirely or partly financed, assisted, conducted, regulated, or approved by Federal agencies; new or revised agency rules, regulations, plans, policies, or procedures; and legislative proposals (Secs. 1506.8, 1508.17). Actions do not include funding assistance solely in the form of general revenue sharing funds, distributed under the State and Local Fiscal Assistance Act of 1972, 31 U.S.C. 1221 et seq., with no Federal agency control over the subsequent use of such funds. Actions do not include bringing judicial or administrative civil or criminal enforcement actions.

(b) Federal actions tend to fall within one of the following categories:

1. Adoption of official policy, such as rules, regulations, and interpretations adopted pursuant to the Administrative Procedure Act, 5 U.S.C. 551 et seq.; treaties and international conventions or agreements; formal documents establishing an agency’s policies which will result in or substantially alter agency programs.
2. Adoption of formal plans, such as official documents prepared or approved by Federal agencies which guide or prescribe alternative uses of federal resources, upon which future agency actions will be based.

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3. Adoption of programs, such as a group of concerted actions to implement a specific policy or plan; systematic and connected agency decisions allocating agency resources to implement a specific statutory program or executive directive.
 4. Approval of specific projects, such as construction or management activities located in a defined geographic area. Projects include actions approved by permit or other regulatory decision as well as federal and federally assisted activities.

Section 1508.20 Mitigation.

“Mitigation” includes:

- (a) Avoiding the impact altogether by not taking a certain action or parts of an action.
- (b) Minimizing impacts by limiting the degree or magnitude of the action and its implementation.
- (c) Rectifying the impact by repairing, rehabilitating, or restoring the affected environment.
- (d) Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action.
- (e) Compensating for the impact by replacing or providing substitute resources or environments.

Section 1508.22 Notice of intent.

“Notice of intent” means a notice that an environmental impact statement will be prepared and considered. The notice shall briefly:

- (a) Describe the proposed action and possible alternatives.
- (b) Describe the agency’s proposed scoping process including whether, when, and where any scoping meeting will be held.
- (c) State the name and address of a person within the agency who can answer questions about the proposed action and the environmental impact statement.

Section 1508.23 Proposal.

“Proposal” exists at that stage in the development of an action when an agency subject to the Act has a goal and is actively preparing to make a decision on one or more alternative means of accomplishing that goal and the effects can be meaningfully evaluated. Preparation of an environmental impact statement on a proposal should be timed (Sec. 1502.5) so that the final statement may be completed in time for the statement to be included in any recommendation or report on the proposal. A proposal may exist in fact as well as by agency declaration that one exists.

Section 1508.25 Scope.

“Scope” consists of the range of actions, alternatives, and impacts to be considered in an environmental impact statement. The scope of an individual statement may depend on its relationships to other statements (Secs. 1502.20 and 1508.28). To determine the scope of environmental impact statements, agencies shall consider 3 types of actions, 3 types of alternatives, and 3 types of impacts. They include:

- (a) Actions (other than unconnected single actions) which may be:
 - (1) Connected actions, which means that they are closely related and therefore should be discussed in the same impact statement. Actions are connected if they:
 - (i) Automatically trigger other actions which may require environmental impact statements.
 - (ii) Cannot or will not proceed unless other actions are taken previously or simultaneously.
 - (iii) Are interdependent parts of a larger action and depend on the larger action for their justification.
 - (2) Cumulative actions, which when viewed with other proposed actions have cumulatively significant impacts and should therefore be discussed in the same impact statement.
 - (3) Similar actions, which when viewed with other reasonably foreseeable or proposed agency actions, have similarities that provide a basis for evaluating their environmental consequences together, such as common timing or geography. An agency may

wish to analyze these actions in the same impact statement. It should do so when the best way to assess adequately the combined impacts of similar actions or reasonable alternatives to such actions is to treat them in a single impact statement.

(b) Alternatives, which include:

- (1) No action alternative.
- (2) Other reasonable courses of actions.
- (3) Mitigation measures (not in the proposed action).

(c) Impacts, which may be: (1) Direct; (2) indirect; (3) cumulative.

Section 1508.27 Significantly.

“Significantly” as used in NEPA requires considerations of both context and intensity:

(a) Context. This means that the significance of an action must be analyzed in several contexts such as society as a whole (human, national), the affected region, the affected interests, and the locality. Significance varies with the setting of the proposed action. For instance, in the case of a site-specific action, significance would usually depend upon the effects in the locale rather than in the world as a whole. Both short- and long-term effects are relevant.

(b) Intensity. This refers to the severity of impact. Responsible officials must bear in mind that more than one agency may make decisions about partial aspects of a major action. The following should be considered in evaluating intensity:

- (1) Impacts that may be both beneficial and adverse. A significant effect may exist even if the Federal agency believes that on balance the effect will be beneficial.
- (2) The degree to which the proposed action affects public health or safety.
- (3) Unique characteristics of the geographic area such as proximity to historic or cultural resources, park

lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas.

- (4) The degree to which the effects on the quality of the human environment are likely to be highly controversial.
- (5) The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks.
- (6) The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration.
- (7) Whether the action is related to other actions with individually insignificant but cumulatively significant impacts. Significance exists if it is reasonable to anticipate a cumulatively significant impact on the environment. Significance cannot be avoided by terming an action temporary or by breaking it down into small component parts.
- (8) The degree to which the action may adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historical resources.
- (9) The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act of 1973.
- (10) Whether the action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment.

Section 1508.28 Tiering.

“Tiering” refers to the coverage of general matters in broader environmental impact statements (such as national program or policy statements) with subsequent narrower statements or environmental analyses (such as regional or basinwide program statements or ultimately site-specific statements) incorporating by reference the

general discussions and concentrating solely on the issues specific to the statement subsequently prepared. Tiering is appropriate when the sequence of statements or analyses is:

(a) From a program, plan, or policy environmental impact statement to a program, plan, or policy statement or analysis of lesser scope or to a site-specific statement or analysis.

(b) From an environmental impact statement on a specific action at an early stage (such as need and site selection) to a supplement (which is preferred) or a subsequent statement or analysis at a later stage (such as environmental mitigation). Tiering in such cases is appropriate when it helps the lead agency to focus on the issues which are ripe for decision and exclude from consideration issues already decided or not yet ripe.