

1 **SECTION 2.0**

2 **PROPOSED ACTION AND ALTERNATIVES**

3 **2.1 ALTERNATIVES DEVELOPMENT AND SCREENING**

4 The USACE regulatory permit review process requires a detailed analysis of alternative highway
5 alignments and alternative project site plans to demonstrate the avoidance and minimization of
6 impacts on the aquatic resources to the greatest extent possible. The analysis must also address
7 the public interest factors that are relevant to the project. NEPA requires that a No Build
8 Alternative be analyzed to determine the environmental consequences of not undertaking the
9 proposed project, and thereby providing a framework for measuring the benefits and adverse
10 effects of other alternatives.

11 In addition to the No Build Alternative, a range of reasonable alternatives to meet the purpose and
12 need of the proposed action was formulated through input by CEMVN, LADOTD, local
13 government agencies, the public, stakeholders, and cooperating resource and regulatory agencies.
14 Those alternatives are composed of a number of alternative alignment corridors for the proposed
15 highway. Numerous input opportunities were used during the alternative development and
16 evaluation process, including the following:

- 17 • Public Meetings (June 25–27, 2002; June 18, 2003; July 22–24, 2003; July 27–29,
18 2004)—Numerous public meetings were conducted by LADOTD to gather input from
19 local residents and stakeholders regarding potential highway corridor alignments.
- 20 • Interagency Meetings—Regularly scheduled meetings were held with interested federal
21 and state agency representatives to discuss the project.
- 22 • Scoping Meeting (January 22, 2009)—A scoping meeting was held to solicit public
23 comments on issues or concerns that should be addressed in the EIS.

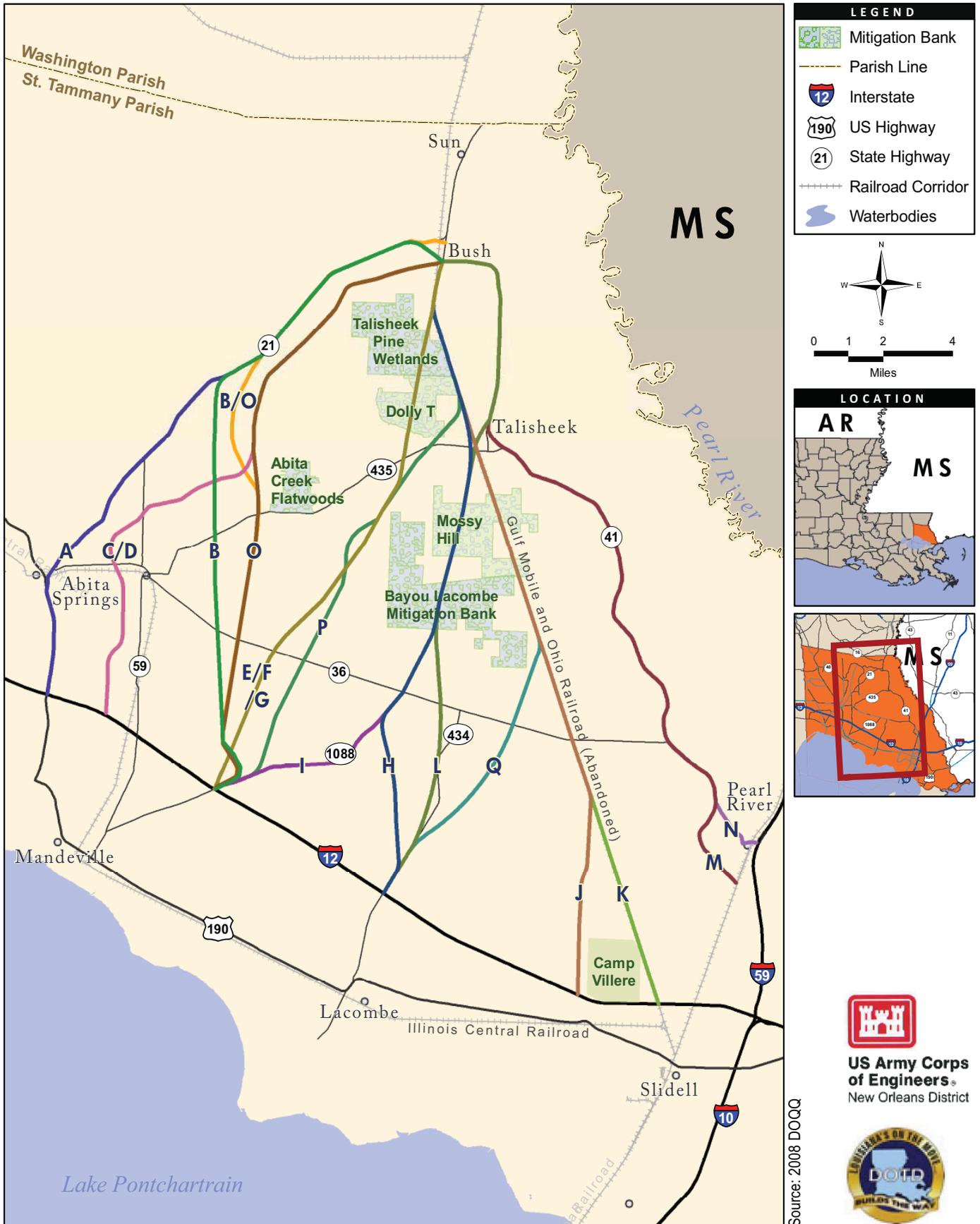
24 Pursuant to CWA section 404(b), the USACE defines practicable alternatives as those that are,
25 “available and capable of being done after taking into consideration cost, existing technology, and
26 logistics in light of overall project purposes.” For the purposes of this project, an alternative is
27 considered practicable with regard to cost if it is not prohibitively costly when compared to other
28 projects that are similar in size, scale, and context. The technology to build a high-speed, four-
29 lane highway to meet the project purpose and need exists for all alternatives. Logistically, it is
30 possible to construct a four-lane highway that meets the project purpose and need, if it is
31 appropriately located to do so.

32 **2.1.1 Description of Alternatives**

33 During LADOTD’s alternatives development process, 64 alternatives were developed and then
34 further reduced to 17 alternatives (Burk-Kleinpeter 2004). The 17 alternatives were revised to
35 minimize impacts to the human and natural environment, which resulted in Alternatives C and D
36 being combined into Alternative C/D, and Alternatives E, F, and G being combined into
37 Alternative E/F/G. At the request of the Interagency Team, another alternative was added that
38 combined Alternative B and Alternative O into Alternative B/O to minimize impacts to existing
39 residences that could be impacted by Alternative B, and to optimize Alternative O by using the
40 existing LA 21 route instead of constructing a new road parallel to LA 21. Those revisions
41 resulted in a total of 13 alternatives, plus the No Build Alternative, to be considered (Figure 2-1).
42 A brief description of each alternative follows.

43 **No Build Alternative:** Under the No Build Alternative, CEMVN would not issue any permits for
44 the proposed highway project. Including the CEQ-required No Build Alternative in the EIS serves

Figure 2-1 - Alternatives considered



1 as a benchmark against which the build alternatives can be evaluated. If the proposed highway is
2 not constructed, project-related impacts would be avoided.

3 **Build Alternatives:**

- 4 1. Alternative A: Widen LA 21 to US 190, from Bush to US 190 near Abita Springs.
- 5 2. Alternative B/O: Widen LA 21 to Waldheim, then south to LA 1088 near I-12.
- 6 3. Alternative C/D: New road paralleling LA 21, with a bypass west of Abita Springs to
7 meet I-12 between LA 59 and US 190.
- 8 4. Alternative E/F/G: New road from Bush to LA 1088 at I-12 (slight jog along abandoned
9 railroad corridor, north of Talisheek).
- 10 5. Alternative H: New road from Bush heading south to LA 434 at I-12.
- 11 6. Alternative I: New road along the abandoned IC Railroad south of Talisheek, connecting
12 to LA 36, then widen LA 1088 to I-12.
- 13 7. Alternative J: New road along abandoned railroad corridor, from LA 36 along Airport
14 Road to meet I-12 at the Northshore Mall.
- 15 8. Alternative K: New road along abandoned railroad corridor, to meet I-12 near US 11.
- 16 9. Alternative L: Widen LA 41 to Talisheek, then south to meet LA 434 and widen LA 434
17 to I-12.
- 18 10. Alternative M: Widen LA 41 to Pearl River, bypassing to the west to connect to I-59 and
19 then to I-12.
- 20 11. Alternative N: Widen LA 41 to Pearl River, then connect I-59 to I-12.
- 21 12. Alternative P: Along abandoned railroad corridor then south to meet LA 36, then to LA
22 1088, following LA 1088 to I-12.
- 23 13. Alternative Q: Along abandoned railroad corridor, then west to meet LA 36 at LA 434,
24 below Bayou Lacombe Mitigation Bank and follow LA 434 to I-12.

25 **2.1.2 Alternatives Screening Analysis**

26 The alternatives screening analysis consisted of two stages. Stage I screening involved a fatal-
27 flaws approach as detailed in Section 2.1.2.1. Any alternative that was determined to be fatally
28 flawed was not carried forward to the second alternative screening stage. Stage II screening
29 evaluated the remaining alternatives against screening criteria developed during the alternatives
30 development process as described in Section 2.1.2.2. As described below, an alternative must
31 have passed both screening stages to be carried forward for detailed impacts analysis.

32 **2.1.2.1 Stage I—Fatal-Flaws Approach**

33 During the first stage of preliminary screening analysis, a fatal-flaws approach was used to
34 evaluate the 13 alternatives. An alternative was considered fatally flawed if it met one of the
35 following criteria:

- 36 • If it directly impacts wetland mitigation banks in the project area that have no
37 mitigation credits available at the time this EIS was initiated in early 2009 (Talisheek
38 Pine Wetlands Mitigation Bank or Bayou Lacombe Mitigation Bank);
- 39 • If it directly impacts a military installation in the project area (Camp Villere)
- 40 • If it has a terminus that would require the creation of a new interchange, which would
41 fail to meet American Association of State Highway and Transportation Officials

(AASHTO) requirements for interchange spacing. AASHTO requires interchanges to be greater than one mile apart (AASHTO 2004)

Using that approach, the following five alternatives were identified as fatally flawed and not carried forward to Stage II analysis:

- Alternative E/F/G—Directly affects the Talisheek Pines Wetlands Mitigation Bank.
- Alternatives H, I, and L—Directly impacts the Bayou Lacombe Wetland Mitigation Bank.
- Alternative K—Requires a new interchange to be constructed 0.95 mile west of the US 11 interchange (Exit 83), therefore not meeting AASHTO requirements for interchange spacing.

On the basis of the results of the Stage I screening analysis using the fatal-flaws approach, the eight remaining alternatives (A, B/O, C/D, J, M, N, P, and Q) were carried forward to Stage II screening analysis.

2.1.2.2 Stage II—Alternatives Development Screening

In the second stage of alternatives screening, the eight remaining alternative alignments were evaluated against screening criteria developed during the alternatives development process. To be carried forward for detailed impacts analysis, an alternative must have met all four of the following criteria:

1. Legislative Mandate—Comply with Louisiana Revised Statute 47:820.2B(e) (TIMED program).
2. Arterial Linkages—Provide a four-lane arterial connection from the southern terminus of the current modern four-lane arterial portion of LA 21 in Bush to I-12.
3. Travel Time Savings—Reduce travel time from Washington and northern St. Tammany Parishes to Interstate 12.
4. Traffic Congestion Reduction—Divert through-traffic that originates in Washington and northern St. Tammany Parishes from segments of existing routes in southern suburban areas (Abita Springs and Covington), thereby freeing capacity for local trips on those existing routes.

2.1.2.2.1 Legislative Mandate

Louisiana Revised Statute 47:820.2B(e) requires, “[t]he Louisiana Highway 3241 project from Interstate 12 to Bush...shall be constructed as a [four]-lane or more highway.”

The eight alternatives carried forward for Stage II screening analysis comply with Louisiana Revised Statute 47:820.2.B (e) to construct a four-lane or more highway.

2.1.2.2.2 Arterial Linkages

The I-12 to Bush highway should provide a modern, four-lane, arterial highway from the southern terminus of the existing modern, four-lane portion of LA 21 in Bush to I-12. As configured, the four-lane section of LA 21 ends at Bush and does not provide Washington and northern St. Tammany Parishes with a modern, four-lane arterial connection to I-12, as the two-lane roadways leading south from that point to I-12 are congested in the suburban areas. Those existing routes are US 190, LA 59, and LA 21 in the vicinity of Abita Springs and Covington.

The eight alternatives carried forward for Stage II screening analysis meet the arterial linkages criteria, as they could provide a four-lane arterial connection from the southern terminus of LA 21 in Bush to I-12. Those alternatives could be optimized to minimize impacts to the social

environment, and traverse St. Tammany Parish as directly as practicable, with minimal curves. The alternatives could be designed to meet the current LADOTD design guidelines, and could incorporate access management to allow the highway to operate at high speeds. It is anticipated that the alternatives could operate at a LOS A in 2035, which is indicative of a free-flowing highway, with traffic moving at or close to the posted speed limit of 65 miles per hour for an RA-3.

2.1.2.2.3 Travel Time Savings

The I-12 to Bush highway should reduce the travel time from Washington and northern St. Tammany Parishes to I-12. Travel time savings could enhance economic growth in Washington Parish, particularly the forest-products industry near Bogalusa. While Bogalusa is convenient to the timber resource area, it is isolated in terms of connectivity to external markets (Burk Kleinpeter 2008). Travel time savings could impact the Washington Parish economy by providing quick, direct connectivity to external forestry product markets via I-12.

On the basis of the results of the traffic analysis of existing and no build conditions, Alternatives B/O, J, P, and Q could provide a travel time savings that could support and enhance economic activities in Washington Parish (Table 2-1) (Urban Systems 2011). Those four alternatives would be designed as a free-flowing highway, with traffic moving at or close to the posted speed limit of 65 miles per hour for an RA-3. Alternatives B/O and P could provide travel time savings compared to the existing routes between Bush and both US 190 and LA 434. Alternatives J and Q could provide travel time savings compared to the existing route between Bush and LA 434. Alternatives B/O, J, P, and Q would be expected to provide a nominal decrease in travel time compared to the existing route between Bush and LA 41/US 11, because those roads have excess capacity.

Table 2-1.
Range of travel time savings (in minutes)

Origin and destination	Alternatives							
	M	N	J	A	Q	C/D	B/O	P
I-12 at US 190 to Bush	0	0	0–6.4	0–10.4	2.8–13.2	5.3–15.7	9.3–19.7	9.6–20.0
	A	C/D	M	N	B/O	P	Q	J
I-12 at US 11 to Bush	0	0	3.6	3.8	4.1	4.4	7.4	11.4
	A	M	N	C/D	J	B/O	P	Q
I-12 to LA 434 to Bush	0–4.4	0–6.4	0–6.6	1.1–12.7	8.2–19.8	11.7–23.3	12.0–23.6	15.0–26.6

Source: Urban Systems 2011

Note: Estimated travel times are based on average travel speed of 65 mph on proposed alternative portions, 70 mph on I-12 and I-59, and 40 mph on the southern portion of Alternative C/D.

Alternatives A, M, and N would not be expected to provide a travel time savings from Washington and northern St. Tammany Parishes to I-12. Even though LA 21 and LA 41 can be brought up to current LADOTD design guidelines by widening and using super-elevations, those alternatives would be expected to provide only a minimal travel time savings compared to Alternatives B/O, J, P and Q. Even with the improvements to those routes, LA 21/US 190 near Abita Springs and LA 41/US 11 near Pearl River would not be expected to exceed speeds of 10 to

1 15 miles per hour in the most congested segments during peak periods, because of both the
2 existing traffic and lack of access management (Urban Systems 2011).

3 Additionally, Alternatives A, M, and N would be expected to continue to follow a meandering
4 and winding path from Bush in a generally southerly direction. As a result, travel time savings
5 would be expected to be less compared to Alternatives B/O, J, P, and Q (Table 2-1). The travel
6 time savings provided by Alternative A ranges from no savings from US 11 to Bush, up to 4
7 minutes from LA 434 to Bush, and up to 10 minutes from US 190 to Bush. Travel time savings
8 provided by Alternative M ranges from no savings from US 190 to Bush, up to 3 minutes from
9 US 11 to Bush, and up to 6 minutes from LA 434 to Bush. Travel time savings provided by
10 Alternative N ranges from no savings from US 190 to Bush, up to 3 minutes from US 11 to Bush,
11 and up to 6 minutes from LA 434 to Bush. Because Alternatives A, M, and N would be expected
12 to provide only a minimal travel time savings; they were not carried forward for additional
13 screening or detailed impacts analysis.

14 Alternative C/D would not be expected to provide a travel time savings from Washington and
15 northern St. Tammany Parishes to I-12. Although it would be a new highway and could be
16 designed to meet LADOTD design guidelines, its winding path would be expected to provide
17 only a minimal travel time savings compared to Alternatives B/O, J, P and Q. The southern
18 portion of the road would require the use of an urban arterial standard near Abita Springs, which
19 would require the design speed to be as low as 35–45 miles per hour (Burk-Kleinpeter 2008). In
20 addition, the amount of driveway and side road access that would need to be required in that
21 suburban area would make it difficult for the highway to function at a speed sufficient enough to
22 decrease travel time. As a result, travel time savings would be expected to be less compared to
23 Alternatives B/O, J, P, and Q (Table 2-1). Travel time savings ranges from no savings from US
24 11 to Bush, up to 15 minutes from US 190 to Bush, and up to 12 minutes from LA 434 to Bush.
25 Because Alternative C/D would be expected to provide only a minimal travel time savings, it was
26 not carried forward for additional screening or detailed impacts analysis.

27 **2.1.2.2.4 Traffic Congestion Reduction**

28 The I-12 to Bush highway should divert traffic and reduce congestion along existing north-south
29 routes in the project area. Those existing routes are US 190, LA 59, and LA 21 in the vicinity of
30 Abita Springs and Covington. The current four-lane section of LA 21 moves traffic onto a series
31 of two-lane, rural arterials to traverse St. Tammany Parish from north to south. While vehicles
32 travel through rural areas often unimpeded, their presence in urbanized areas can place additional
33 demand on existing congested roadways. That can lead to increased frequency of congestion,
34 travel time delays, and accidents. By diverting traffic that is traveling to and from Washington
35 and northern St. Tammany Parishes, the proposed highway could free capacity for local trips on
36 portions of the existing roads during heavy congestion periods.

37 The I-12 to Bush highway should provide an alternative to the older, two-lane, rural roadway
38 system. A four-lane arterial that meets today's design guidelines could remove a portion of the
39 vehicles that are contributing to congestion and delays in the suburban and urban areas and
40 provide a direct route to Washington and northern St. Tammany Parishes.

41 On the basis of an analysis of existing traffic demands, several roadways and intersections in the
42 project area have heavy congestions during peak periods (Urban Systems 2011). The roadways
43 and intersections in the project area, including some that provide access between Bush and the
44 approaches to I-12, have one or more segments operating at, or over, capacity (LOS E and F) as
45 summarized in Table 2-2.

Table 2-2.
Existing peak hour LOS estimates

Roadway segments	LOS
LA 59 between LA 36 and I-12 (AM & PM peak)	E
LA 36 between LA 21 and LA 59 (AM & PM peak)	E
Airport Road north of I-12 (AM & PM peak)	E
Unsignalized intersections	
LA 36 at LA 59 (southbound AM peak)	E
LA 21 at LA 59 (northbound AM peak)	F
Signalized intersections	
LA 21 at LA 36 (southbound AM peak)	E
US 190 at LA 21 (northbound AM peak)	F
LA 59 at Harrison Ave. (eastbound AM peak)	E
I-12 at LA 59 (westbound AM peak)	E
I-12 at LA 59 (eastbound AM peak)	E
I-12 at Airport Road (westbound AM peak)	F
I-12 at LA 59 (eastbound PM peak)	E
I-12 at Airport Road (westbound PM peak)	F
I-12 at Airport Road (eastbound PM peak)	E

Source: Urban Systems 2011

Results from the traffic analysis of existing and no build conditions indicate that Alternatives B/O and P would be expected to divert traffic from LA 21 and LA 59 in the vicinity of Abita Springs, which are congested (Urban Systems 2011). Alternatives J and Q would be expected to divert traffic mainly from LA 41 in the eastern portion of the project area, which has excess capacity.

An analysis of traffic diversion potential for Alternatives B/O, J, P, Q, and the No Build Alternative using the 2010 RPC traffic model to project future traffic conditions was conducted (RPC 2010). That analysis assumes the implementation of the proposed I-12 to Bush highway, the St. Tammany Parish 10-year Capital Improvement Program, and the St. Tammany Parish Long Range Plan. For each of the build alternatives, the traffic volumes generated were summarized and compared against the No Build Alternative. The value of change, expressed as estimated average daily traffic (ADT) was used to determine the potential change on selected roadways: US 190, LA 21, and LA 59. To further assist in assessing that change in traffic, additional inputs to review intersection performance at peak periods as an indicator of corridor performance were the following:

- Forecast Traffic Volumes (ADT) for corridors and corridor segments from the St. Tammany Traffic Model
- Traffic Signal Inventory (TSI) forms
- Traffic Data from Previous Studies

Alternatives B/O, J, P, and Q meet the traffic congestion reduction criteria because they could divert traffic and reduce congestion along existing north-south routes in the project area (LA 21, LA 41, and LA 59) traveling to and from Washington and northern St. Tammany Parishes (Urban Systems 2011).

2.2 ALTERNATIVES CARRIED FORWARD FOR IMPACTS ANALYSIS

On the basis of the information and evaluation presented in Section 2.1, the following alternatives have been selected for detailed impacts analysis: No Build, Alternatives B/O, J, P, and Q (Figure 2-2). Alternative B/O was selected in place of Alternatives B and O to minimize impacts to existing residences that could be impacted by Alternative B, and to optimize Alternative O by using the existing LA 21 route instead of constructing a new parallel road.

2.2.1 No Build Alternative

Under the No Build Alternative, CEMVN would not issue any permits for construction of a new modern, high-speed, four-lane highway between Bush and I-12. As a result, the existing roadway network in the region would remain in its current condition and continue to serve as the transportation network to travel between Bush and I-12. LADOTD could implement future roadway projects in the project area that could improve the transportation network, but those projects might not necessarily fully meet the purpose and need of this project. The No Build Alternative ensures that there would be no direct or indirect impacts to threatened and endangered species, wetlands, environmentally sensitive areas, aquatic resources, or historic sites. Including the CEQ-required No Build Alternative in the EIS serves as a benchmark against which build alternatives can be evaluated. If the proposed highway is not constructed, project-related impacts would be avoided. Other alternatives would have to be developed to provide anticipated project benefits.

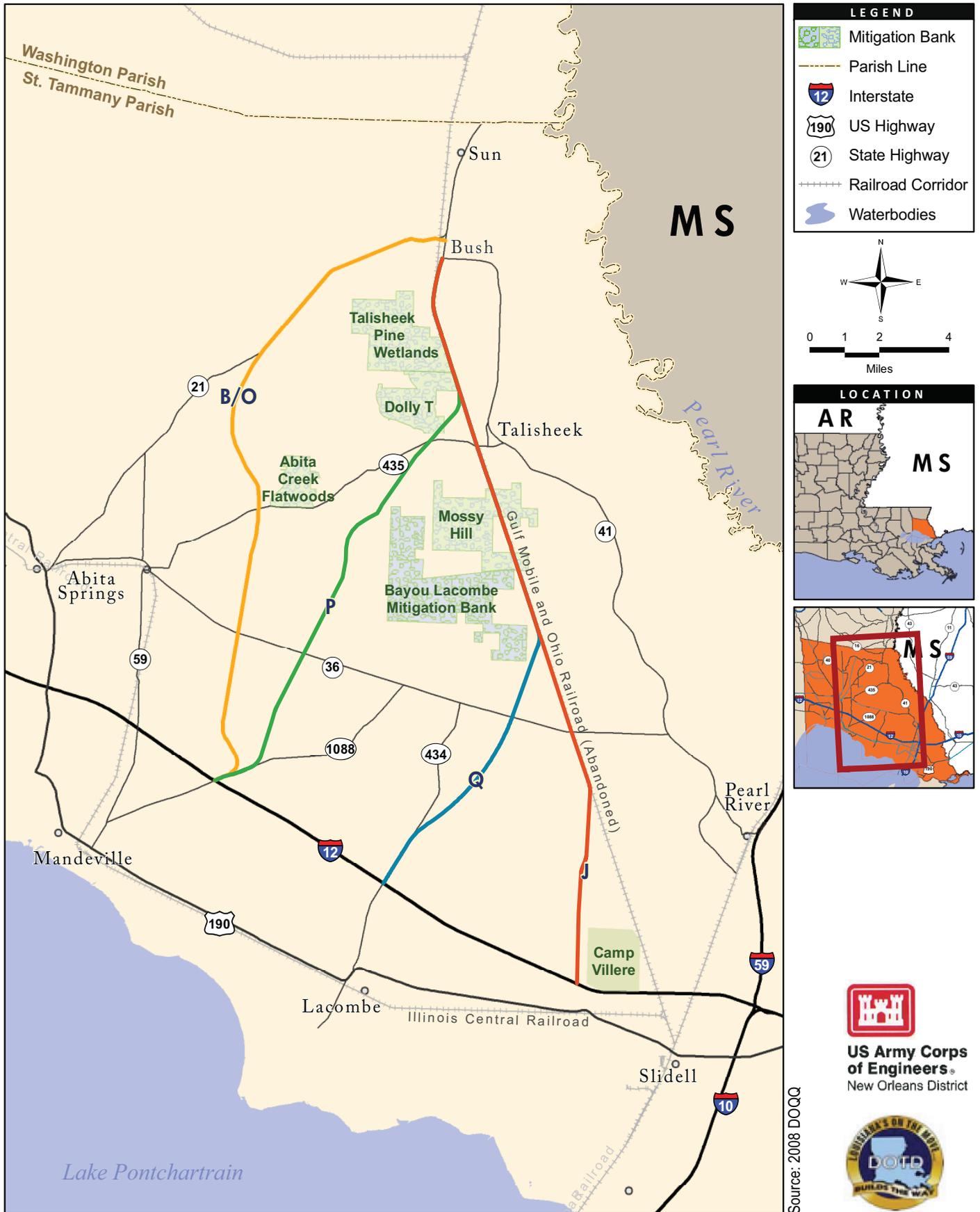
2.2.2 Alternative B/O

Alternative B/O would widen LA 21 to a four-lane highway from Bush to just north of Waldheim, then continue as a new four-lane roadway about halfway between Alternatives B and O before capturing Alternative O just north of LA 435, terminating at LA 1088 near I-12. This alternative would use as much of existing highway alignments and non-wetland areas as possible to minimize impacts to the human and natural environment. The alternative would be approximately 19.5 miles long, with 7.0 miles on existing alignment and 12.5 miles on new alignment. The majority of the alignment would consist of an RA-3 typical cross section, which would have a typical ROW width requirement of 250 feet. Control of access could be provided except where the highway follows existing LA 21 and highway crossings at LA 435 and LA 36, and the connection to LA 1088.

2.2.3 Alternative J

Alternative J would be new construction of a four-lane highway following the abandoned railroad corridor from Bush to a point due north of the Slidell Municipal Airport. From that point, the proposed route would connect to Airport Road, which ties into I-12 at an existing interchange (Exit 80). This proposed route would be approximately 21.1 miles long, with 14.2 miles using the abandoned railroad embankment, 5.4 miles on new alignment, and 1.5 miles of existing roadway. The majority of the route (17.5 miles) would consist of an RA-3 typical cross section, which would have a typical ROW width of 250 feet. The northern 0.7 mile of the route would consist of a rural arterial-2 (RA-2) cross section, while the southern 1.9 miles would have suburban arterial SA-1 cross section. Control of access to the route could be provided for the section of highway classified as RA-3 (17.5 miles), except for the segment through Talisheek (2.0 miles) and where the highway crosses LA 435 and LA 36.

Figure 2-2 - Alternatives carried forward for impacts analysis



Source: 2008 DOQQ



2.2.4 **Alternative P**

LADOTD's preferred alignment, Alternative P, would begin at the intersection of LA 41 and LA 40 in Bush and proceed southward for approximately 17.4 miles to LA 1088. The majority of the project (15.2 miles) would consist of an RA-3 typical cross section, which has a typical ROW width requirement of 250 feet. The northern 0.7 mile of the project would consist of an RA-2 cross section, which also has a ROW width of 250 feet. The exception to that design would be at the southern end of the project area. The last 1.5 miles would be designed as a suburban arterial - 1 typical section, which has a ROW width of approximately 180 feet. The proposed route would use an abandoned railroad corridor from Bush to Talisheek, a distance of approximately 2.5 miles, before turning southwesterly for approximately 13.3 miles on a new alignment to connect with LA 1088 north of I-12. Access for this route would be provided in Bush, at LA 435, at LA 36, and at the intersection with LA 1088. Crossings of existing highways would be at grade.

2.2.5 **Alternative Q**

Alternative Q would include new construction of a four-lane highway following the abandoned railroad corridor from Bush to a point approximately 1.7 miles north of LA 36. From that point, the proposed route would leave the railroad corridor and connect to LA 434, which ties into I-12 at an existing interchange (Exit 74). This alternative would be approximately 19.8 miles long, with 9.8 miles using the abandoned railroad embankment, 8.7 miles on new alignment, and 1.3 miles on existing roadway. The majority of the alternative (17.2 miles) would consist of an RA-3 typical cross section, which would have a typical ROW width of 250 feet. The northern 0.7 miles of the route would have an RA-2 cross section, with a ROW width of 250 feet. Control of access to the route could be provided for the section of highway classified as RA-3 (17.3 miles), except for the segment through Talisheek (2.0 miles) and where the highway crosses LA 435, LA 36, and connects to LA 434.

2.3 **ALTERNATIVES NOT CARRIED FORWARD FOR FURTHER ANALYSIS**

The alternatives not carried forward for further analysis on the basis of the Stage I and II alternative evaluation analysis are described in this section.

2.3.1 **Alternative A**

Alternative A would involve widening LA 21 from Bush to US 190 between Covington and Abita Springs, connecting to I-12 at the US 190 interchange (Exit 63). Even though LA 21 could be brought up to current LADOTD design guidelines by widening and using super-elevations, it would not achieve a high-speed arterial link between Bush and I-12. Even with the improvements to this route, LA 21/US 190 would not be expected to exceed speeds of 10 to 15 miles per hour in the most congested segments during peak periods because of both the existing traffic and lack of access management (Urban Systems 2011). Additionally, the route would continue to follow a meandering path from Bush in a generally southerly direction. The alternative does not meet the travel time savings criteria.

2.3.2 **Alternative C/D**

Alternative C/D would involve a new road paralleling LA 21, with a bypass west of Abita Springs to meet I-12 between LA 59 and US 190. It would require a new interchange to be constructed between the existing LA 21 (Exit 65) and US 190 (Exit 63) interchanges. The southern portion of the alternative alignment would require the use of an urban arterial standard, which would require the design speed to be lowered to 35–45 miles per hour (Burk-Kleinpeter 2008). The alternative does not meet the travel time savings criteria.

2.3.3 *Alternative E/F/G*

Alternative E/F/G would involve a new road from Bush to meet with LA 1088 at I-12. CEMVN determined that this alternative would convert 40 acres of wetlands in the Talisheek Pine Flatwood/Savanna Mitigation Bank to roadway embankment, drain an undetermined amount of additional wetlands, and isolate approximately 375 acres to the east of the highway (CEMVN 2008). The alternative is considered fatally flawed because of its direct impacts to an existing wetland mitigation bank.

2.3.4 *Alternatives H, I, and L*

Alternatives H and L would involve widening LA 41 to Talisheek, then south along Alternative I. Alternative I would be a new road along the abandoned railroad corridor south of Talisheek, connecting to LA 36, then widened to LA 1088 to I-12. Alternative H would leave Alternative I after crossing LA 36 to join LA 434 just before the interchange with I-12. Alternative L leaves Alternative I before crossing LA 36 to meet LA 434 and widened LA 434 to I-12. CEMVN determined that all three alternatives would convert approximately 58 acres of wetlands in the Bayou Lacombe Mitigation Bank to roadway embankment and drain an undetermined amount of additional wetlands (CEMVN 2008). The three alternatives are considered fatally flawed because of their impacts to an existing wetland mitigation bank.

2.3.5 *Alternative K*

Alternative K would be a new road along the abandoned railroad corridor to meet I-12 near US 11. A new interchange would be required, which would be 0.95 mile west of the US 11 interchange. The alternative is considered fatally flawed because it does not meet the AASHTO design criteria of a minimum of one mile between interchanges.

2.3.6 *Alternatives M and N*

Alternatives M and N would involve widening LA 41 to Pearl River. Alternative M would bypass Pearl River to the west and connect to I-59 and then to I-12. Alternative N would go through Pearl River and connect to I-59 and then to I-12. Even though LA 41 could be brought up to current LADOTD design guidelines by widening and using super-elevations, it would not achieve a high-speed arterial link between Bush and I-12. The alternatives do not meet the travel time savings criteria.

2.4 *SUMMARY OF ALTERNATIVES*

A summary of the alternatives considered for the proposed highway between I-12 and Bush and the screening process are presented in Table 2-3.

**Table 2-3.
Summary of alternatives**

Screening criteria	Alternatives												
	A	B/O	C/D	E/F/G	H	I	J	K	L	M	N	P	Q
Fatal flaws													
Direct effects on a wetland mitigation bank				X	X	X			X				
Direct effects on a military installation													
New interchange does not meet AASHTO design criteria								X					
Alternatives development													
Legislative mandate													
Arterial linkages													
Travel time savings	X		X							X	X		
Traffic congestion reduction													
Alternatives carried forward for impacts analysis		B/O					J					P	Q

X – does not meet screening criteria

1
2

3