

**Replace section 12-4.02C(3)(g) with:**

**12-4.02C(3)(g) Freeway Lane Requirement Charts**

Freeway lane closures must comply with the requirements shown in the following charts:

<b>Chart No. G1 Freeway Lane Requirements</b>																														
County: SF							Route/Direction: 80/EB							Post Mile: 5.0/5.5																
Closure limits: From 5th Street/Bryant Street on-ramp to 1st Street & Essex Street on-ramps																														
Hour	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24					
Mon– Thu	2	2	1	1	1	2																								
Fri		2	2	1	1	2																								
Sat				2	1	2	2																							
Sun				2	1	1	2																							
Legend:																														
<table border="0"> <tr> <td style="border: 1px solid black; width: 20px; text-align: center;">1</td> <td>Provide at least 1 through freeway lane open in the direction of travel.</td> </tr> <tr> <td style="border: 1px solid black; width: 20px; text-align: center;">2</td> <td>Provide at least 2 adjacent through freeway lanes open in the direction of travel.</td> </tr> <tr> <td style="border: 1px solid black; width: 20px; text-align: center;"> </td> <td>Work is allowed within the highway where a shoulder or lane closure is not required.</td> </tr> </table>																									1	Provide at least 1 through freeway lane open in the direction of travel.	2	Provide at least 2 adjacent through freeway lanes open in the direction of travel.		Work is allowed within the highway where a shoulder or lane closure is not required.
1	Provide at least 1 through freeway lane open in the direction of travel.																													
2	Provide at least 2 adjacent through freeway lanes open in the direction of travel.																													
	Work is allowed within the highway where a shoulder or lane closure is not required.																													
REMARKS:																														
<ol style="list-style-type: none"> <li>1. For left lanes closure only.</li> <li>2. The lanes from the 5th Street /Bryant Street on-ramp and Bus Terminal on-ramp are not to be considered through lanes with respect to this lane requirement chart. The 5th Street /Bryant Street on-ramp must remain open during any freeway lane closure.</li> <li>3. This chart must be used concurrently with chart G2.</li> </ol>																														

**Chart No. G2  
Freeway Lane Requirements**

County: SF		Route/Direction: 80/EB										Post Mile: 5.6/5.8													
Closure limits: From 1st Street & Essex Street on-ramps to Beale Street																									
Hour	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Mon–Thu	2	1	1	1	1	2	3																	4	3
Fri	2	2	1	1	1	2	2																		
Sat	3	2	2	1	1	1	2	3																	
Sun	3	2	2	2	1	1	2	2	3														4	4	3

- Legend:
- 1 Provide at least 1 through freeway lane open in the direction of travel.
  - 2 Provide at least 2 adjacent through freeway lanes open in the direction of travel.
  - 3 Provide at least 3 adjacent through freeway lanes open in the direction of travel.
  - 4 Provide at least 4 adjacent through freeway lanes open in the direction of travel.
  - Work is allowed within the highway where a shoulder or lane closure is not required.

- REMARKS:
1. For left lanes closure only.
  2. If any part of the lane closure extends upstream of the 1st Street and Essex Street on-ramps (i.e. extends to the 3 lane section of the freeway), chart G1 must be used concurrently.
  3. The 1st Street, Essex Street/Bus on-ramps, and the Bus Terminal on-ramp must be closed when the left freeway lanes are closed.

**Chart No. G3  
Freeway Lane Requirements**

County: SF	Route/Direction: 80/EB	Post Mile: 5.0/5.5
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Closure limits: From 5th Street/Bryant Street on-ramp to Sterling Street on-ramp

Hour	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Mon– Thu	2	1	1	1	1	2	2																		
Fri	2	2	1	1	1	2	2																		
Sat		2	2	1	1	1	2																		
Sun		2	1	1	1	1	1	2																	

**Legend:**

1	Provide at least 1 through freeway lane open in the direction of travel.
2	Provide at least 2 adjacent through freeway lanes open in the direction of travel.
	Work is allowed within the highway where a shoulder or lane closure is not required.

**REMARKS:**

1. For right lanes closure only.
2. The lanes from the 5th Street/Bryant Street on-ramp and Bus Terminal on-ramp are not considered through lanes with respect to this lane requirement chart. The 5th Street /Bryant Street on-ramp must remain open during any freeway lane closure.
3. This chart must be used concurrently with chart G4 if the lane closure upstream of the 1st Street and Essex Street on-ramps (i.e. extends to the 3 lane section of the freeway).

**Chart No. G4  
Freeway Lane Requirements**

County: SF		Route/Direction: 80/EB										Post Mile: 5.6/5.8													
Closure limits: From Sterling Street on-ramp to Beale Street																									
Hour	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Mon– Thu	2	1	1	1	1	2	3																	4	3
Fri	2	2	1	1	1	2	2																		
Sat	3	2	2	1	1	1	2	3																	
Sun	3	2	2	2	1	1	2	2	3														4	4	3

- Legend:
- 1 Provide at least 1 through freeway lane open in the direction of travel.
  - 2 Provide at least 2 adjacent through freeway lanes open in the direction of travel.
  - 3 Provide at least 3 adjacent through freeway lanes open in the direction of travel.
  - 4 Provide at least 4 adjacent through freeway lanes open in the direction of travel.
  - Work is allowed within the highway where a shoulder or lane closure is not required.

- REMARKS:
1. For right lanes closure only.
  2. If any part of the lane closure extends upstream of the 1st Street and Essex Street on-ramps (i.e. extends to the 3 lane section of the freeway), chart G3 must be used concurrently.
  3. The Sterling Street on-ramp must be closed when the right freeway lanes are closed.

Chart No. G5 Freeway Lane Requirements																									
County: SF							Route/Direction: 80/EB							Post Mile: 5.6/7.8											
Closure limits: From Beale Street to Treasure Island off-ramp																									
Hour	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Mon–Thu	2	1	1	1	1	2	3																4	3	
Fri	2	2	1	1	1	2	2																		
Sat	3	2	2	1	1	1	2	3																	
Sun	3	2	2	2	1	1	2	2	3													4	4	3	
Legend:																									
1 Provide at least 1 through freeway lane open in the direction of travel.																									
2 Provide at least 2 adjacent through freeway lanes open in the direction of travel.																									
3 Provide at least 3 adjacent through freeway lanes open in the direction of travel.																									
4 Provide at least 4 adjacent through freeway lanes open in the direction of travel.																									
Work is allowed within the highway where a shoulder or lane closure is not required.																									
REMARKS:																									

Chart No. G6 Freeway Lane Requirements																									
County: SF							Route/Direction: 80/WB							Post Mile: 7.8/5.6											
Closure limits: From Treasure Island on-ramp to Beale Street																									
Hour	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Mon–Thu	2	1	1	2																		4	4	3	2
Fri	2	1	1	2																			4	4	3
Sat	3	2	2	2	3	4	4																		
Sun	3	2	2	1	2	2	3	4															4	4	2
Legend:																									
1 Provide at least 1 through freeway lane open in the direction of travel.																									
2 Provide at least 2 adjacent through freeway lanes open in the direction of travel.																									
3 Provide at least 3 adjacent through freeway lanes open in the direction of travel.																									
4 Provide at least 4 adjacent through freeway lanes open in the direction of travel.																									
Work is allowed within the highway where a shoulder or lane closure is not required.																									
REMARKS:																									

**Replace section 12-4.02C(3)(j) with:**

**12-4.02C(3)(j) Complete Ramp Closure Hour Charts and Ramp Lane Requirement Charts**

Comply with the requirements for the complete ramp closure shown in the following charts:

Chart No. J1 Complete Ramp Closure Hours																									
County: SF							Route/Direction: 80/EB							Post Mile: 5.494											
Closure limits: Sterling Street On-ramp																									
Hour	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Mon–Thu	C	C	C	C	C	C	C																		
Fri	C	C	C	C	C	C	C																		
Sat			C	C	C	C	C																		
Sun				C	C	C	C	C																	
Legend:																									
<input type="checkbox"/> C Ramp may be closed completely. <input type="checkbox"/> Work is allowed within the highway where a shoulder or lane closure is not required.																									
REMARKS:																									
1. Sterling Street on-ramp must remain open when 1st Street on-ramp and Harrison/Essex Street on-ramp are closed. 2. See detour plan No. 4.																									

Chart No. J2 Complete Ramp Closure Hours																									
County: SF							Route/Direction: 80/EB							Post Mile: 5.543											
Closure limits: Essex Street On-ramp																									
Hour	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Mon–Thu	C	C	C	C	C	C	C																		
Fri	C	C	C	C	C	C	C																		
Sat			C	C	C	C	C	C	C																
Sun		C	C	C	C	C	C	C	C																
Legend:																									
<input type="checkbox"/> C Ramp may be closed completely. <input type="checkbox"/> Work is allowed within the highway where a shoulder or lane closure is not required.																									
REMARKS:																									
1. This ramp must remain open when the Sterling Street on-ramp is closed. 2. See detour plan No. 3.																									

Chart No. J3 Complete Ramp Closure Hours																									
County: SF							Route/Direction: 80/EB							Post Mile: 5.544											
Closure limits: 1st Street On-ramp																									
Hour	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Mon–Thu	C	C	C	C	C	C	C																		
Fri	C	C	C	C	C	C	C																		
Sat			C	C	C	C	C	C	C																
Sun				C	C	C	C	C	C																
Legend:																									
<input type="checkbox"/> C Ramp may be closed completely.																									
<input type="checkbox"/> Work is allowed within the highway where a shoulder or lane closure is not required.																									
REMARKS:																									
1. This on-ramp must remain open when the Sterling Street on-ramp is closed. 2. See detour plan No. 2.																									

Chart No. J4 Complete Ramp Closure Hours																									
County: SF							Route/Direction: 80/EB							Post Mile: 5.40											
Closure limits: Bus Terminal on-ramp																									
Hour	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Mon–Thu	C	C	C	C	C	C																			
Fri	C	C	C	C	C	C																			
Sat	C	C	C	C	C	C																			
Sun	C	C	C	C	C	C																			
Legend:																									
<input type="checkbox"/> C Ramp may be closed completely.																									
<input type="checkbox"/> Work is allowed within the highway where a shoulder or lane closure is not required.																									
REMARKS:																									
1. Sterling Street on-ramp must remain open when this ramp is closed. 2. See detour plan No. 5.																									

**Chart No. J5  
Complete Ramp Closure Hours**

County: SF		Route/Direction: 80/WB										Post Mile: 7.674													
Closure limits: Treasure Island on-ramp																									
Hour	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	
Mon–Thu	C	C	C	C																		C	C	C	C
Fri	C	C	C	C																			C	C	C
Sat	C	C	C	C	C	C	C																		C
Sun	C	C	C	C	C	C	C	C															C	C	C
Legend:																									
C Ramp may be closed completely.																									
Work is allowed within the highway where a shoulder or lane closure is not required.																									
REMARKS: See detour plan No. 1.																									

**Replace section 12-4.02C(12) with:**

**12-4.02C(12) Construction Work Zone Speed Limit Reduction**

**12-4.02C(12)(a) General**

Section 12-4.02C(12) includes specifications for providing, installing, maintaining, and removing traffic control devices for reducing the speed limit for the construction work zones.

Speed limit reduction is limited to 10 mph from the posted speed limit in construction work zones unless a greater speed limit reduction is specified. Construction work zone speed limit reduction can either be required when construction activities are active in a closure as a temporary condition or 24 hours a day, 7 days a week based on the roadway conditions when specified.

Temporary construction work zone speed limit reduction is required for lane closures when construction activities require workers to be present within the lane closures. Construction work zone speed limit reduction is not required for short duration closures of 1 hour or less or when the length of lane closure is 1/2 mile or less.

**12-4.02C(12)(b) Materials**

For construction work zone speed limit reduction for 24 hours a day, 7 days a week, construction area signs must comply with the requirements for stationary-mounted signs in section 12-3.11. When the duration of construction work zone speed limit reduction for 24 hours a day, 7 days a week is 7 days or less, you may use portable signs that comply with the requirements for portable signs in section 12-3.11.

For temporary construction work zone speed limit reduction, signs must comply with the requirements for portable signs in section 12-3.11.

The PCMS must comply with section 12-3.32.

Radar feedback sign LED displays must have LED:

1. Character of at least 18 inches in height for freeways and expressways
2. Character of at least 14 inches in height for conventional highways
3. Character's width-to-height ratio from 0.7 to 1.0
4. Character's stroke width-to-height ratio of 0.2

Portable radar speed feedback sign must comply with section 12-3.37.