

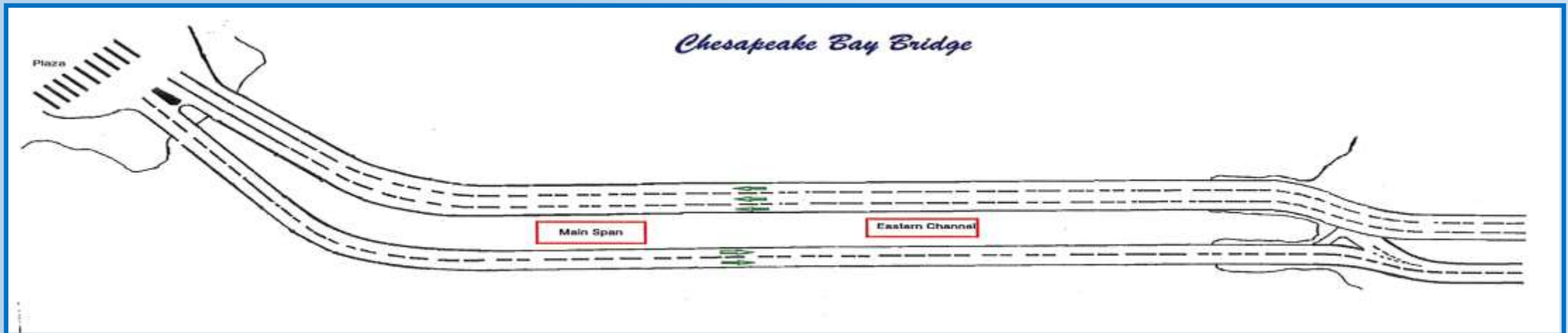
William Preston Lane Jr. Memorial (Bay) Bridge



Bay Bridge



Bridge Layout – Normal Operations

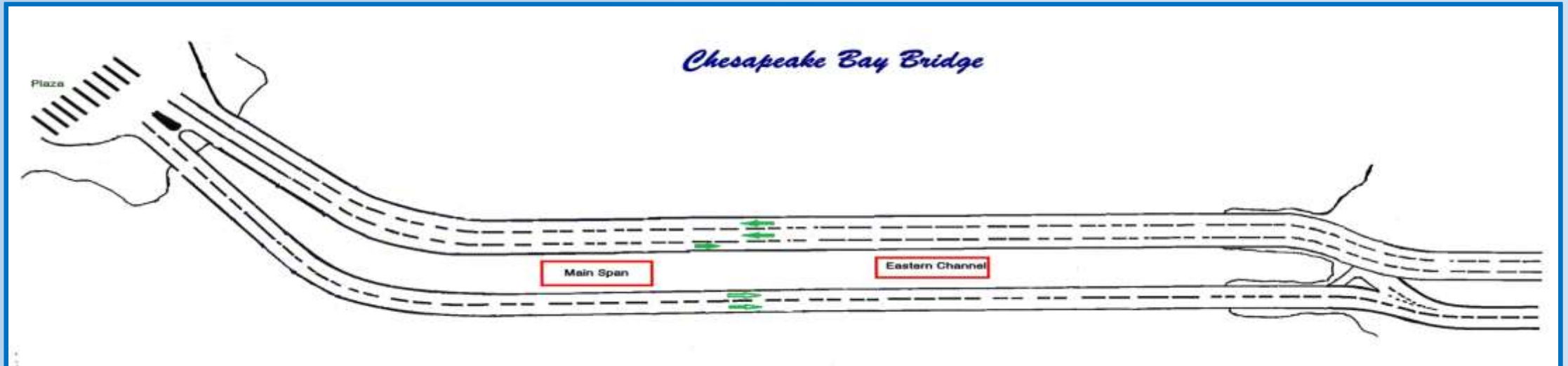


Two Bridge Spans

- North Bridge: 3 Lanes Westbound
- South Bridge: 2 Lanes Eastbound



Bridge Layout – Contraflow Operations



Contraflow

- Uses one of the Westbound Bridge lanes for Eastbound Movement
- Provides a 3rd Eastbound Lane
- **Weather permitting**



Contraflow criteria

Contraflow Operation Criteria:

- Weather dependent – Wind Restriction Guideline
- Traffic volume and queue length dependent
- Reduced speed from 50 mph to 40 mph in contraflow lane
- Variable message signs to alert drivers prior to bridge
- Maintain volume of traffic in contraflow lane (reduce gaps)

Contraflow Operation Criteria:

- Lane signals
- Emergency vehicles lead traffic at the start; follow at the end
- Implemented only during good weather conditions
 - No rain
 - No frozen precipitation
 - No Precipitation of any type
 - Winds must be below 30 mph
 - No fog



Contraflow on WB Bridge - implement

Contraflow (2-way) is implemented on the Westbound Bridge when:

- Eastbound traffic volumes start to reach 2,800 VPH or eastbound delays start to approach Exit-30, Bay Head Road, 1.5 miles
 - Trigger reduced from 3,200 VPH and/or Exit-29B, Cape St. Clair, 2.5 miles; based on trials to determine when lane gaps form
- Weather conditions permit
- Heavy traffic volumes
- Support lane closures (construction or maintenance)
- Crashes or disabled vehicles
- Emergencies
- Safety and security measures

* **NOTE:** The triggers are based on averages from field measured data, anomalies may occur due to other circumstances (weather, accidents, volumes, queues, etc.)



Contraflow on WB Bridge – discontinue

Traffic volumes are continuously monitored and contraflow may be discontinued if:

- Eastbound traffic volumes fall below 2,800 VPH
- Traffic volumes in contraflow lane drop below 900 VPH
- Weather conditions become unfavorable
- Westbound traffic volumes start to reach 2,500 VPH or westbound delays start to approach Exit-38B, Shopping Center Road, 1.5 miles
 - It was 2,800 VPH and/or westbound delays start to approach Exit-39A, Castle Marina Road, 2.5 miles

Eastbound contraflow re-implemented:

- When westbound traffic volumes are below 2,500 vph and westbound backups are clear
- Eastbound conditions meet implementation triggers

* **NOTE:** The triggers are based on averages from field measured data, anomalies may occur due to other circumstances (weather, accidents, volumes, queues, etc.)



Traffic Management

Traffic Management

- Traffic volumes in both directions are continuously monitored
 - Closely monitored, monitored on 5-minute intervals/traffic counts
- Staff staged on both western and eastern shores to monitor traffic
- VRT staged on both western and eastern shores to assist motorists
- Police staged and/or monitoring both western and eastern shores



Contraflow summary

1. Contraflow is based on traffic volumes, queues, accidents, disables, lane closures or emergency situations.
2. Contraflow has typical ranges of times, but is based on actual traffic conditions with no scheduled hours.
3. Contraflow is weather dependent.



Overview

The core issue is traffic volume exceeding lane capacity not contraflow timing or management.

**** This has been observed routinely for many years on Sundays where 3 lanes westbound are not constrained by contraflow**

Safety is always priority #1.