

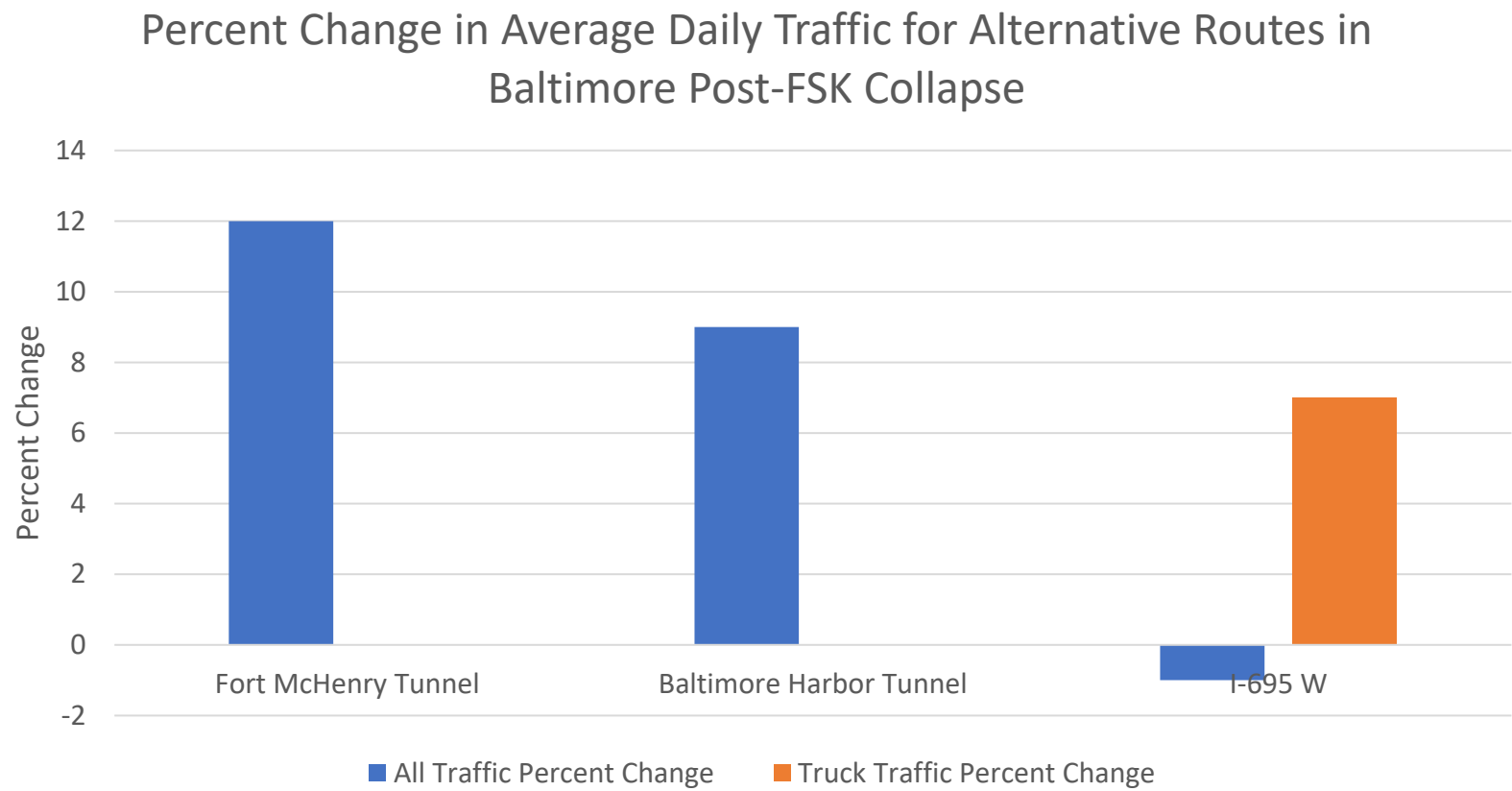
Key Traffic Impacts from FSK – April 20

- **All Traffic Impacts: I-95** experienced the greatest increase in ***all traffic*** since the collapse (12% increase in all traffic volumes).
- **Truck Impacts:** I-695 W has had a slight decrease (less than 1%) in all traffic but a 7% increase in **truck traffic**. It is the only hazardous materials alternative route.
- **Diversion routes now take 2 to 4 times longer for all traffic and trucks.**
 - Diversion routes were congested prior to the collapse and now experience much worse congestion and uncertainty in travel times, impacting route planning.
 - Speeds are slower on most key diversion routes.
 - Travel time is increased on most key diversion routes.
 - I-95 SB is experiencing higher unreliability in the AM; truckers need to add more time to their trip to be on time in the AM, but PM is better.
 - I-895 SB in the AM is also unreliable; truckers need to add more time to their trips to be on time.
 - I-895 NB and I-95 NB in the PM are not as bad as I-895 SB and I-95 SB in the AM, but both are showing PM congestion challenges.
- Collisions on some alternative routes increased.

AVERAGE DAILY TRAFFIC ON ALTERNATIVE ROUTES IN BALTIMORE – POST COLLAPSE

What Does the Data Say?

I-95/Fort McHenry Tunnel had the highest change in *all vehicle* traffic volumes followed by I-895/Baltimore Harbor Tunnel. I-695 W had a decrease in traffic volumes for *all vehicles*, but this is suspected to be mostly passenger cars as *truck volumes* increased on I-695 W. MDOT is not reporting truck data for I-95 or I-895.

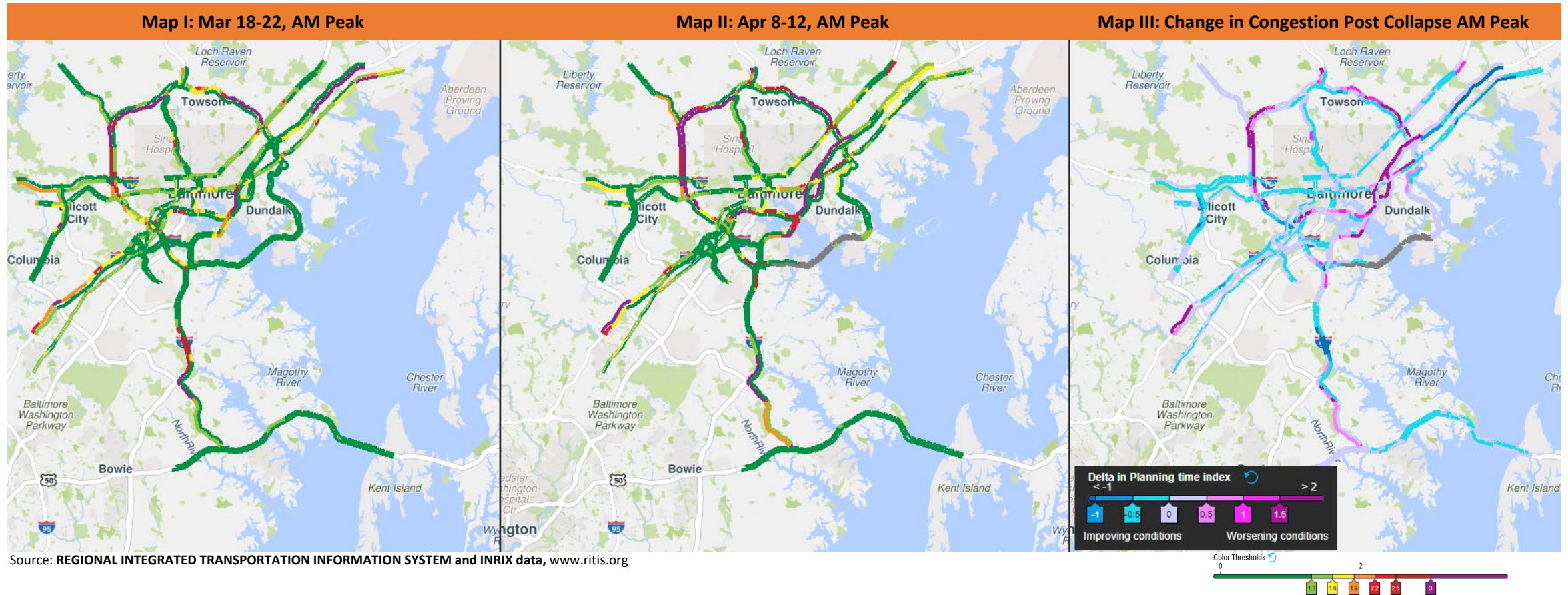


Note: Data are provided by the Maryland Department of Transportation from the tunnel tolls and a traffic count reader on I-695 capturing traffic south of I-795 (not the entire diversion route) and represent the percent change in Average Daily Traffic since the collapse. Truck information is only reported for I-695 W. I-695 W is the only alternative for hazardous material transport in the region.

TRAFFIC IMPACTS BEFORE AND AFTER COLLAPSE FOR PEAK PERIODS (AM and PM)

What Does This Say? Prior to the collapse, there were some parts of I-695 and I-95 that experienced significant congestion, especially unpredictable or unreliable congestion meaning that drivers never know what to expect in terms of travel time (worst segments are orange to purple). Since the collapse, many more parts of I-695, the tunnels (I-95 and I-895) and surrounding roadways are experiencing congestion (as shown in red and purple (Map I and Map II). As shown in Map III (Delta Map), I-695 W outer loop from I-95 to the west, at the I-795 interchange, and the inner loop on the west side are significantly worse post-collapse. I-95 and I-895 from White Marsh (I-95/I-695 interchange) through the tunnels are also much worse than before (pink and dark purple represent worsening).

Post-collapse results show that truckers must plan for trips on alternative routes to the Key Bridge to be 2 to 4 times longer depending on the time of day, and it is difficult to plan with certainty because these segments are much less reliable (predictable) than before. They may be delayed 20 minutes or several hours depending on the time of travel.



These maps show the results of a planning time index (PTI) calculation using INRIX data for all traffic in RITIS. The PTI is a useful measure of congestion because it helps calculate how much time you need to be on time considering congestion. PTI measures the consistency of travel time and how much congestion causes travel time to deviate from a free flow travel time with no congestion. A higher PTI means drivers must plan more travel time, which leads to higher costs, fuel usage, and emissions. A PTI value of 1.50 means that for a 30-minute trip at free flow, 45 minutes should be planned to ensure on-time arrival. Map I is for the period of March 18-March 22 (week prior), Map II is for the period of April 8 –April 12 . Map III represents the delta or change between the two. **Dark purple and pink segments in Map III represent worsening since the collapse.**

IMPACTS OF INCREASED TRAFFIC ON ALTERNATIVE ROUTES (COLLISIONS)

What does this show?

- I-95 has had sizeable increases in collisions: Pre-collapse having an average of 25 per week to **41 per week** (post-collapse).
- I-895 also increased in collisions: Pre-collapse having an average of 7 per week to **10.33 per week** (post-collapse).
- I-695 experienced a decrease in collisions: Pre-collapse having an average of 32 per week to 31.33 per week (post-collapse).
- All roadway safety events (collisions, disabled vehicles, fires, obstructions, etc.) decreased since the collapse except for on I-895. Further analysis found that I-895 may have had an increase in disabled vehicles reported under All Events.

Collisions

Time Period	Broening Highway	I-695	I-895	I-95	Grand Total
Week 1 March 5 to March 11	0	44	8	26	78
Week 2 March 12 to March 18	0	22	8	23	53
Week 3 March 19 to March 25	0	30	5	26	61
<i>Week 4 March 26 to April 1</i>	<i>0</i>	<i>39</i>	<i>8</i>	<i>21</i>	<i>68</i>
<i>Week 5 April 2 to April 8</i>	<i>0</i>	<i>35</i>	<i>10</i>	<i>47</i>	<i>92</i>
<i>Week 6 April 7 to April 15</i>	<i>1</i>	<i>20</i>	<i>13</i>	<i>55</i>	<i>89</i>

Time Period	Broening Highway	I-695	I-895	I-95	Grand Total
Three Weeks Prior to Collapse	0	96	21	75	192
<i>Three Weeks After Collapse</i>	<i>1</i>	<i>94</i>	<i>31</i>	<i>123</i>	<i>249</i>
% Change	~	-2.08%	47.62%	64.00%	29.69%

All Events (collisions, disabled vehicles, obstructions, etc.)

Time Period	Broening Highway	I-695	I-895	I-95	Grand Total
Week 1 March 5 to March 11	18	181	42	220	461
Week 2 March 12 to March 18	18	179	74	225	496
Week 3 March 19 to March 25	20	182	54	252	508
<i>Week 4 March 26 to April 1</i>	<i>17</i>	<i>158</i>	<i>56</i>	<i>187</i>	<i>418</i>
<i>Week 5 April 2 to April 8</i>	<i>18</i>	<i>171</i>	<i>61</i>	<i>229</i>	<i>479</i>
<i>Week 6 April 7 to April 15</i>	<i>16</i>	<i>162</i>	<i>79</i>	<i>276</i>	<i>533</i>

Time Period	Broening Highway	I-695	I-895	I-95	Grand Total
Three Weeks Prior to Collapse	56	542	170	697	1465
<i>Three Weeks After Collapse</i>	<i>51</i>	<i>491</i>	<i>196</i>	<i>692</i>	<i>1430</i>
% Change	-8.93%	-9.41%	15.29%	-0.72%	-2.39%

Note: Italics represent post-collapse period. Broening Highway is included because of the truck significance around the port; however, there has only been one collision since the collapse.

Source: MDOT Coordinated Highway Action Response Team (CHART) event data via University of Maryland's RITIS tool for I-895, I-95, and I-695 in Baltimore County, Baltimore City, and Anne Arundel County only.