THE TURKS AND CAICOS ISLANDS EXPERIENCE

HURRICANES IRMA AND MARIA 2017

November 20, 2017

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Department of Disaster Management and Emergencies
Hurricane Irma impacted the TCI 7\textsuperscript{th} – 8\textsuperscript{th} September 2017

- Passed south of islands as Cat 5 with 185/200 mph winds observed
- Primarily affected islands-Salt Cay, South Caicos, Providenciales and Grand Turk

- The first \textbf{Category 5} impact for the TCI
- Hurricane Ike in 2008 was the last major impact
- 25 years major impact prior to Ike in 2008
Background - Event

Hurricane Maria – Category 3

September 21-22, 2017

- Distance of the Eye
  - Grand Turk - 35 miles
  - South Caicos - 59 miles
  - Providenciales - 105 miles
Level of Vulnerability

- Location-Hurricane belt
- Climate change-frequency and larger events
- Multi-island chain
- High dependency on the tourism sector
- 47% of Female Headed Households
- 13.9% of home owners insured
## Impact – Critical Infrastructure & Facilities

### Overall Infrastructure Damage

<table>
<thead>
<tr>
<th>Island</th>
<th>% of Damage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grand Turk</td>
<td>73.58</td>
</tr>
<tr>
<td>Salt Cay</td>
<td>87.50</td>
</tr>
<tr>
<td>Middle Caicos</td>
<td>42.86</td>
</tr>
<tr>
<td>North Caicos</td>
<td>46.15</td>
</tr>
<tr>
<td>South Caicos</td>
<td>93.33</td>
</tr>
<tr>
<td>Providenciales</td>
<td>74.48</td>
</tr>
<tr>
<td><strong>Overall Total</strong></td>
<td><strong>73.82</strong></td>
</tr>
</tbody>
</table>

- **Island**
  - Grand Turk
  - Salt Cay
  - Middle Caicos
  - North Caicos
  - South Caicos
  - Providenciales

- **% of Damage**
  - Grand Turk: 73.58%
  - Salt Cay: 87.50%
  - Middle Caicos: 42.86%
  - North Caicos: 46.15%
  - South Caicos: 93.33%
  - Providenciales: 74.48%

- **Overall Total**: 73.82%
## Overall Impact – Electricity
*(Transmission and Distribution Network)*
(Source: Fortis TCI, 2017)

<table>
<thead>
<tr>
<th>Island</th>
<th>% Damage</th>
<th>Poles downed/damaged</th>
</tr>
</thead>
<tbody>
<tr>
<td>Providenciales</td>
<td>65</td>
<td>500</td>
</tr>
<tr>
<td>North &amp; Middle Caicos</td>
<td>35</td>
<td>60</td>
</tr>
<tr>
<td>South Caicos</td>
<td>80</td>
<td>250</td>
</tr>
<tr>
<td>Grand Turk</td>
<td>90</td>
<td>450</td>
</tr>
<tr>
<td>Salt Cay</td>
<td>65</td>
<td>25</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>1285</strong></td>
</tr>
</tbody>
</table>
Impact – Telecommunications

(Source: FLOW TCI, 2017)

Key
Providenciales
North Caicos
Middle Caicos
South Caicos
Grand Turk
Salt Cay
Coastal Impact

- Over 70% of beaches in the TCI experienced erosion
- 4 – 6 feet of beach erosion (vertical height)
- Shoreline pushed inwards up to 70 feet
- Severe impact on Tourism earnings and livelihoods

BEFORE - Grace Bay, Provo, Late August, 2017

Pooling of water between the beach berm and backshore at The Palms, Grace Bay

Textile T - groynes at Emerald Point, Grace Bay
Recovery Challenges/Needs

Short Term
- Purpose built Emergency Operations Centres
- Early Warning System/National communication system

Medium Term
- Mainstreaming of DRR and Capacity Building across the National Disaster Management System
- Doppler Radar

Long Term
- Rebuild/repair critical facilities
- Low-cost homes for vulnerable population
Turks and Caicos Islands

RESILIENT

#RecoveryTCI  #BuildBackBetter  #TCIStrong  #RebuildTCI