

CHAPTER 20. GRAYS HARBOR TRANSPORTATION AUTHORITY ANNEX

20.1 INTRODUCTION

This Annex details the hazard mitigation planning elements specific to the Grays Harbor Transportation Authority (GHT), a participating municipal corporation to the Grays Harbor County Hazard Mitigation Plan Update. GHT provides county-wide multimodal transportation services to residents of Grays Harbor County. As such, all hazards identified in the County's plan have the potential of impacting GHT. This Annex is not intended to be a standalone document, but rather appends to and supplements the information contained in the base plan document. As such, all sections of the base plan, including the planning process and other procedural requirements, apply to and were met by GHT. For planning purposes, this Annex provides additional information specific to GHT, with a focus on providing greater details on the risk assessment and mitigation strategy for this entity only.

20.2 HAZARD MITIGATION PLANNING TEAM POINT(S) OF CONTACT

Grays Harbor Transit followed the planning process detailed in Section 2 of the Base Plan. In addition to providing representation on the County's Planning Team, GHT also formulated their own internal planning team to support the broader planning process. GHT Team Members regularly provided updates and information to its governing Board throughout the HMP process, including presentation of risk data, and presentation of the final draft plan for review. These are open public meetings, which are advertised. Team members also posted information to the GHT website. Information was also presented on the GHT website. Individuals assisting in this Annex development are identified below, along with a brief description of how they participated. This list is not all-inclusive.

| Local Planning Team Members | | | | |
|---|---|--|--|--|
| Name | Planning Tasks | | | |
| Ken Mehin, General Manager 343 W. Wishkah Street Aberdeen, WA 98520 360-532-2770 ext. 101 kmehin@ghtransit.com | Oversight over planning team; provided information on annex development; review of risk assessment as completed; annex and base plan review. | | | |
| Shawn Brewer, Safety & Training Manager 705 30 th Street Hoquiam, WA 98550 360-532-2770 ext. 128 sbrewer@ghtransit.com | Annex Update; lead author of update; attended planning team meetings; led effort for annex development; provided information on countywide data and risk assessment review; reviewed draft plan; presented plan to Board for review and approval. | | | |
| Todd Tobeck, Maintenance Manager 705 30 th Street Hoquiam, WA 98550 360-532-2770 ext. 129 ttobeck@ghtransit.com | Technical Support; assisted with data capture; provided information on previous impact data; reviewed risk assessment; assisted with plan development. | | | |

20.3 ORGANIZATIONAL PROFILE

The Grays Harbor Transportation Authority is a County Transportation Authority (CTA), authorized under Chapter 36.57 RCW, located in the southwestern portion of Washington State. The Grays Harbor Transportation Authority began providing transportation services in June 1975. Our system map below indicates the extent of our service area. The three Grays Harbor County Commissioners, the Mayors of Aberdeen, Hoquiam, and Westport comprise the current Board of Directors. The position held by the Mayor of Westport alternates with the Mayors from McCleary, Elma, Montesano, Oakville, Ocean Shores, or Cosmopolis. The Board of Directors holds public meetings on the second Tuesday of each month at the Grays Harbor Transportation Authority's Administrative Offices in Aberdeen. Resolution 11 Establishes By-Laws 1975 The following is a summary of key information about the jurisdiction:

- Governing Authority— Chapter 36.57 RCW
- Land Area Served—1,917 square miles
- **Land Area Owned**—Approximately 25 acres. Since completion of the last plan, the Authority has acquired approximately 18 additional acres in the Central Park area. At present, the property has no structures located on it, but it is anticipated that the site will be developed, potentially during the life cycle of this 2024 update.
- List of Critical Infrastructure/Equipment Owned by the Jurisdiction:

| _ | Full size buses (36) | \$21,466,596.00 |
|---|----------------------|-----------------|
| _ | Mini buses (18) | \$2,754,000.00 |
| - | Vanpool Vans(20) | \$1,334,600.00 |
| _ | Shop Equipment | \$1,000,000.00 |

- **Total Value of Critical Infrastructure/Equipment**—The total value of critical infrastructure and equipment owned by the jurisdiction is \$26,555,196.00.
- List of Critical Facilities Owned by the Authority:

| _ | GHT Main Facility | \$5,000,000.00 |
|---|---------------------------|----------------|
| - | Aberdeen Transit Center | \$2,149,000.00 |
| _ | Hoquiam Transit Center | \$1,200,000.00 |
| _ | Montesano Transit Center | \$ 500,000.00 |
| _ | Elma Transit Center | \$ 500,000.00 |
| _ | Gavet Lane (Central Park) | \$1,500,000.00 |

• **Total Value of Critical Facilities**—The total value of critical facilities owned by the jurisdiction is \$10,849,000.

• **Current and Anticipated Service Trends—**Bus ridership has been increasing approximately 8% a year over the last several years and is expected to continue the current trends.

| | | | | Personal | | |
|------------------------------|------------------------------------|--------------|--------------|----------------|----------|---------------|
| | | | | Property | Property | Total Insured |
| Building | | | Real | (Equipment & | Rental | Values for |
| Description | Address | City | Property | Bldg Contents) | Incomes | 2022 Renewal |
| SHELTERS | | | \$ 274,018 | \$ - | \$ - | \$ 274,018 |
| MONTESANO TRANSFER STATION | 214 E. PIONEER | MONTESANO | \$ 210,731 | \$ 50,500 | \$ - | \$ 261,231 |
| OCEAN SHORES TRANSFER STAION | 205 W CHANCE A LA MER NW | OCEAN SHORES | \$ 920,110 | \$ - | \$ - | \$ 920,110 |
| ABERDEEN TRANSFER STATION | 320 E. WISHKAH | ABERDEEN | \$ 587,182 | \$ 193,489 | \$ - | \$ 780,671 |
| HOQUIAM TRANSFER STATION | 706 J STREET | HOQUIAM | \$ 422,900 | \$ 186,189 | \$ - | \$ 609,089 |
| ELMA TRANSFER STATION | 601 W. MAIN STREET | ELMA | \$ 920,110 | \$ - | \$ - | \$ 920,110 |
| ADMINISTRATION I | 705 30TH ST. | HOQUIAM | \$ 507,453 | \$ 100,517 | \$ - | \$ 607,970 |
| BUS WASH | 705 30TH ST. | HOQUIAM | \$ 273,336 | \$ 96,691 | \$ - | \$ 370,027 |
| BUS SHED | 705 30TH ST. | HOQUIAM | \$ 617,794 | \$ 273,321 | \$ - | \$ 891,115 |
| MOBILE EQUIPMENT | 705 30TH ST. | HOQUIAM | \$ - | \$ 250,000 | \$ - | \$ 250,000 |
| EDP VALUE | 705 30TH STREET | HOQUIAM | \$ - | \$ 171,039 | \$ - | \$ 171,039 |
| BUS MAINT. | 705 30TH STREET | HOQUIAM | \$ 1,197,358 | \$ 530,502 | \$ - | \$ 1,727,860 |
| PUMP ISLAND | 705 30TH STREET | HOQUIAM | \$ 136,517 | \$ 36,069 | \$ - | \$ 172,586 |
| ADMINISTRATION II | 615 30TH ST | HOQUIAM | \$ 163,485 | \$ 11,491 | \$ - | \$ 174,976 |
| ABERDEEN TRANSFER STATION | 303 E. MARKET | ABERDEEN | \$ 173,051 | \$ - | \$ - | \$ 173,051 |
| PARK AND RIDE LOT | 702 S. ENGLEWOOD | WESTPORT | \$ 152,143 | \$ - | \$ - | \$ 152,143 |
| COMMERICAL BUILDING | 300 E WISHKAH ST | ABERDEEN | \$ 338,625 | \$ - | \$ - | \$ 338,625 |
| COMMERCIAL LAND | 1193 US Highway 12, 41 Gavett Lane | Montesano | \$ 1,100,000 | | | \$ 1,100,000 |
| | | | | | | |
| | | | | | | |
| | | | \$ 7,994,813 | \$ 1,899,808 | \$ - | \$ 9,894,621 |



Figure 20-1 GHT Area of Operation Boundaries

20.4 HAZARD EVENT HISTORY

Within the Base Plan, the Planning Team identified all hazard events that have occurred within the County. In the context of the planning region, it was determined that there are no additional hazards that are unique to Grays Harbor Transit. Being a county-wide service provider, Table 20-1 lists all past occurrences that have impacted the County, and potentially GHT operations and facilities since operations began in 1975.

While the County was declared five times since the 2018 HMP was completed, the Authority sustained no damages. At most, there may have been some delay in operations due to roadway impact, but no damages were sustained.

TABLE 20-1 GRAYS HARBOR COUNTY DISASTER HISTORY 1953-2022

| Disaster Number | Declaration Date | Incident Type | Title | Incident Begin Date | Incident End Date |
|--------------------|---------------------|-----------------|---|------------------------|----------------------|
| 4650 | 3/29/22 | Flood | Severe Winter Storms, Snowstorms, Straight- Line Winds, Flooding (Incident resulted in two deaths in the County.) | 12/26/2021 | 2/15/2022 |
| 4593 | 4/8/2021 | Severe Storm | Severe Winter Storm, Straight-Line Winds, Flooding, Landslides, And Mudslides | 12/29/2020 | 1/16/2021 |
| 4539 | 4/23/20 | Flood | Severe Storms, Flooding, Landslides, And Mudslides | 1/20/2020 | 2/10/2020 |
| 4481 | 3/22/20 | COVID | Biological | 1/20/2020 | 5/11/2023 |
| 4418 | 3/4/2019 | Severe Storms | Severe Winter Storms, Straight-Line Winds, Flooding, Landslides, Mudslides, Tornado | 12/20/2018 | 12/24/2018 |
| 4253 | 2/2/2016 | Flood | Severe Winter Storm, Straight-Line Winds, Flooding, Landslides, Mudslides | 12/1/2015 | 12/14/2015 |
| 4242 | 10/15/2015 | Severe Storm(s) | Severe Windstorm | 8/29/2015 | 8/29/2015 |
| 4056 | 3/5/2012 | Severe Storm(s) | Severe Winter Storm, Flooding, Landslides, and Mudslides | 1/14/2012 | 1/23/2012 |
| 1825 | 3/2/2009 | Severe Storm(s) | Severe Winter Storm, Record and Near Record Snow | 12/12/2008 | 1/5/2009 |
| 1817 | 1/30/2009 | Flood | Severe Winter Storm, Landslides, Mudslides, and Flooding | 1/6/2009 | 1/16/2009 |
| 1734 | 12/8/2007 | Severe Storm(s) | Severe Storms, Flooding, Landslides, and Mudslides | 12/1/2007 | 12/17/2007 |
| 1682 | 2/14/2007 | Severe Storm(s) | Severe Winter Storm, Landslides, and Mudslides | 12/14/2006 | 12/15/2006 |

TABLE 20-1 GRAYS HARBOR COUNTY DISASTER HISTORY 1953-2022

| Disaster Number | Declaration Date | Incident Type | Title | Incident Begin Date | Incident End Date |
|--------------------|---------------------|-----------------|--|------------------------|----------------------|
| 1671 | 12/12/2006 | Severe Storm(s) | Severe Storms, Flooding, Landslides, and Mudslides | 11/2/2006 | 11/11/2006 |
| 1641 | 5/17/2006 | Severe Storm(s) | Severe Storms, Flooding, Tidal Surge, Landslides, and Mudslides | 1/27/2006 | 2/4/2006 |
| 1499 | 11/7/2003 | Severe Storm(s) | Severe Storms and Flooding | 10/15/2003 | 10/23/2003 |
| 1361 | 3/1/2001 | Earthquake | Earthquake | 2/28/2001 | 3/16/2001 |
| 1172 | 4/2/1997 | Flood | Heavy Rains, Snow Melt, Flooding, Land and Mudslides | 3/18/1997 | 3/28/1997 |
| 1159 | 1/17/1997 | Severe Storm(s) | Severe Winter Storms, Land and Mudslides, Flooding | 12/26/1996 | 2/10/1997 |
| 1100 | 2/9/1996 | Flood | High Winds, Severe Storms, Flooding | 1/26/1996 | 2/23/1996 |
| 1079 | 1/3/1996 | Severe Storm(s) | Severe Storms, High Wind, and Flooding | 11/7/1995 | 12/18/1995 |
| 1037 | 8/2/1994 | Fishing Losses | The El Nino (The Salmon Industry) | 5/1/1994 | 10/31/1994 |
| 883 | 11/26/1990 | Flood | Severe Storms, Flooding | 11/9/1990 | 12/20/1990 |
| 852 | 1/18/1990 | Flood | Severe Storms, Flooding | 1/6/1990 | 1/14/1990 |
| 623 | 5/21/1980 | Volcano | Volcanic Eruption, Mt. St. Helens | 5/21/1980 | 5/21/1980 |
| 612 | 12/31/1979 | Flood | Storms, High Tides, Mudslides, Flooding | 12/31/1979 | 12/31/1979 |
| 545 | 12/10/1977 | Flood | Severe Storms, Mudslides, Flooding | 12/10/1977 | 12/10/1977 |
| 492 | 12/13/1975 | Flood | Severe Storms and Flooding | 12/13/1975 | 12/13/1975 |

| | TABLE 20-1 GRAYS HARBOR COUNTY DISASTER HISTORY 1953-2022 | | | | | | |
|--------------------|--|-------------------|---|------------|----------------------|--|--|
| Disaster Number | | | | | Incident End Date | | |
| 322 | 2/1/1972 | Flood | Severe Storms and Flooding | 2/1/1972 | 2/1/1972 | | |
| 300 | 2/9/1971 | Flood | Heavy Rains, Melting Snow, Flooding | 2/9/1971 | 2/9/1971 | | |
| 185 | 12/29/1964 | Flood | Heavy Rains and Flooding | 12/29/1964 | 12/29/1964 | | |
| | EMERGENCY DECLARATIONS | | | | | | |
| 3227 | 9/7/2005 | Coastal Storm | Hurricane Katrina Evacuation | 8/29/2005 | 10/1/2005 | | |
| | SIGNIFICANT LOCAL INCIDENTS | | | | | | |
| NA | NA | Landslides/Floods | Heavy Rains and Landslides (Countywide) | 1/4/2015 | 1/5/2017 | | |

20.5 APPLICABLE REGULATIONS AND PLANS

Coordination with other community planning efforts is paramount to the successful implementation of this plan. This section provides information on how planning mechanisms, policies, and programs are integrated into other ongoing efforts. It also identifies the jurisdiction's capabilities with respect to preparing and planning for, responding to, recovering from, and mitigating the impacts of hazard events and incidents.

Capabilities include the programs, policies, and plans currently in use to reduce hazard impacts or that could be used to implement hazard mitigation activities. The capabilities are divided into the following sections: regulatory capabilities, which influence mitigation; administrative and technical mitigation capabilities, including education and outreach, partnerships, and other ongoing mitigation efforts; fiscal capabilities, which support mitigation efforts, and classifications under various community programs.

20.5.1 Regulatory Capability

The assessment of the district's legal and regulatory capabilities which are customarily used by jurisdictions to implement hazard mitigation activities, are identified in Table 20-2. Those items applicable to the district are identified. It should be noted that as the Authority begins to update various emergency and other plans, information from this risk assessment will help identify potential areas of concern, as well as areas where mitigation efforts would help reduce the impact.

| TABLE 20-2 LEGAL AND REGULATORY CAPABILITY | | | | | |
|---|--------------------|--------------------------------------|-------------------|--|--|
| | Local Authority | Other Jurisdictional Authority | State Mandated | Comments | |
| Codes, Ordinances & Requirements | | | | | |
| Building Code | No | Yes | Yes | The Transit Authority complies with all building codes when construction or re-construction occurs. | |
| Sprinkler Codes | Yes | Yes | Yes | All structures meet the IBC, which include sprinkler codes. All structures meet the codes in place at the time of construction. | |
| Post Disaster Recovery | Yes | Yes | Yes | The Transit Authority does have plans in place to assist with recovery and reestablishment of services as quickly as possible after a disaster incident. The Authority also has various response plans and priority routes established to address various hazard impact scenarios. | |
| Public Health and Safety | Yes | Yes | Yes | The Transit Authority works to assist with transportation with individuals with access or functional needs. The Authority works with various social and health services agencies to ensure services are provided to all individuals equitably. | |
| National Incident Management System | Yes | Yes | Yes | | |

| TABLE 20-2 LEGAL AND REGULATORY CAPABILITY | | | | |
|---|-----------|----------------|----------|--|
| | | Other | | |
| | Local | Jurisdictional | State | |
| | Authority | Authority | Mandated | Comments |
| Planning Documents | | | | |
| Capital Improvement Plan | Yes | Yes | Yes | |
| Economic Development Plan | Yes | Yes | Yes | |
| Transportation Plan | Yes | Yes | Yes | |
| Emergency Operations Plan | Yes | Yes | Yes | |
| Response Plan | Yes | Yes | Yes | |
| Evacuation Plan | Yes | Yes | Yes | The Transportation Authority works with the County with respect to evacuation planning to support the mass movement of citizens should an event occur. |
| Response/Recovery Planning | | | | |
| Comprehensive Emergency Management Plan | Yes | Yes | Yes | The County has identified the Transportation Authority in its CEMP in ESF 1. |
| Public Health Plans | Yes | Yes | Yes | The Transportation Authority regularly assists with real life incidents and response activities. The Transportation Authority is included in various response and recovery plans for the County. |
| Standard Operating | Yes | Yes | Yes | Various SOPs exist for the |
| Procedures/Guides | | | | Transportation Authority. Several of those SOPs are directly related to the hazards of concern. |
| Boards and Commission | | | | |
| Planning Commission | Yes | Yes | Yes | The Transportation Authority does provide input to countywide planning initiatives to include transportation planning. |
| Mitigation Planning Committee | Yes | Yes | Yes | |
| Governing Commissioners | Yes | Yes | Yes | |
| Other | | | | |

20.5.2 Administrative and Technical Capabilities

The assessment of the district's administrative and technical capabilities, including educational and outreach efforts, and on-going programmatic efforts are presented in Table 20-3. These are elements which support not only mitigation, but all phases of emergency management already in place that are used to implement mitigation activities and communicate hazard-related information.

| TABLE 20-3 ADMINISTRATIVE AND TECHNICAL CAPABILITY | | | | | |
|---|-----------------------|---|--|--|--|
| Staff/Personnel Resources | Available (Yes/No) | Department/Agency/Position | | | |
| Planners or engineers with knowledge of land development and land management practices | Yes | Administrative Services | | | |
| Engineers specializing in construction practices? | Yes | Contracted Services | | | |
| Planners or engineers with an understanding of natural hazards | Yes | Administrative Services | | | |
| Staff with training in benefit/cost analysis | Yes | Administrative Services | | | |
| Surveyors | No | | | | |
| Personnel skilled or trained in GIS applications | Yes | Operations/Dispatch | | | |
| Personnel skilled or trained in Hazus use | Yes | Administrative Services | | | |
| Emergency Manager | Yes | Safety & Training | | | |
| Grant writers | Yes | Operations/Administrative Services | | | |
| Warning Systems/Services (Reverse 9-1-1, outdoor warning signs or signals, flood or fire warning program, etc.?) | No | | | | |
| Hazard data and information available to the public | Yes | Risk Assessment from HMP is available on the County's website. This includes the Transportation Authorities Annex Document | | | |
| Educati | on and Out | reach | | | |
| Ongoing public education or information program (e.g., responsible water use, fire safety, household preparedness, environmental education) | Yes | The Transportation Authority, as part of the HMP process, includes a plan maintenance section which provides hazard information on a regular basis. | | | |
| Public-private partnership initiatives addressing disaster-related issues? | Yes | In partnership with the County to provide emergency management information, the Transportation Authority supports the various emergency management activities, including public education outreach concerning the hazards of concern. | | | |
| Multi-seasonal public awareness program? | Yes | In conjunction with GH County EM partnership. | | | |
| Other | No | | | | |

20.5.3 Fiscal Capability

The assessment of the jurisdiction's fiscal capabilities is presented in Table 20-4. These are the financial tools or resources that could potentially be used to help fund mitigation activities.

| TABLE 20-4 FISCAL CAPABILITY | | | | | |
|--|--------------------------------|--|--|--|--|
| Financial Resources | Accessible or Eligible to Use? | | | | |
| Community Development Block Grants | No | | | | |
| Capital Improvements Project Funding | Yes | | | | |
| Authority to Levy Taxes for Specific Purposes | Yes | | | | |
| User Fees for Water, Sewer, Gas or Electric Service | No | | | | |
| Incur Debt through General Obligation Bonds | Yes | | | | |
| Incur Debt through Special Tax Bonds | Yes | | | | |
| Incur Debt through Private Activity Bonds | Yes | | | | |
| Withhold Public Expenditures in Hazard-Prone Areas | No | | | | |
| State Sponsored Grant Programs | Yes | | | | |
| Development Impact Fees for Homebuyers or Developers | No | | | | |
| Other | | | | | |

20.6 COMMUNITY CLASSIFICATION

GHT's classifications under various hazard mitigation programs are presented in Table 20-5 Each of the classifications identified establish requirements which, when met, are known to increase the resilience of a community. Those that specifically require district participation or enhance mitigation efforts are indicated accordingly.

| TABLE 20-5 COMMUNITY CLASSIFICATIONS | | | | | |
|--|------------------------|----------------|--|--|--|
| | Participating (Yes/No) | Date Enrolled | | | |
| Building Code Effectiveness Grading Schedule | Yes | | | | |
| Storm Ready | Yes | Through County | | | |
| Tsunami Ready (if applicable) | Yes | Through County | | | |

20.7 HAZARD RISK AND VULNERABILITY RANKING

GHT's Planning Team reviewed the hazard list identified within the Base Plan and have identified the hazards that affect Grays Harbor Transit.

Table 20-6 presents the ranking of the hazards of concern based on their CPRI score. A qualitative vulnerability ranking was then assigned based on a summary of potential impact determined by past

occurrences, spatial extent, damage, casualties, and continuity of government. The assessment is categorized into the following classifications:

- □ **Extremely Low** No or very limited impact. The occurrence and potential cost of damage to life and property is very minimal-to-nonexistent. No impact to government functions with no disruption to essential services.
- □ **Low (Negligible)** Minimal potential impact. The occurrence and potential cost of damage to life and property is minimal. Government functions are at 90% with limited disruption to essential services.
- □ **Medium (Limited)** Moderate potential impact. This ranking carries a moderate threat level to the general population and /or built environment. The potential damage is more isolated, and less costly than a more widespread disaster. Government functions are at 80% with limited impact to essential services.
- High (Critical) Widespread potential impact. This ranking carries a high threat to the general population and/or built environment. The potential for damage is widespread. Hazards in this category may have occurred in the past. Government functions are at $\sim 50\%$ operations with limited delivery of essential services.
- □ **Extremely** High (Catastrophic) Very widespread with catastrophic impact. Government functions are significantly impacted for in excess of one month.

| TABLE 20-6 2024 CPRI SCORE AND HAZARD RANKING | | | | | | | | | | | | | | | | | | | | | | | |
|--|--------------------|-----------------------|------------------|-------------------------------|-------------------------|-------------|--------------|------------------|--------------------------------------|-------------|-----------------|---------------|---------------|------------------|-------------------|----------------|---------------|----------------|--------------|--------------|------------|------|----------------------------|
| | Probability | | | | Magnitude / Severity | | | | Geographic Extent and Location | | | Warning Time | | | Duration | | | | | M/L) | | | |
| Hazards Of Concern | Unlikely / Low (1) | Possible / Medium (2) | Likely/ High (3) | Highly Likely / Very High (4) | Negligible (1) | Limited (2) | Critical (3) | Catastrophic (4) | Negligible (1) | Limited (2) | Significant (3) | Extensive (4) | < 6 hours (4) | 6 - 12 hours (3) | 12 - 24 hours (2) | > 24 hours (1) | < 6 hours (1) | < 24 hours (2) | < 1 week (3) | > 1 week (4) | CPRI Score | Rank | Vulnerability Rank (H/M/L) |
| Earthquake | | | | 4 | | | | 4 | | | | 4 | 4 | | | | | | | | 3.80 | 1 | High |
| Severe Weather | | | | 4 | | 2 | | | | | 3 | | | 3 | | | | 2 | | | 3.15 | 2 | High |
| Tsunami | | | 3 | | | | | 4 | | 2 | | | 4 | | | | | 2 | | | 3.10 | 3 | High |
| Flood | | | | 4 | | | 3 | | | 2 | | | | | | 1 | | | 3 | | 2.90 | 4 | High |
| Other Hazards of Concern | | | 3 | | | 2 | | | | 2 | | | 4 | | | | 1 | | | | 2.65 | 5 | Medium |
| Wildfire | | 2 | | | | 2 | | | | 2 | | | 4 | | | | | 2 | | | 2.30 | 6 | Low |
| Erosion | | | 3 | | | 2 | | | 1 | | | | | | 2 | | | 2 | | | 2.20 | 7 | Low |
| Landslides | | | 3 | | | | 3 | | | 2 | | | | | | | | | | | 2.20 | 8 | Low |
| Drought | | 2 | | | 1 | | | | | 2 | | | | | | 1 | | | | 7 | 1.90 | 9 | Low |
| Climate Change | | 2 | | | 1 | | | | | 2 | | | | | | 1 | | | | 7 | 1.90 | 10 | Low |
| Volcano | 1 | | | | 1 | | | | | | 3 | | | | | 1 | | | | 4 | 1.55 | 11 | Low |

20.7.1 Additional Hazard Data - Risk Overview

The hazards listed above have been ranked in relationship to the potential impact to Grays Harbor Transit operations and facilities and demonstrate our level of potential impact as established by the Calculated Priority Risk Index process defined in Chapter 4. This process included a review of our critical facilities that could be impacted, estimated dollar losses, and the impacts to people, property, regional economy, and environment for each of the identified hazards of concern. Reviewers should examine Chapter 4 of the County plan for information on the type of data included in determining the hazard rank and vulnerability identified above.

For the 2024 update, the internal planning team again reviewed the impact to critical facilities and followed the same process as with the 2018 risk ranking. In addition to the CPRI process, the GHT internal planning team also considered the following additional factors for the hazards identified. Once completed, the hazards remained consistent in their ranking for the 2024 update.

Since completion of the 2018 plan, GHT has not acquired or built any new structures. There was one structure removed in Aberdeen due to the structure's status, including black mold resulting from a leaking roof. That structure, now removed, has lowered the vulnerability to the GHT. Now cleared, that area will be utilized for expansion purposes when GHT initiates that effort. At present, GHT anticipates updating its main transit facility in Aberdeen within the next year. It also anticipates upgrading its communications center, moving that to a larger room within the same structure (remodel).

Earthquakes are the primary concern to both GHT's daily operations as well as our facilities. Our key maintenance and operations facilities are essential to maintaining fleet operations and can be expected to be adversely impacted by earthquakes. Additionally, the potential adverse impacts to the bridges and road systems in Grays Harbor from an earthquake would have a significant impact on our ability to provide essential transportation support.

Severe Weather events are significant to GHT primarily from an operational perspective as well as the frequency of events. Ice/snowstorms, windstorms with downed trees and powerlines, etc., have an immediate impact on our transportation routes, significantly reducing our ability to provide essential transportation services in a safe and timely manner.

Tsunamis, like earthquakes, are a primary concern to both GHT's daily operations as well as our facilities. Our key maintenance and operations facilities are located in the tsunami inundation zone and would be impacted by any significant tsunami wave action in the harbor. Additionally, the potential adverse impacts to the bridges and road systems in Grays Harbor from a tsunami would have a significant impact on our ability to provide essential transportation support.

Floods are less frequent events but have the potential to impact both our road-based transportation activities and our main Hoquiam facility as well. Water over roads, bridges,

and road closures are common flood-related events and impact our service delivery of essential transportation services county-wide.

Other Hazards of Concern were identified primarily as HAZMAT-type incidents due to the location of our main Hoquiam facility within the Port of Grays Harbor in relationship to facilities that utilize various types of chemicals, including a fueling station, grain silo, and refinery for biodiesel.

The "low" ranked hazards, Wildfire, Erosion, Landslides, Climate Change, Drought, and Volcano, all would have an impact on daily operations – to one extent or another – versus an impact on our facilities. Wildfire, erosion, volcano, and landslide hazards have the potential to impact the road and bridge infrastructure systems, while climate change and drought would have a minimal direct impact on either our operations or facilities.

20.8 MITIGATION GOALS AND OBJECTIVES

GHT adopts the hazard mitigation goals and objectives developed by the Planning Team described in Volume 1.

20.9 HAZARD MITIGATION ACTION PLAN

The GHT Planning Team identified and prioritized a wide range of actions based on the risk assessment, and their knowledge of the district assets and hazards of concern. Table 20-7 lists the action items/strategies that make up the GHT hazard mitigation plan. Background information and information on how each action item will be administered, responsible agency/office (including outside the district), potential funding sources, the timeframe, and the type of initiative associated with each item are also identified.

| | TABLE 20-7 HAZARD MITIGATION ACTION PLAN MATRIX | | | | | | | | | | | |
|--|---|------------------------|-----------------|--|---|--|--|---|---|--|--|--|
| Applies to new or existing assets | Hazards Mitigated | Objectives Met | Lead Agency | Estimated Cost (High/ Medium/ Low) or \$ Figure if Known | Sources of Funding (List Grant type, General Fund, etc.) | Timeline (Long- Term, Short- Term) | Included in Previous Plan? Yes/No | Initiative Type: Public Information, Preventive Activities, Structural Projects, Property Protection, Emergency Services, Recovery, Natural Resource Protection | Who or What Benefits? Facility, Local, County, Region | | | |
| INITIATI | INITIATIVE #1 Assess needs for backup power generator | | | | | | | | | | | |
| Existing | All | 1, 4, 6, 8 | Operations | Low | GF | Short-term | Yes | Preventive, Property Protection, Emergency Services, Recovery | Facility and Local | | | |
| INITIATI | VE #2 Ass | ess location | ıs for satelli | te parking | of buses | | | | | | | |
| Existing | All | 1, 2, 3, 4, 6, 8 | Operations | Medium | GF, WSDOT | Med | Yes | Prop Protection, Recovery, Emergency Services | Facility, County, Region | | | |
| INITIATI | VE #3 Seis | mic retrofi | t of shop | | | | | | | | | |
| Existing | EQ | 1, 4, 6, 8 | Maintenan ce | High | GF, WSDOT, HMGP | Long-term | Yes | Preventive, Structural, Recovery | Facility | | | |
| INITIATI | VE #4 Relo | ocate facilit | y outside ts | unami inur | ndation zor | ie | | | | | | |
| Existing | EQ, T | 1, 2, 3, 4, 5, 6, 8 | Admin | High | GF, WSDOT, HMGP | Long-term | Yes | Preventive, Structural, Recovery, EM | Facility, County, Region | | | |
| INITIATI | VE #5 Upd | ate GPS ma | pping for di | spatch to i | nclude tsui | nami and otl | ner hazard | evacuation routes | | | | |
| Existing | EQ, T | 2, 5, 7, 8 | Operations | Low | GF | Short- Term | Yes | Prop Protection, Emergency Services, Preventive | Facility, County, Region | | | |

20.10 PRIORITIZATION OF MITIGATION INITIATIVES

Once the mitigation initiatives items were identified, the Planning Team followed the same process outlined within Volume 1 to prioritize their initiatives. An analysis of five different initiative types for each identified action item was conducted. Table 20-8 identifies the prioritization for each initiative.

| TABLE 20-8 MITIGATION STRATEGY PRIORITY SCHEDULE | | | | | | | | | | | |
|--|---|----------|-------|--|-----------------------------------|---|--------------|--|--|--|--|
| Initiative | # of Objectives Met | Benefits | Costs | Do Benefits Equal or Exceed Costs? | Is Project Grant- Eligible? | Can Project Be Funded Under Existing Programs/ Budgets? | Priority a | | | | |
| 1 | 4 | Н | L | Yes | Yes | Yes | Н | | | | |
| 2 | 6 | Н | M | Yes | Yes | Yes | Н | | | | |
| 3 | 4 | Н | Н | Yes | Yes | No | Н | | | | |
| 4 | 7 | Н | Н | Yes | Yes | No | Н | | | | |
| 5 | 4 | Н | L | Yes | No | Yes | Н | | | | |
| | | | | | | | | | | | |
| a. See Ch | a. See Chapter 1 for explanation of priorities. | | | | | | | | | | |

20.11 STATUS OF PREVIOUS PLAN INITIATIVES

Table 20-9 summarizes the initiatives that were recommended in the previous version of the hazard mitigation plan and their implementation status at the time this update was prepared.

| TABLE 20-9 2024 STATUS OF PREVIOUS HAZARD MITIGATION STRATEGIES | | | | | | | | | | | | |
|--|-----------------|-------------|--------|------------|----------------|---------|---------------|---|-----------|------------------------------|---|--------------|
| | | Asso | ociat | ed H | lazaı | rds | | | | Curre | nt Status | |
| Mitigation Strategy | Coastal Erosion | Earthquakes | Floods | Landslides | Severe Weather | Tsunami | Wildland Fire | 2023 Project Status | Completed | Continual /Ongoing Nature | Removed /No Longer Relevant /No Action | Carried Over |
| Assess needs for backup power generator | Х | Х | X | X | X | X | Х | GHT is in the process of acquiring a new generator at the maintenance facility, which should be installed within the next year. GHT does feel that this project remains valid, as additional generators are needed for other structures to ensure continuity of operations. | Х | | | Х |
| Assess locations for satellite parking of buses | X | X | X | X | X | X | X | During the life cycle of the existing plan, the transit has not been required to relocate its fleet due to hazard impact; however, this remains a valid project for long-term and recovery planning, and therefore the project is carried forward. | | | | X |
| Seismic retrofit of shop | | Х | | | | | | No action taken. Project remains valid and is carried forward. | | | | Х |
| Relocate facility outside tsunami inundation zone | | | | | | Х | | GHT is moving forward with this project and is actively working towards relocation onto the newly acquired 17 acres. | | | | Х |
| Update GPS mapping for dispatch to include tsunami evacuation routes | X | X | X | X | X | X | X | GHT has lacked the funding and staffing to work on this project, but does feel it is significant. This project is carried forward. | | | | X |