

Casualty estimates assume a MODERATE WALK travel speed (4 ft per second)

• Buildings and Boats Community Boundary **Evacuation Route Classification**
 1:65,000 L Safety Zone ■ High likelihood of survival for all ages
 Miles L Tsunami Zone ■ High likelihood of fatality for people 65 and over
 0 1.5 ■ Ocean, Water Bodies ■ High likelihood of fatality for all ages

Visa Type	Number of People
Permanent	~1700
Temporary	~1530

Response	Percentage
Doing a good job	17%

Age Group	Percentage
<65 years	78 %
≥ 65 years	22 %

Figure 1 is a combined bar and line chart showing the distribution of people by distance to safety. The x-axis represents 'Distance to Safety (ft)' from 12000 to 0. The left y-axis represents 'Number of People' from 0 to 1200. The right y-axis represents 'Cumulative percent' from 0 to 100. The chart includes bars for 'Permanent resident' (yellow) and 'Temporary visitor' (light blue). A red line represents the 'Cumulative %'. A grey shaded region indicates the '4 fps Uncertainty' area, bounded by a vertical dotted line at approximately 9500 ft and a vertical dashed line at approximately 8500 ft. A black arrow points right with the text 'Towards safety'.

Distance to Safety (ft)	Permanent resident (Number of People)	Temporary visitor (Number of People)	Cumulative %
12000	0	0	0
10000	0	0	0
9500	0	0	0
8500	0	0	0
2000	10	0	0
1500	150	100	10
1000	800	230	60
500	750	0	100

The figure consists of two stacked bar charts. The top chart displays the number of permanent residents, and the bottom chart displays the number of temporary residents, both categorized by their distance to safety in feet. The x-axis for both charts ranges from 12,000 feet to 0 feet, with a vertical dashed line at 9,000 feet indicating the 4 fps threshold. A large black arrow points to the right, labeled 'Towards safety'. The legend identifies six categories: Single Family Residential (blue), Multi-family Residential (yellow), Mobile (Tents, Rec. Vehicles) (green), Manufactured Housing (orange), Hotel/Motel (purple), and Other (light blue).

Distance to Safety (ft)	Permanent Residents (number)	Temporary Residents (number)
12000 - 10000	0	0
10000 - 9000	0	0
9000 - 8000	0	0
8000 - 7000	0	0
7000 - 6000	0	0
6000 - 5000	0	0
5000 - 4000	0	0
4000 - 3000	0	0
3000 - 2000	0	0
2000 - 1000	10	10
1000 - 500	150	100
500 - 0	800	1200

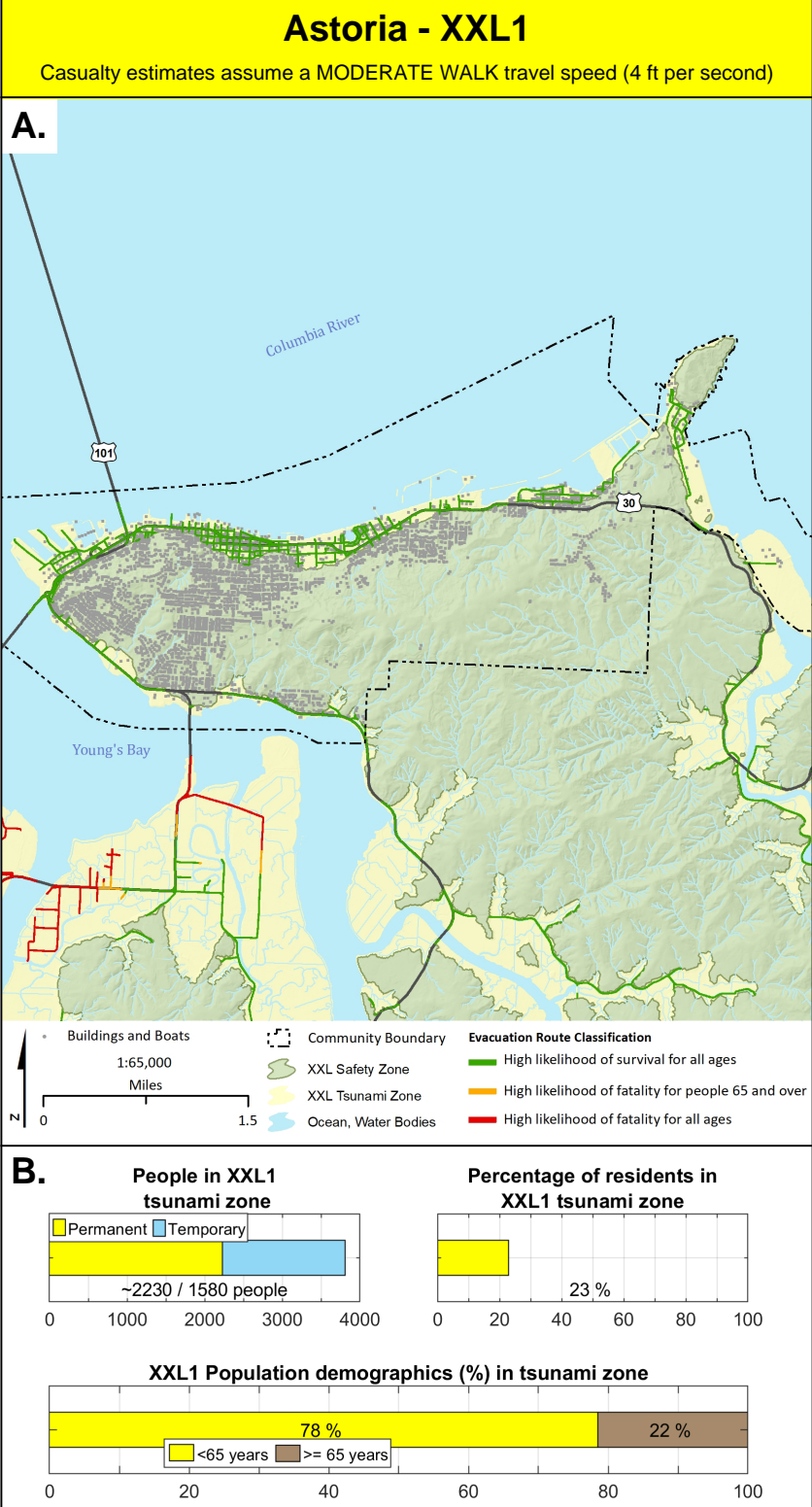
The figure consists of five horizontal bar charts, each representing a different metric of the disaster's impact. The x-axis for the first four charts ranges from 0 to 1000, while the fifth chart ranges from 0 to 150,000.

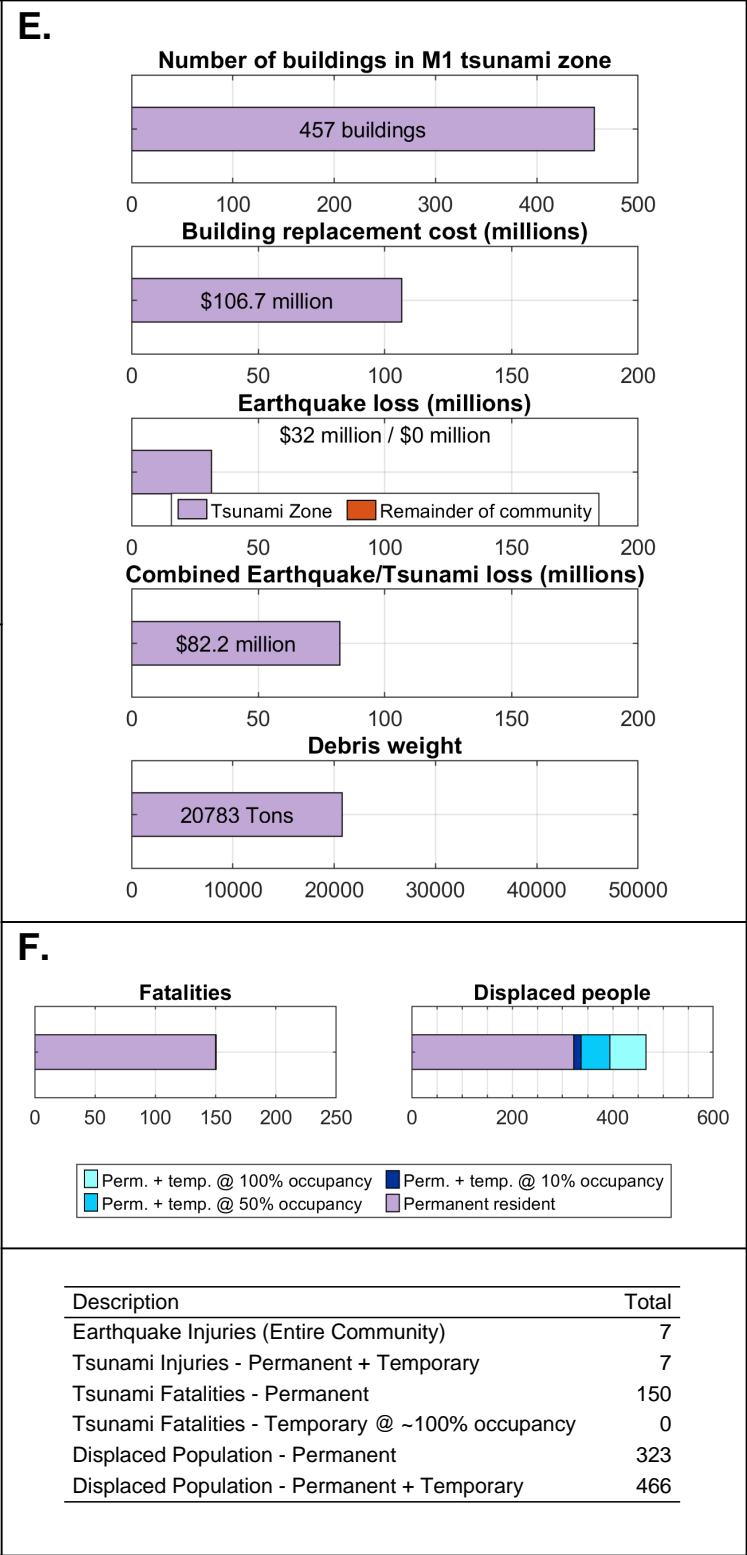
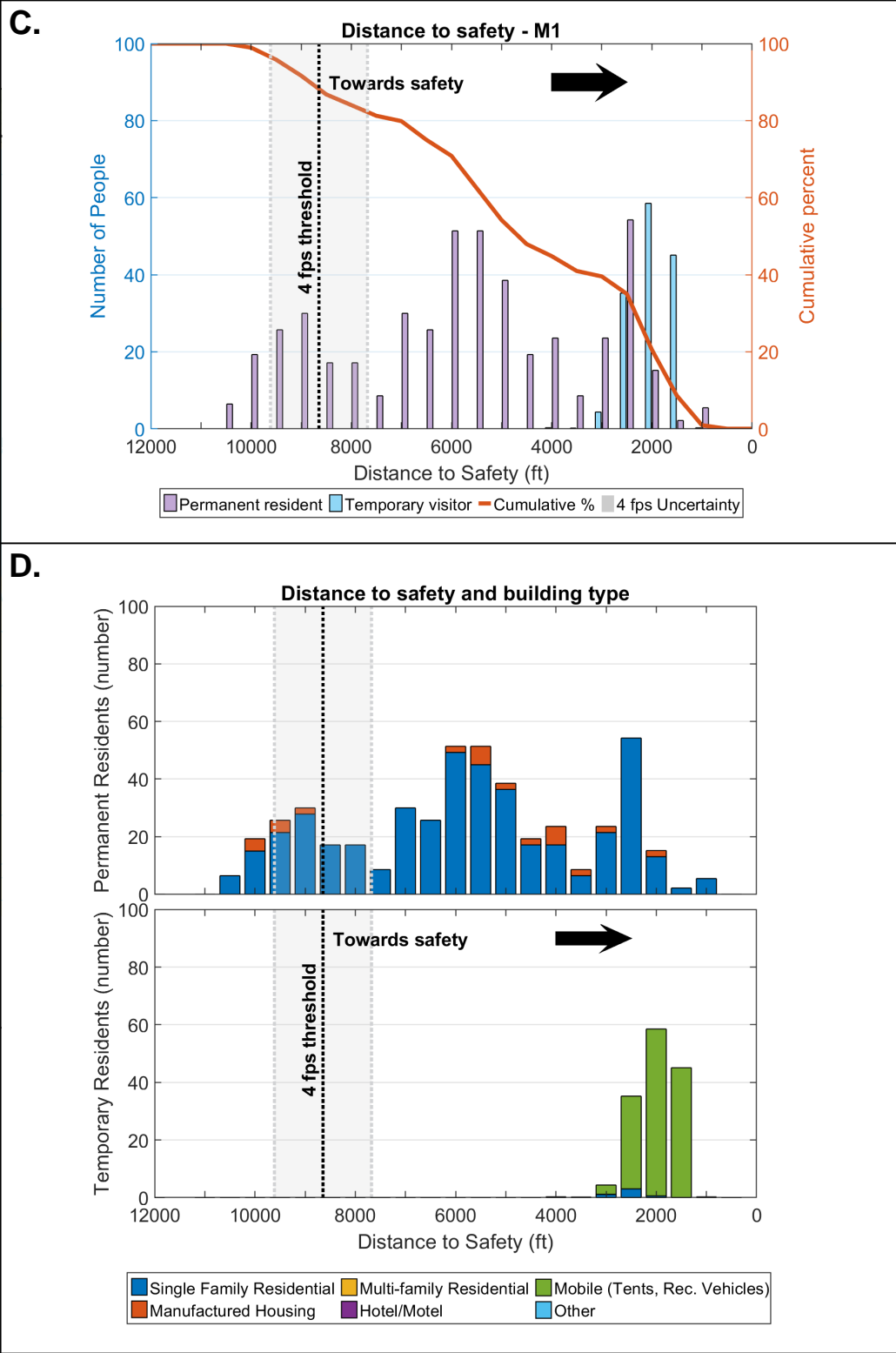
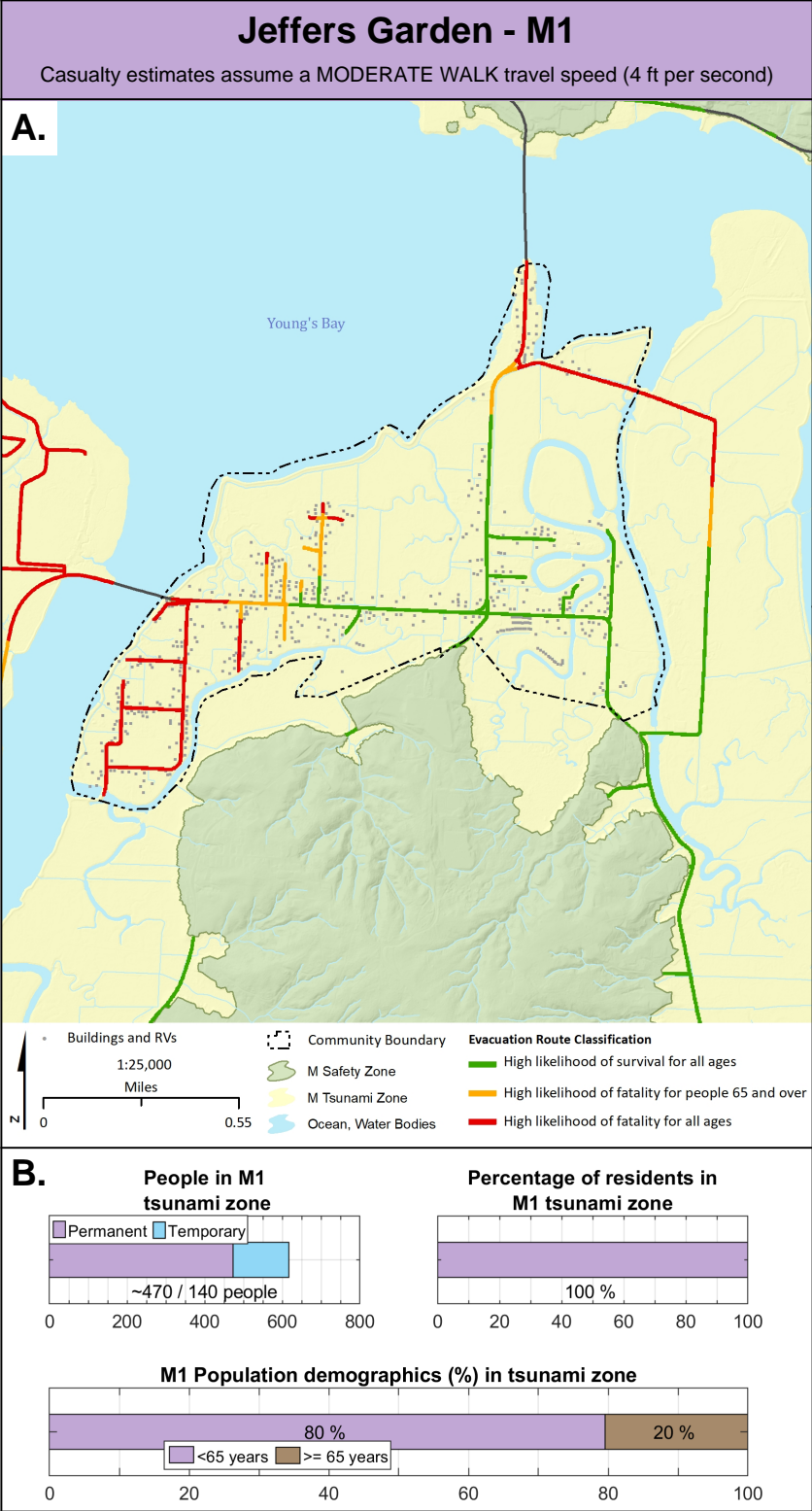
- Building replacement cost (millions):** A single yellow bar representing 694 buildings.
- Earthquake loss (millions):** A single yellow bar representing \$680.4 million.
- Combined Earthquake/Tsunami loss (millions):** A stacked bar chart. The yellow segment represents the Tsunami Zone loss of \$196 million, and the orange segment represents the remainder of the community loss of \$262 million.
- Debris weight:** A single yellow bar representing 67,875 tons.

Two horizontal stacked bar charts are displayed side-by-side. The left chart has a scale from 0 to 40, and the right chart has a scale from 0 to 4000. The legend indicates four categories: Perm. + temp. @ 100% occupancy (light blue), Perm. + temp. @ 50% occupancy (medium blue), Perm. + temp. @ 10% occupancy (dark blue), and Permanent resident (yellow).

Category	Perm. + temp. @ 100% occupancy	Perm. + temp. @ 50% occupancy	Perm. + temp. @ 10% occupancy	Permanent resident
Perm. + temp.	~35	~5	~1	~0
Permanent resident	~1500	~1000	~100	~0

Description	Total
Earthquake Injuries (Entire Community)	150
Tsunami Injuries - Permanent + Temporary	0
Tsunami Fatalities - Permanent	0
Tsunami Fatalities - Temporary @ ~100% occupancy	0
Displaced Population - Permanent	1,699
Displaced Population - Permanent + Temporary	3,230





Casualty estimates assume a MODERATE WALK travel speed (4 ft per second)

A.

Young's Bay

• Buildings and RVs

1:25,000
Miles

0 0.55

Community Boundary

L Safety Zone

L Tsunami Zone

Ocean, Water Bodies

Evacuation Route Classification

- High likelihood of survival for all ages
- High likelihood of fatality for people 65 and over
- High likelihood of fatality for all ages

A horizontal bar chart with a yellow bar extending to the 100% mark on a scale from 0 to 100. The text '100 %' is displayed inside the bar.

Age Group	Percentage
<65 years	80 %
≥ 65 years	20 %

Distance to safety - L1

Towards safety →

4 fps threshold

4 fps Uncertainty

Number of People

Cumulative percent

Distance to Safety (ft)

Legend: Permanent resident (yellow bar), Temporary visitor (blue bar), Cumulative % (orange line), 4 fps Uncertainty (shaded gray area)

Distance to safety and building type

Permanent Residents (number)

Temporary Residents (number)

Distance to Safety (ft)

4 fps threshold

Towards safety

Single Family Residential

Multi-family Residential

Mobile (Tents, Rec. Vehicles)

Manufactured Housing

Hotel/Motel

Other

Building replacement cost (millions)

Category	Value
Buildings	457

Earthquake loss (millions)

Category	Value
Tsunami Zone	\$106.7 million

Combined Earthquake/Tsunami loss (millions)

Category	Value
Tsunami Zone	\$32 million
Remainder of community	\$0 million

Debris weight

Category	Value
Debris weight	\$103.2 million

Debris weight

Category	Value
Debris weight	26956 Tons

The figure consists of two horizontal stacked bar charts. The left chart represents 'Permanent resident' and the right chart represents 'Perm. + temp. @ 100% occupancy'. The x-axis for both charts ranges from 0 to 250 (left) and 0 to 600 (right). The legend indicates four categories: Permanent resident (yellow), Perm. + temp. @ 100% occupancy (light blue), Perm. + temp. @ 50% occupancy (dark blue), and Perm. + temp. @ 100% occupancy (light blue).

Category	Permanent resident (Left Chart)	Perm. + temp. @ 100% occupancy (Right Chart)
Permanent resident (Yellow)	~165	~300
Perm. + temp. @ 100% occupancy (Light Blue)	0	~100
Perm. + temp. @ 50% occupancy (Dark Blue)	0	~20
Perm. + temp. @ 100% occupancy (Light Blue)	0	0

Description	Total
Earthquake Injuries (Entire Community)	7
Tsunami Injuries - Permanent + Temporary	7
Tsunami Fatalities - Permanent	165
Tsunami Fatalities - Temporary @ ~100% occupancy	0
Displaced Population - Permanent	308
Displaced Population - Permanent + Temporary	452

Casualty estimates assume a MODERATE WALK travel speed (4 ft per second)

A.

Young's Bay

Buildings and RVs

1:25,000
Miles

0 0.55

Community Boundary

XXL Safety Zone

XXL Tsunami Zone

Ocean, Water Bodies

Evacuation Route Classification

- High likelihood of survival for all ages
- High likelihood of fatality for people 65 and over
- High likelihood of fatality for all ages

B.

People in XXL1 tsunami zone

This horizontal bar chart displays the number of people in the XXL1 tsunami zone. The x-axis represents the number of people, ranging from 0 to 800 with major grid lines every 200 units and minor grid lines every 100 units. The bar is divided into two segments: a yellow segment for 'Permanent' residents and a blue segment for 'Temporary' residents. The total length of the bar is approximately 550 units, with the yellow segment accounting for about 470 units and the blue segment for about 140 units.

Category	Count
Permanent	~470
Temporary	140

~470 / 140 people

Percentage of residents in XXL1 tsunami zone

This horizontal bar chart shows the percentage of residents in the XXL1 tsunami zone. The x-axis represents the percentage, ranging from 0 to 100 with major grid lines every 20 units and minor grid lines every 10 units. The bar is entirely yellow, representing 100% of the residents.

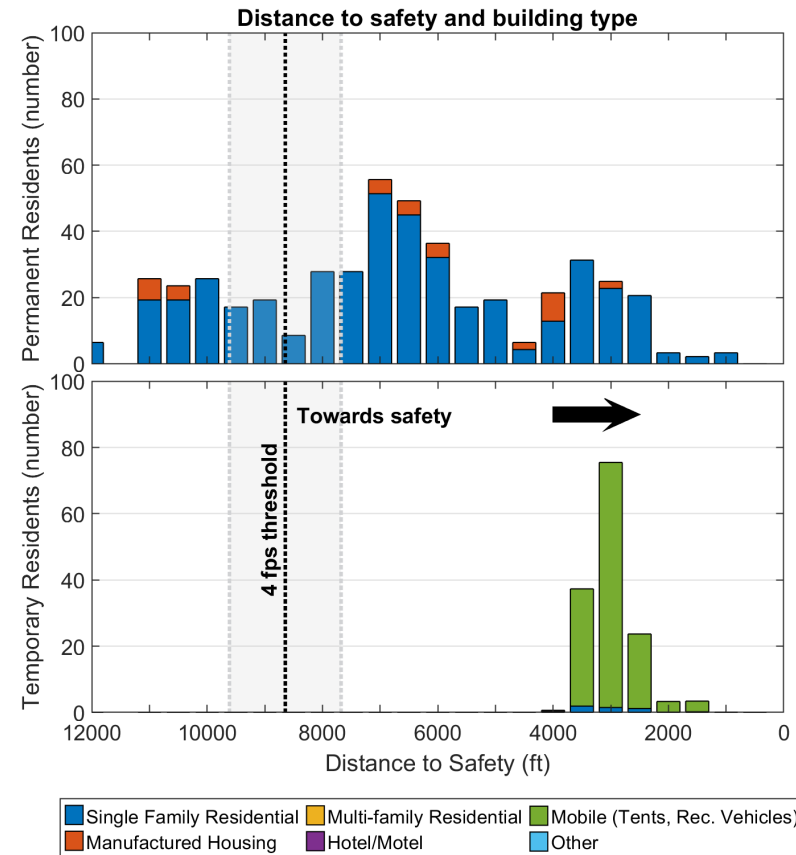
Category	Percentage
Permanent	100 %

100 %

XXL1 Population demographics (%) in tsunami zone

This horizontal bar chart illustrates the population demographics of the XXL1 tsunami zone by age group. The x-axis represents the percentage of the population, ranging from 0 to 100 with major grid lines every 20 units and minor grid lines every 10 units. The bar is divided into two segments: a yellow segment for residents aged '<65 years' and a brown segment for residents aged '≥ 65 years'. The yellow segment accounts for 80% of the population, and the brown segment accounts for 20%.


Age Group	Percentage
<65 years	80 %
≥ 65 years	20 %



3


F.

Fatalities





Category	Value
Permanent resident	~210


Displaced people




Category	Value
Permanent resident	~250
Perm. + temp. @ 50% occupancy	~80
Perm. + temp. @ 100% occupancy	~50

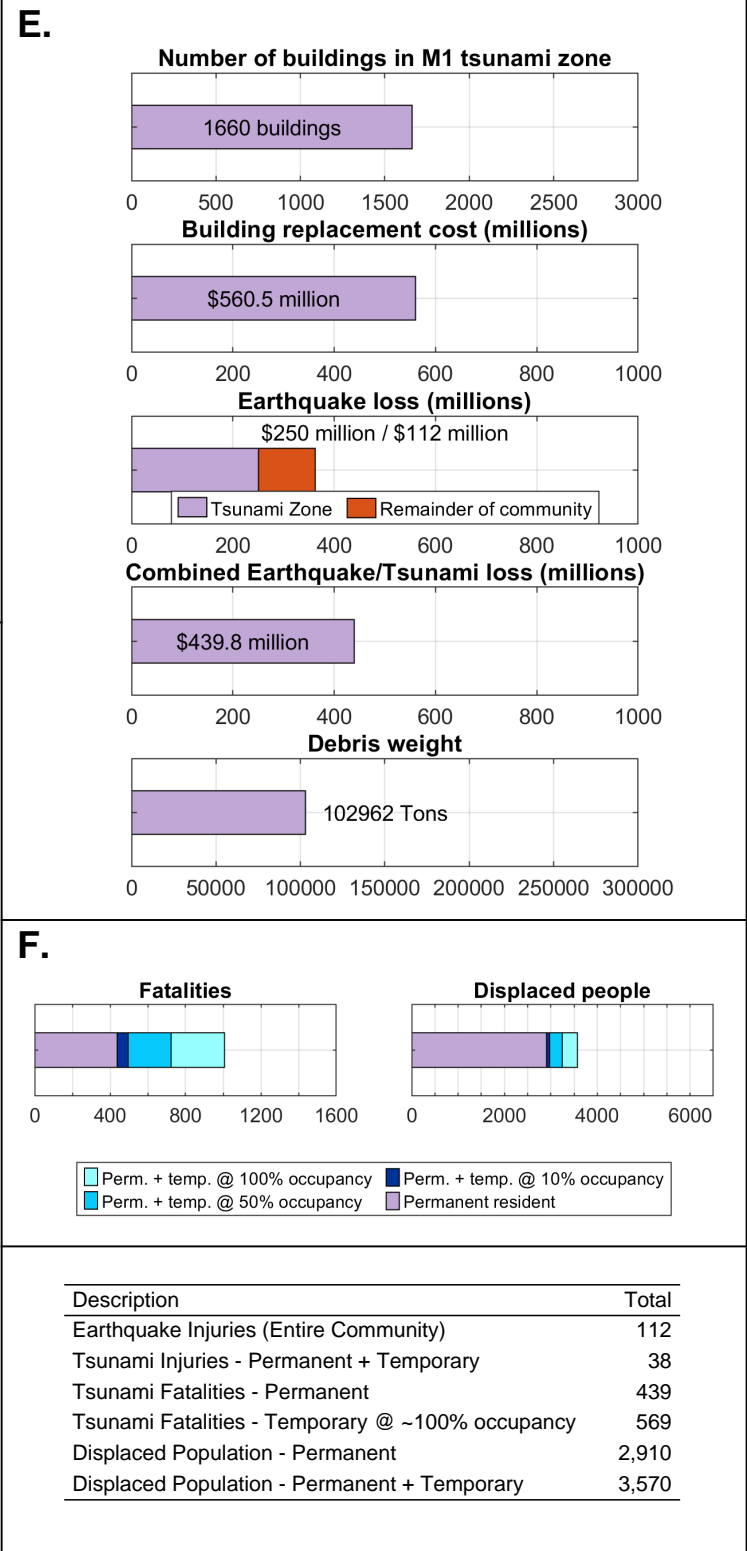
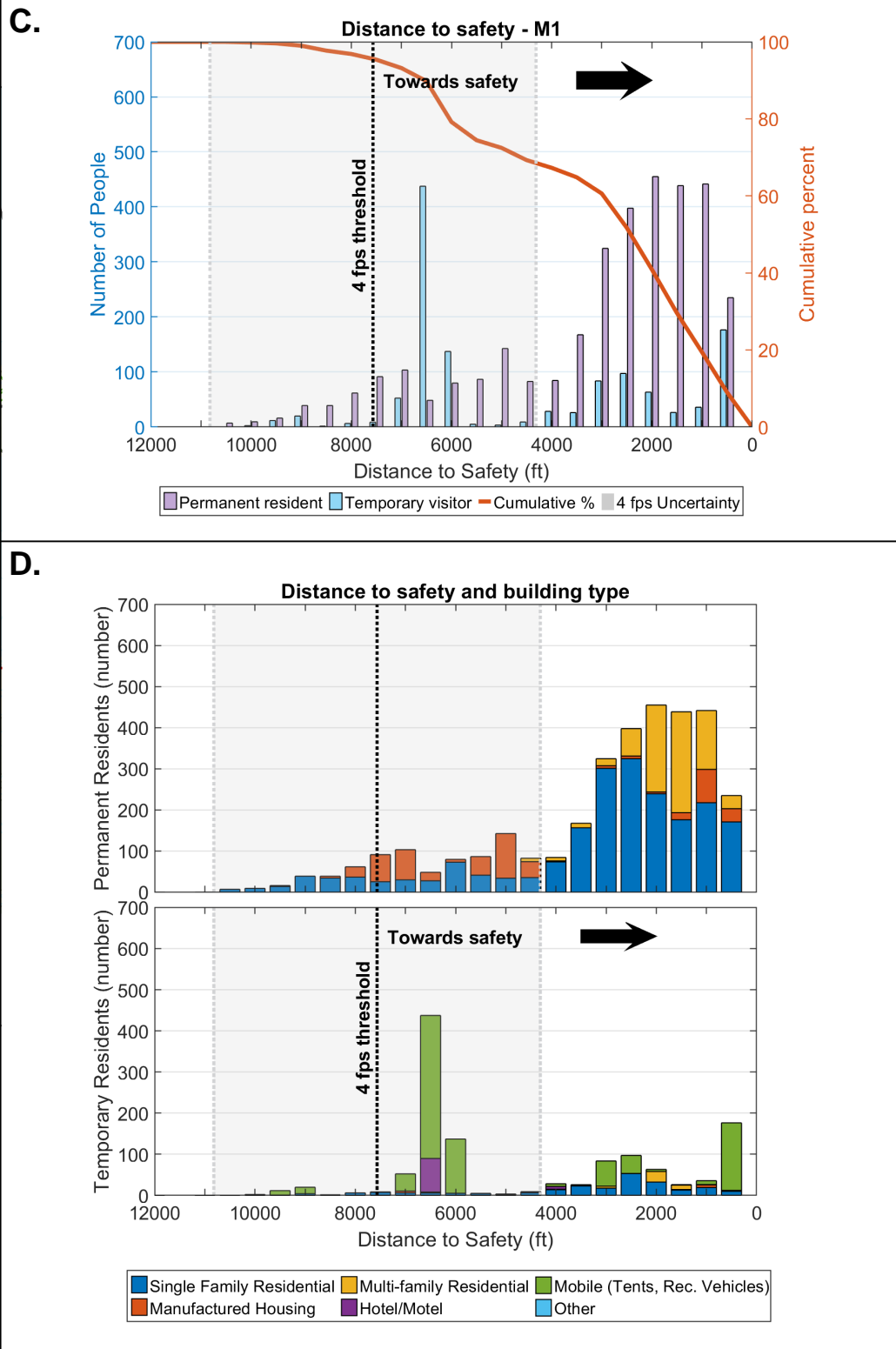
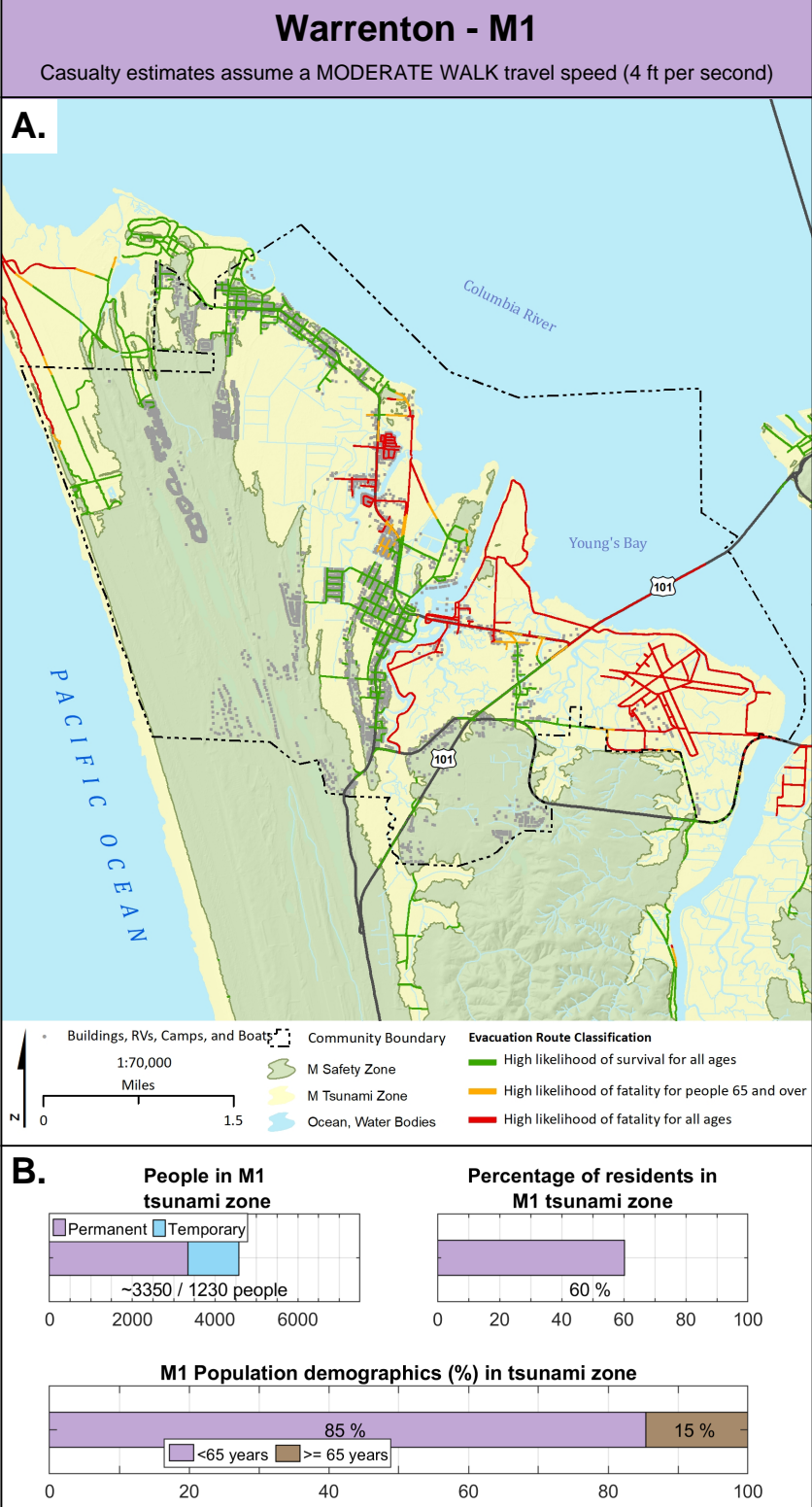
 Perm. + temp. @ 100% occupancy

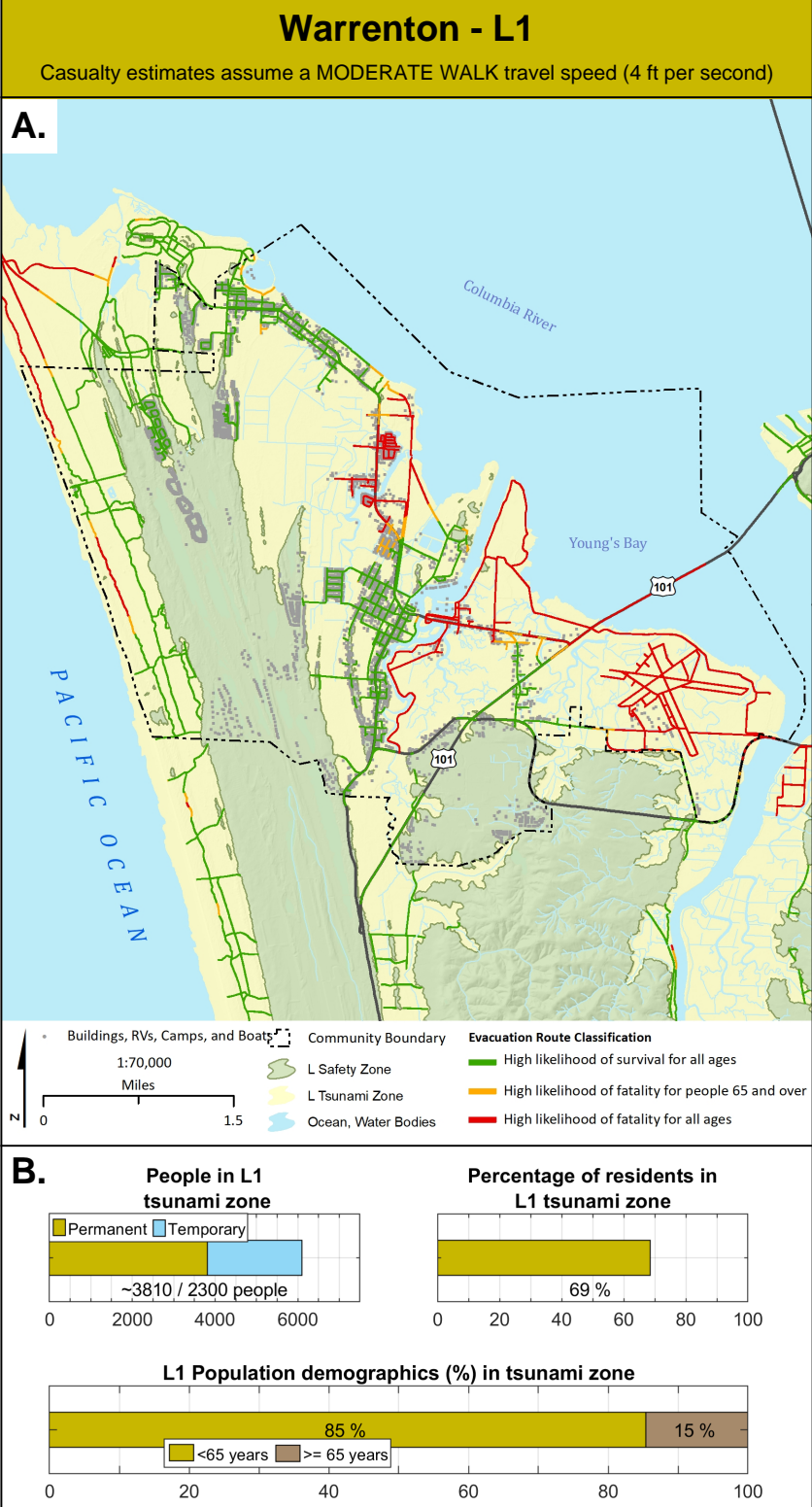
 Perm. + temp. @ 10% occupancy

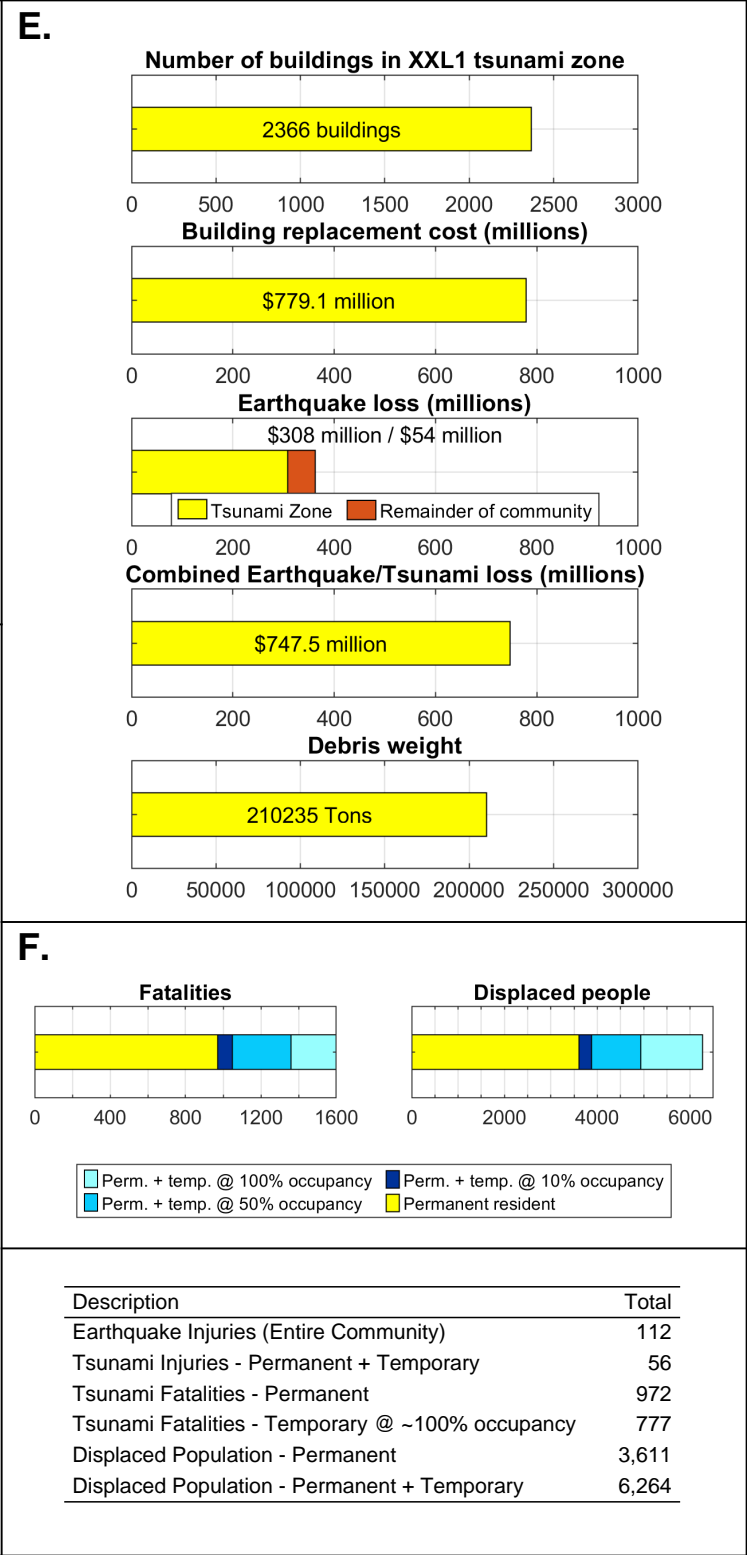
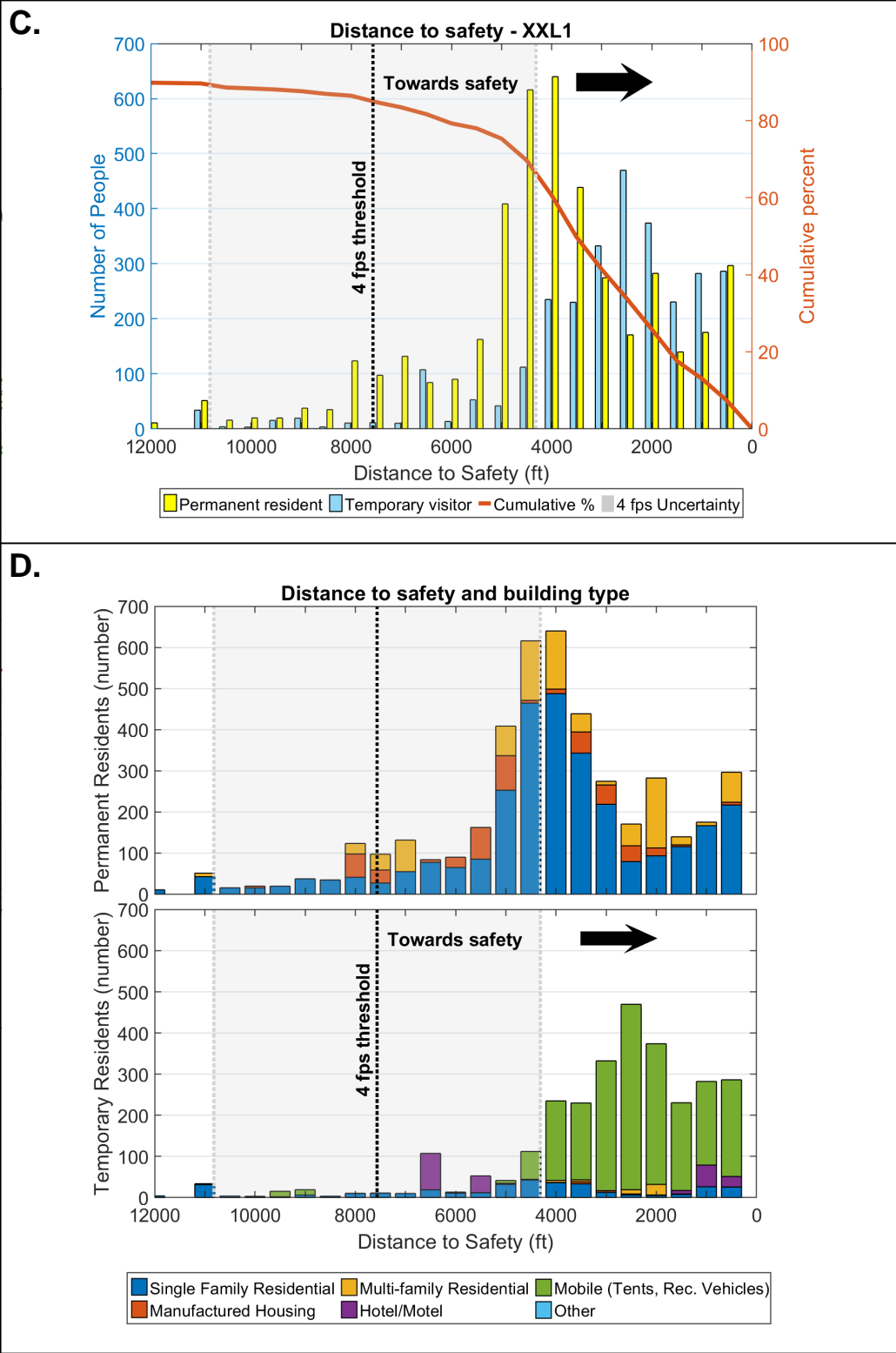
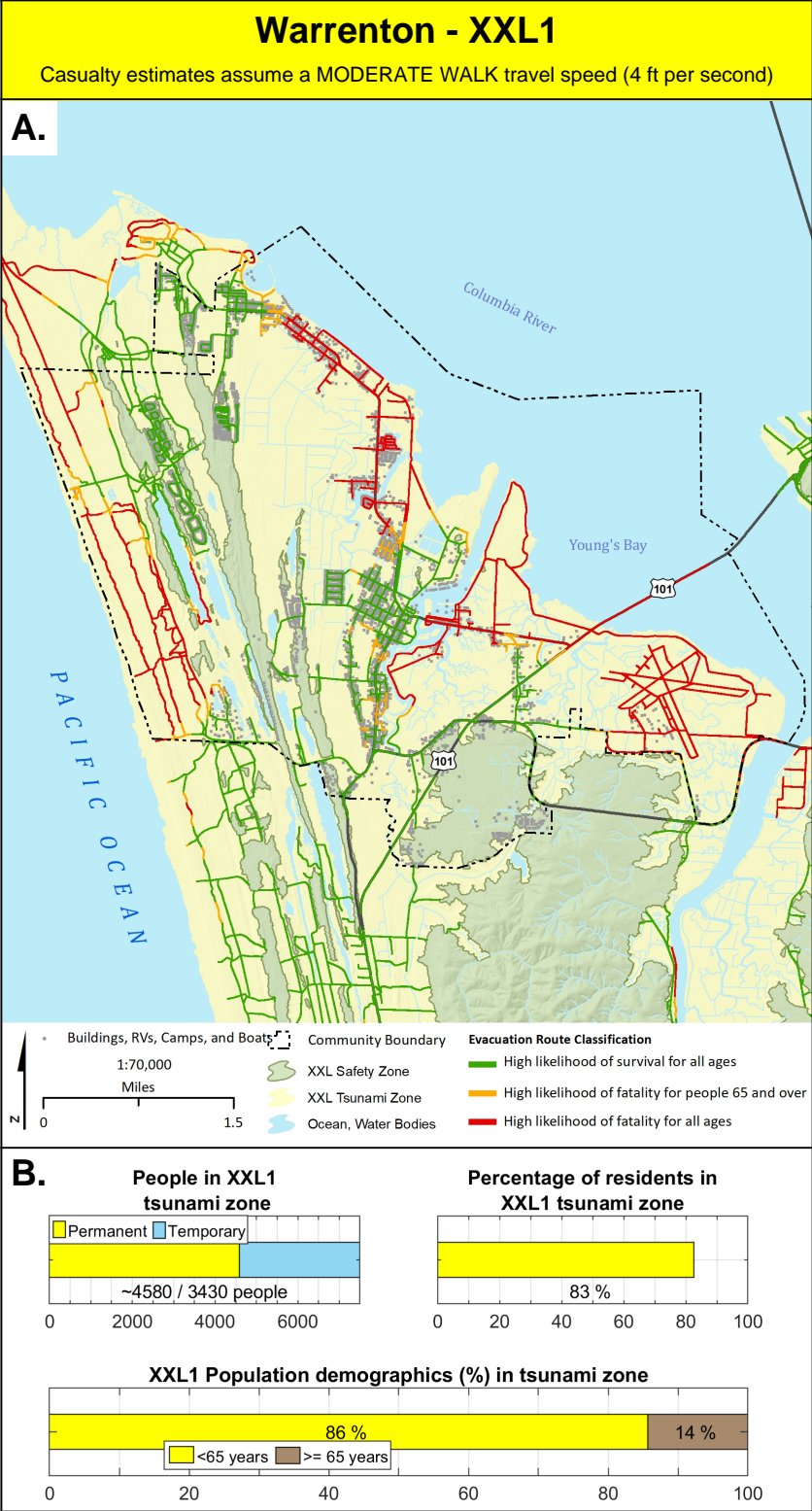
 Perm. + temp. @ 50% occupancy

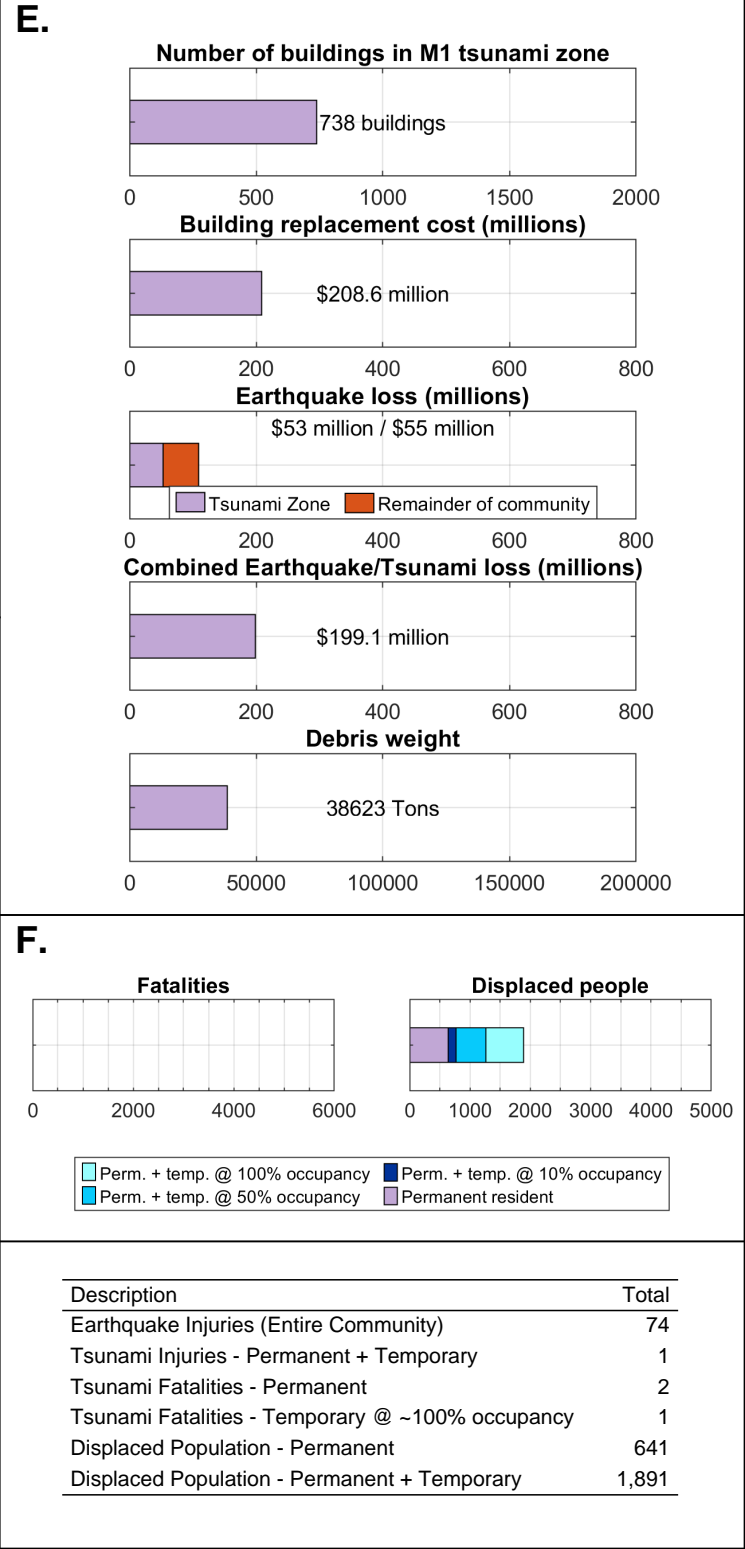
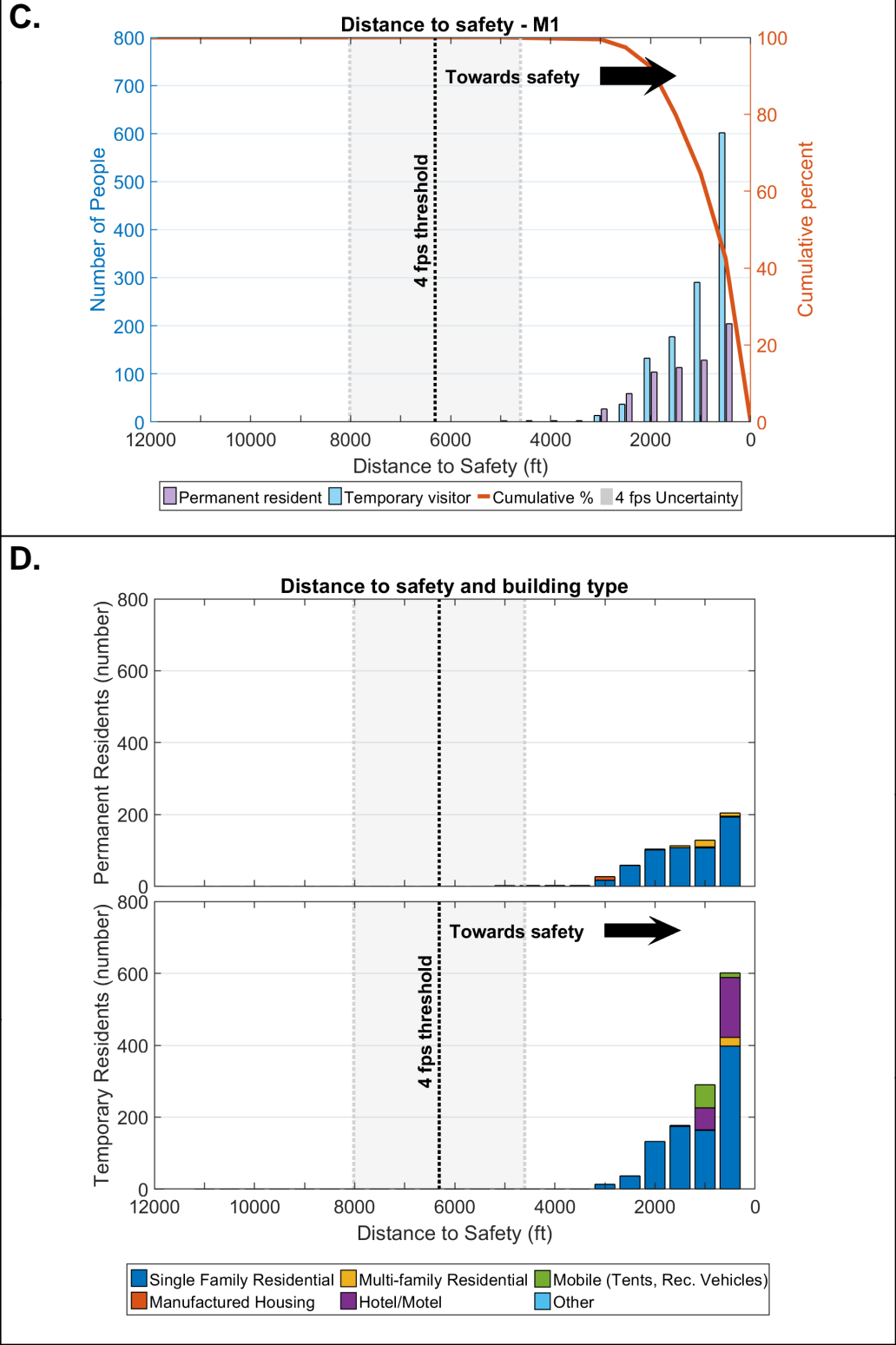
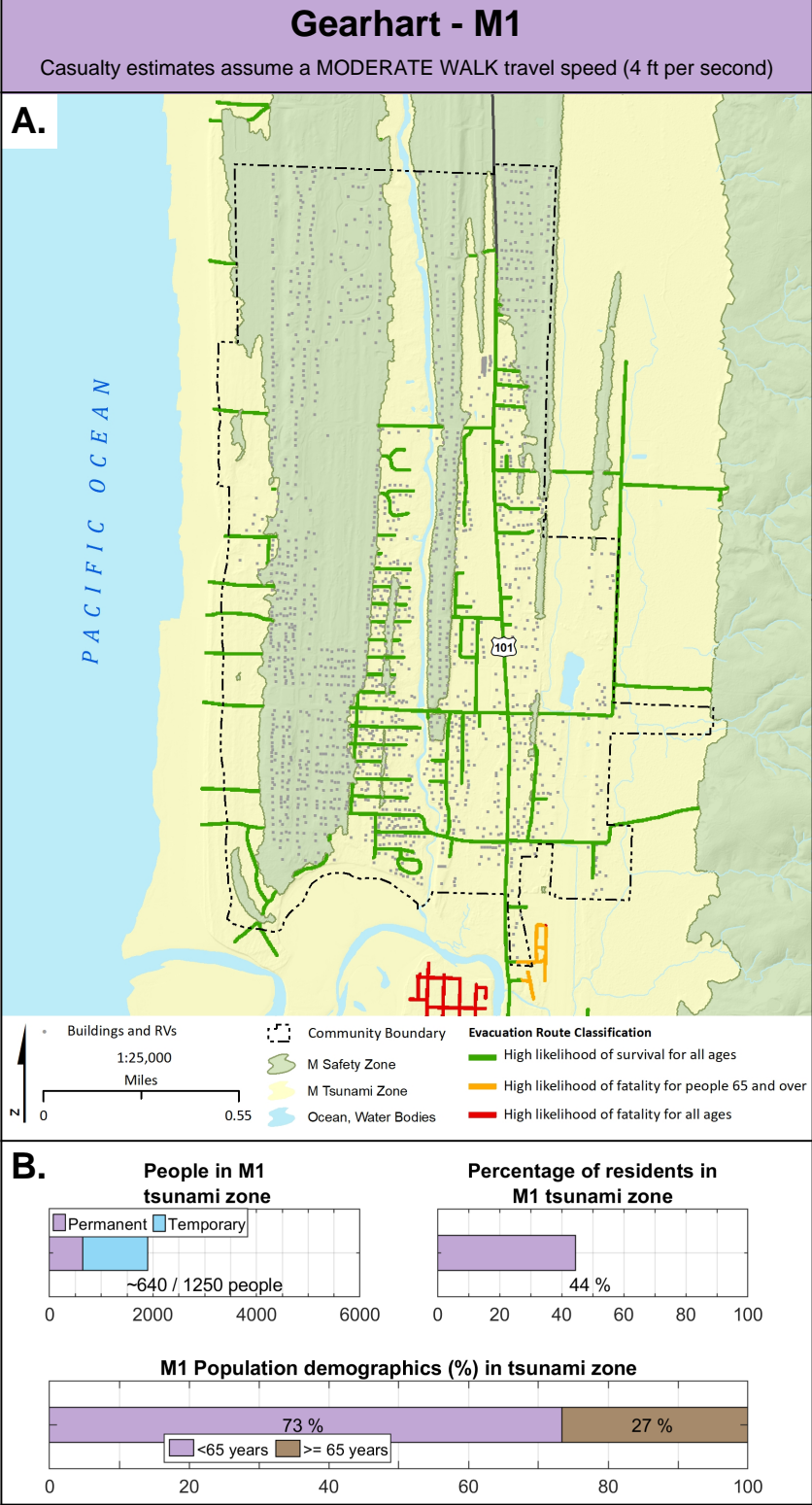
 Permanent resident

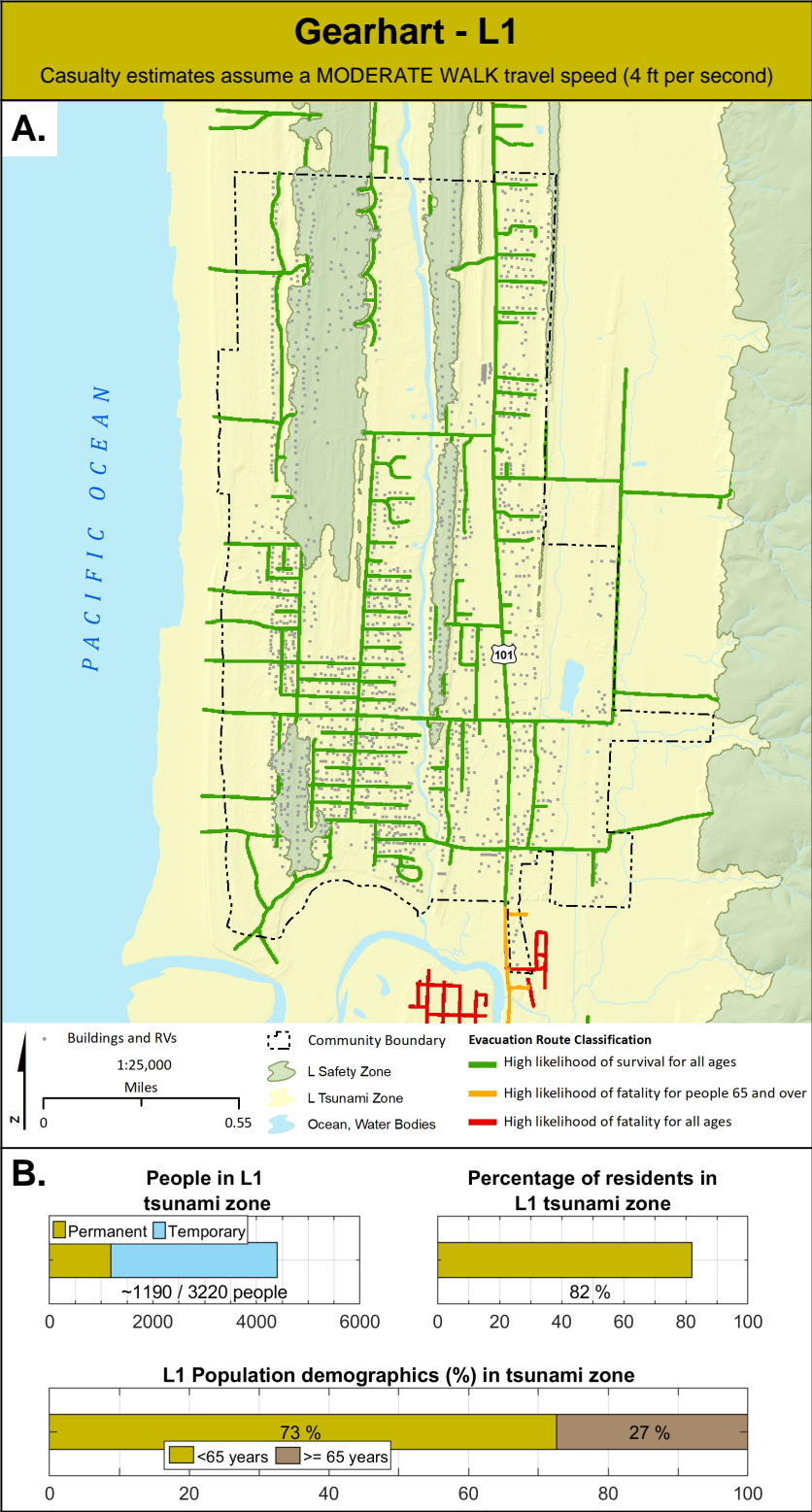
Description	Total
Earthquake Injuries (Entire Community)	7
Tsunami Injuries - Permanent + Temporary	8
Tsunami Fatalities - Permanent	208
Tsunami Fatalities - Temporary @ ~100% occupancy	1
Displaced Population - Permanent	265
Displaced Population - Permanent + Temporary	408











Casualty estimates assume a MODERATE WALK travel speed (4 ft per second)

A.

PACIFIC OCEAN

COLUMBIA RIVER

ASTORIA

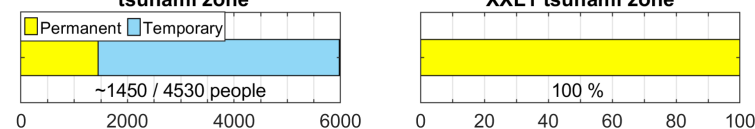
PORTLAND

EUGENE

101

• Buildings and RVs Community Boundary **Evacuation Route Classification**
 1:25,000 XXL Safety Zone High likelihood of survival for all ages
 Miles XXL Tsunami Zone High likelihood of fatality for people 65 and over
 0 Ocean, Water Bodies High likelihood of fatality for all ages

Percentage of residents in



Age Group	Percentage
<65 years	72 %
>= 65 years	28 %

Distance to safety - XXL1

Number of People

Distance to Safety (ft)

4 fps threshold

4 fps Uncertainty

Towards safety

Permanent resident

Temporary visitor

Cumulative %

4 fps Uncertainty

Cumulative percent

Distance to safety and building type

Permanent Residents (number)

Distance to Safety (ft)

4 fps threshold

Towards safety →

Temporary Residents (number)

Distance to Safety (ft)

4 fps threshold

Towards safety →

Single Family Residential Multi-family Residential Mobile (Tents, Rec. Vehicles) Manufactured Housing Hotel/Motel Other

The figure consists of five horizontal bar charts, each representing a different disaster impact metric. The bars are yellow, and the data values are displayed inside the bars. The x-axis scales vary for each chart.

Metric	Value
Building replacement cost (millions)	1627
Earthquake loss (millions)	\$473.6
Combined Earthquake/Tsunami loss (millions)	\$109 million / \$0 million
Debris weight	130880 Tons

Legend:

- Tsunami Zone (Yellow)
- Remainder of community (Red)

The figure consists of two horizontal bar charts. The left chart, titled 'Fatalities', has an x-axis ranging from 0 to 6000. It shows three bars: a dark blue bar for 'Perm. + temp. @ 100% occupancy' (approx. 1000), a light blue bar for 'erm. + temp. @ 50% occupancy' (approx. 3500), and a yellow bar for 'Permanent resident' (approx. 5500). The right chart, titled 'Displaced people', has an x-axis ranging from 0 to 5000. It shows three bars: a dark blue bar for 'Perm. + temp. @ 100% occupancy' (approx. 100), a light blue bar for 'erm. + temp. @ 50% occupancy' (approx. 200), and a yellow bar for 'Permanent resident' (approx. 300). A legend at the bottom identifies the colors: dark blue for 'Perm. + temp. @ 100% occupancy', light blue for 'erm. + temp. @ 50% occupancy', and yellow for 'Permanent resident'.

Scenario	Fatalities (approx.)	Displaced people (approx.)
Perm. + temp. @ 100% occupancy	1000	100
erm. + temp. @ 50% occupancy	3500	200
Permanent resident	5500	300

Description	Total
Earthquake Injuries (Entire Community)	74
Tsunami Injuries - Permanent + Temporary	82
Tsunami Fatalities - Permanent	1,212
Tsunami Fatalities - Temporary @ ~100% occupancy	4,436
Displaced Population - Permanent	235
Displaced Population - Permanent + Temporary	331

