

APPENDIX D—Learner Handout: Construct a TVES Tower in 15 minutes

- You have 15 minutes to construct your tower.
- Use the supplies provided to construct a vertical evacuation tower that will have a finished elevation of 50' using a scale of 1" = 10'. With this scale, your tower will be at least 5" tall.
- In your team, decide which top platform to use: the pre-cut 4" X 5" rectangle cardboard or one of the other options listed in the materials. Using a 1" = 10' scale, the actual dimensions will provide 2,000 sq. ft. enough for 200 evacuees.
- Design your own structural support system (number and location of vertical girders).
- Include stair locations if time permits.
- Optional: You can add an additional floor (above 5"), add a roof for shelter from rain, add a storage container to hold emergency supplies as time allows.



Figure A: Rendering of the Shoalwater Bay Indian Tribe TVES in Tokeland, Washington. Photo courtesy of Washington State Military Department Emergency Management Division.



Figure B: Model tower built in 15 minutes.