



Virtual Sidewalk Survey

Concrete Coalition Toolkit

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About the Concrete Coalition

- ▶ The Concrete Coalition is a network comprised of individuals, governments, institutions, and agencies with an interest in assessing and mitigating the risk associated with dangerous non-ductile concrete buildings.



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The Concrete Coalition Toolkit

- ▶ The components of the concrete coalition toolkit provide details about ways you can assess the risk and move towards solutions in your community



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Virtual Sidewalk Survey

Assessing Risk

- ▶ Objective: The goal of a virtual sidewalk survey is to “ground-truth” information from different sources and take advantage of online “street views” for surveys in lieu of a physical walk around
- ▶ Virtual sidewalk surveys can provide a good estimate of potentially vulnerable buildings, however surveys are limited by the available photography in web maps



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VIRTUAL Sidewalk Survey

Summary of Procedure

- ▶ Assemble Building list based on existing data sets
- ▶ Complete virtual surveys using street views in Google maps
- ▶ Reconcile discrepancies
- ▶ Total buildings and write report



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1. Gather Background Data

- ▶ There are many resources available to help you compile a list of addresses to be used in your virtual sidewalk survey
 - Assessor Data, Zoning Map, Sanborn Maps
- ▶ Building officials generally have excellent information about their jurisdictions
 - Could ask him/her to estimate number of concrete buildings
 - Ask which areas are post-1980 construction
 - Where are older concrete buildings likely to be found?



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2. Set Scope of Survey

- ▶ Determine the areas of the city that you would like to survey
 - Zoning maps can help you determine areas of interest
- ▶ Develop a form to collect desired information about each suspected older reinforced concrete building
 - Form should include: Address, Number of Stories, Torsional, Frame or Shear Wall, Photo
- ▶ Conduct building by building survey of areas of interest and document any older reinforced concrete buildings (organizing a large volunteer effort will help expedite this part)



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3. Survey Buildings

- ▶ Conduct building by building survey of areas of interest by entering addresses into Google maps and using street view to see the building
- ▶ Document any older reinforced concrete buildings (organizing a crowd-sourcing effort can be an effective way to conduct a virtual sidewalk survey quickly)



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5. Reconcile Discrepancies

- ▶ After your virtual survey, there may still be a number of structures where your walkthrough disagrees with the other data like the Sanborn maps.
- ▶ Determine how you will reconcile these differences, re-visiting questionable buildings if necessary.
- ▶ Additionally, any buildings with obstructed street-view images should be flagged for in-person surveys to collect the desired information



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6. Report

- ▶ Write a summary report of your findings
- ▶ Know your audience
 - Make sure the report presents information in a way that is easy to understand for your target audience: policy makers, planners, residents



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Tips

- ▶ Use knowledge of the City to:
- ▶ Be prepared for troublesome areas:
 - No access to some military installations
 - Some buildings are conglomerations of building types
 - Modified buildings
- ▶ Date buildings of unknown construction date using:
 - Use of historic aerial photos
 - Building department records
 - Guidance from building official
 - Judgment/Estimates



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Next Steps

- ▶ Once you have estimates of the number of potentially vulnerable buildings, you can work towards mitigating the risk
- ▶ See the other items in the toolkit to get you started on that process



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Resources

- ▶ Downloadable checklist
- ▶ PDF/Powerpoint files of presentation
- ▶ Completed and ongoing efforts

All available at:

www.concretecoalition.org/tool-kit/visual-categorization



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