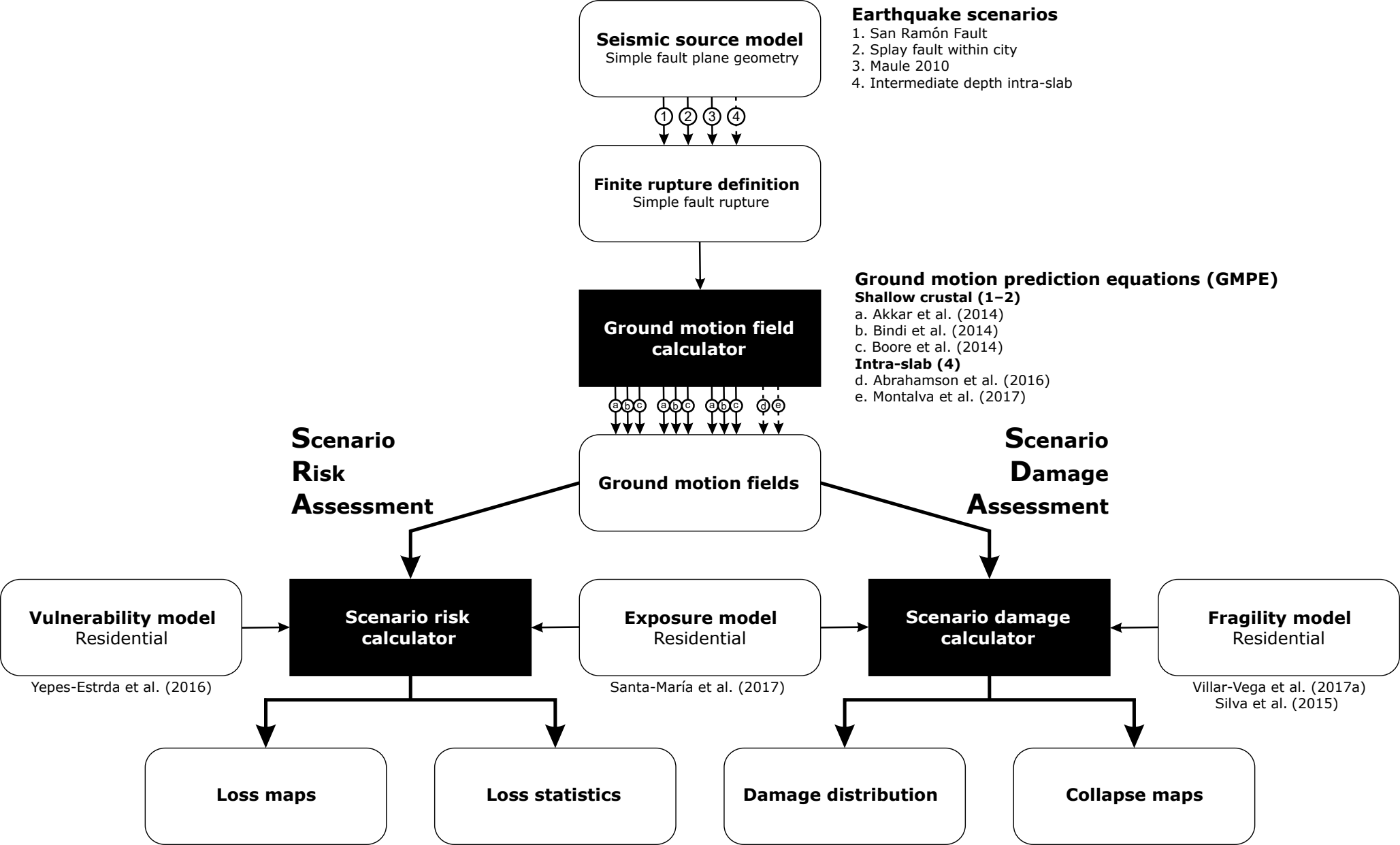
Seismic source model
Simple fault plane geometry
Earthquake scenarios
1. San Ramón Fault
2. Splay fault within city
3. Maule 2010
4. Intermediate depth intra-slab
1
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Finite rupture definition
Simple fault rupture
Ground motion field calculator
Ground motion prediction equations (GMPE)
Shallow crustal (1–2)
a. Akkar et al. (2014)
b. Bindi et al. (2014)
c. Boore et al. (2014)
Intra-slab (4)
d. Abrahamson et al. (2016)
e. Montalva et al. (2017)
a
b
c
a
b
c
a
b
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Scenario Risk Assessment
Ground motion fields
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Vulnerability model
Residential
Yepes-Estrda et al. (2016)
Scenario risk calculator
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Santa-María et al. (2017)
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Fragility model
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Villar-Vega et al. (2017a)
Silva et al. (2015)
Loss maps
Loss statistics
Damage distribution
Collapse maps