Primary Metrics (PM)

- Crash History
- Vehicle Volume
- Vehicle Speed
- Vehicle Travel Time
- Bike Volume

Living Lab – Phase II Corridor Evaluation – Folsom Street

Evaluation Criteria	Data Collection	Data Collection Source	Data Analyzed	Before Data	After Data 1 – 8 weeks	After Data 3 months	After Data 6 months	After Data 12 months
SAFETY								
Crash History (PM)	Intersections and segments	Review City of Boulder Accident Reports	• Fatal & serious injury crashes • Crashes involving bicyclist or pedestrian • Crash types (rear end, approach turn, right angle, etc.)	Yes (3 year)	✓	✓	✓	✓
Right Turn Treatments & Turning Movement Conflicts	Folsom & Canyon Folsom & Pearl	Video Observation (AM & PM Peak Hour)	• Bicycle, pedestrian, and vehicle interactions in right turn treatments • Turning motorist failure to yield to pedestrian or bicycle • Compliance with signage and striping treatment	No		✓		✓
VEHICLES								
Volume (PM)	Folsom n/o Canyon Folsom n/o Bluff	Wavetronix	• Counts of traffic volume: Average Daily Traffic	Yes (1 week ADT)	✓	✓		✓
Speed (PM)	Folsom n/o Bluff Folsom n/o Canyon	Wavetronix	• Average daily speed of vehicles • 85th Percentile speed • Speed limit	Yes (1 week ADT)	✓	✓		✓

Evaluation Criteria	Data Collection	Data Collection Method	Data Analyzed	Before Data	After Data 1 month	After Data 3 months	After Data 6 months	After Data 12 months
VEHICLES – cont'd								
Traffic Neighborhood Diversion	TMC – 20th & Pine, 20th & Pearl, 26th & Pearl, 26th & Canyon, 28th and Valmont, 28th & Pearl, 28th and Canyon, 28th and Arapahoe. ADT-19th s/o Edgewood, Spruce e&w/o Folsom, Pine e&w/o Folsom, South w/o Folsom	Jamar & Miovision	• Peak hour Turning Movement Counts and ADT counts	Yes		✓		✓
Side Street Delay	-Spruce eastbound @ Folsom; -Walnut eastbound @ Folsom; -REMAX alley westbound @ Folsom (alley just north of Canyon)	Video Observation	• Collect AM and PM peak hour video and then document delay for vehicles entering the corridor	Yes		✓		✓
Vehicle Travel Time	Folsom Corridor	Field Data Collection or Acyclica Data	• Average, high, and low PM peak driving times corridor	Yes (Multiple & Acyclica)	✓	✓	✓	✓
Level of Service (LOS) Analysis	Folsom Corridor	Turning Count Movement Data (AM & PM Peak Hour)	• Synchro capacity analysis for each intersection turning movement using data collected during City turning movement counts	Yes (1 day AM/PM)				✓
Left Turn Queue Length	SB Folsom at Pearl NB Folsom at Pearl SB Folsom at Canyon	Video Observation (PM Peak Hour)	• Average and maximum queue. • Number of times turn lane queue blocks through lane	Yes		✓		✓
Saturation Flow Rate	SB Folsom at Pearl NB Folsom at Pearl SB Folsom at Canyon	Video Observation (PM Peak Hour)	• Number of vehicles progressing through intersection and amount of green time for each phase during PM peak period (video observation) and calculate PM peak hour Saturation flow rate	No		✓		
Traffic Signal Queue Failures	Pearl at Folsom Pearl at Canyon	Observation	• Number of cycles in which queue failure results in green indication but nowhere for vehicles to go	No		✓		

Evaluation Criteria	Data Collection	Data Collection Method	Data Analyzed	Before Data	After Data 1 month	After Data 3 months	After Data 6 months	After Data 12 months
BICYCLES								
Volume (PM)	Folsom n&s/o & Arapahoe* Folsom n&s/o & South* Folsom n&S & Pine*	Before: Miovision counters (AM, Noon, PM Peak and Daylight* Hours) Video Observation (AM & PM Peak Hour) After: 24 Hour Counters* Video Observation (AM & PM Peak Hour)	• Bicycle volume by direction and time of day	Yes (@ Pine = 1 day daylight hours @South = 1 day daylight hours s/o Arapahoe = 2012-2015 with gaps)	✓	✓	✓	✓
Bicycle Demographics	n/o Pine n/o South S/o Arapahoe	Observations	Measure ratio of male to female and families bicycling along corridor	No	✓	✓	✓	✓
Demographics	Folsom & Pearl Iris & Broadway 63rd & Spine	Video and Field Observation	• Ratio of male, female, and children cycling on the road	Yes		✓		✓
PEDESTRIANS								
Crossing Volume & vehicle stopping compliance at flashing crosswalks	Folsom & Canyon Folsom & Pearl Folsom & Pine Folsom & Spruce Folsom & Walnut	Miovision counters Video and Field Observation	• Number of crossing pedestrians by direction and time of day	Yes (1 day)		✓		✓
TRANSIT								
Ridership	HOP Transit Stops south of Canyon and Arapahoe	RTD data	• Number of passengers boarding and alighting at stops	Yes		✓		✓
FACILITY DESIGN								
Overall Maintenance	Folsom Corridor	Public Works Department	• Snow, ice, and debris removal along corridors	No		✓	✓	✓
Emergency Response Times	Folsom Corridor	Input from Boulder Fire-Rescue Department	• Response time of emergency vehicles along corridors • Ability of emergency vehicles to maneuver within corridors	No	✓	✓	✓	✓
PUBLIC FEEDBACK								
Public Feedback	All Corridors	Open Houses, Online Feedback, Popup Demonstrations	• Online and community feedback	Yes	✓	✓	✓	✓