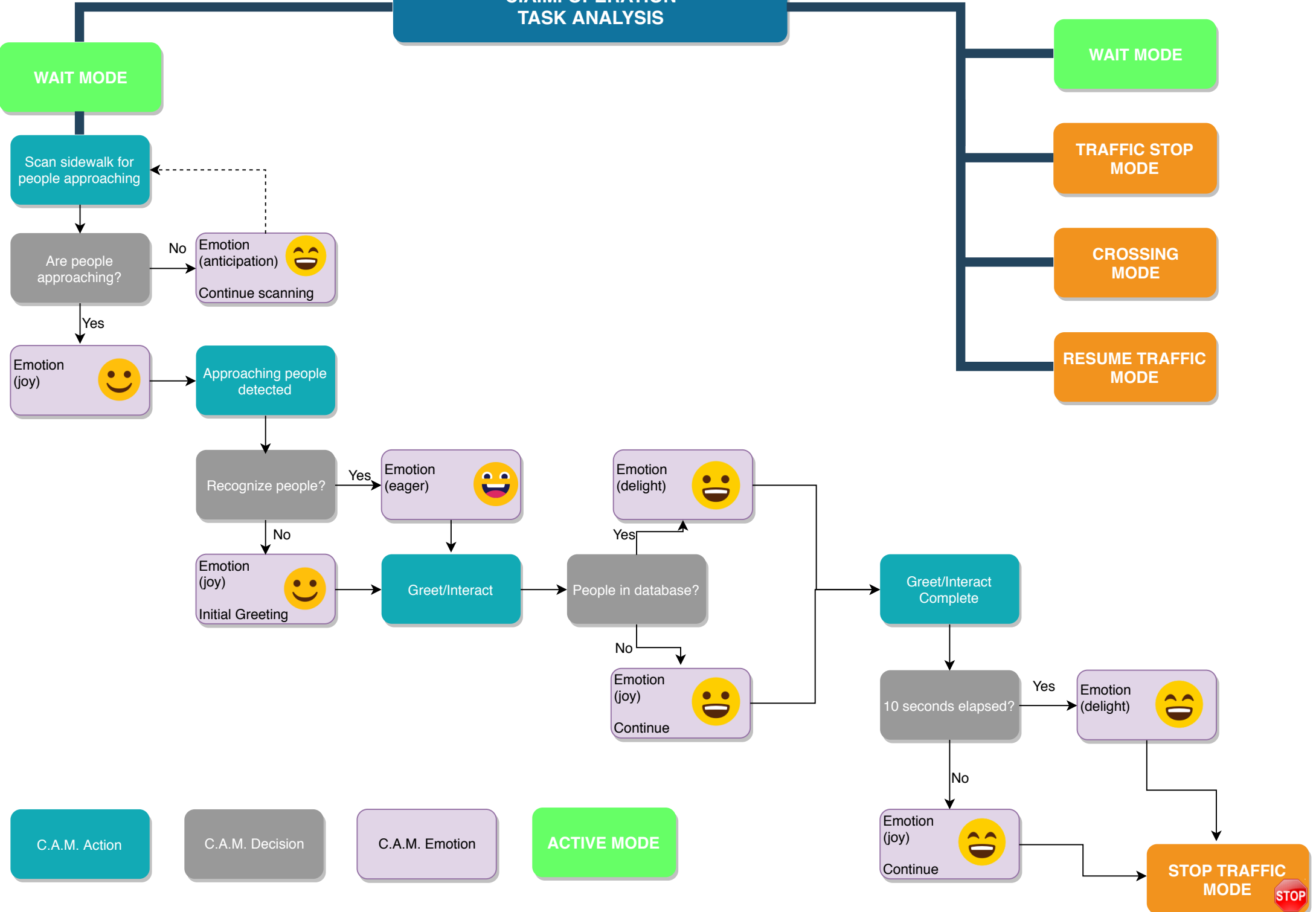


C.A.M. OPERATION TASK ANALYSIS



WAIT MODE

Scan sidewalk for people approaching

Are people approaching?

No

Emotion (anticipation) 😄
Continue scanning

Yes

Emotion (joy) 😊

Approaching people detected

Recognize people?

Yes

Emotion (eager) 😁

No

Emotion (joy) 😊
Initial Greeting

Greet/Interact

People in database?

Yes

Emotion (delight) 😄

No

Emotion (joy) 😊
Continue

Greet/Interact Complete

10 seconds elapsed?

Yes

Emotion (delight) 😄

No

Emotion (joy) 😊
Continue

STOP TRAFFIC MODE

C.A.M. Action

C.A.M. Decision

C.A.M. Emotion

ACTIVE MODE

WAIT MODE

TRAFFIC STOP MODE

CROSSING MODE

RESUME TRAFFIC MODE

STOP

C.A.M. OPERATION TASK ANALYSIS

STOP TRAFFIC MODE

Begin traffic "Stop" signals from sidewalk

Sensors indicate safe to enter crosswalk?

Emotion (excited)

No
Emotion (concerned)
Continue scanning

Enter center of crosswalk while signaling "Stop"

Has traffic complied and stopped?

Yes
Emotion (joy)

Initiate Crossing Mode

CROSSING MODE

WAIT MODE

TRAFFIC STOP MODE

CROSSING MODE

RESUME TRAFFIC MODE



C.A.M. Action

C.A.M. Decision

C.A.M. Emotion

ACTIVE MODE

C.A.M. OPERATION TASK ANALYSIS


CROSSING MODE

WAIT MODE


TRAFFIC STOP MODE


CROSSING MODE

RESUME TRAFFIC MODE

Begin "Walk" signal to pedestrians 


Sensors indicate pedestrians entering crosswalk?


No
Emotion (concerned) 
Continue signaling

Yes
Emotion (excited) 

Monitor crosswalk progress


Pedestrians complete crosswalk?


No
Emotion (excited) 

Yes
Emotion (joy) 

End "Walk" signal

Crosswalk clear?

No
Emotion (concern) 

Yes
Emotion (joy) 

RESUME TRAFFIC MODE

C.A.M. Action

C.A.M. Decision

C.A.M. Emotion

ACTIVE MODE

C.A.M. OPERATION TASK ANALYSIS

WAIT MODE

TRAFFIC STOP MODE

CROSSING MODE

RESUME TRAFFIC MODE

RESUME TRAFFIC MODE

Return to sidewalk

Arrived back to sidewalk post?

Emotion (fulfillment)

No
Emotion (joy)
Continue

Park at post on sidewalk

Is crosswalk clear?

Emotion (joy)

End "Stop" signal to traffic

WAIT MODE

No
Emotion (concern)

C.A.M. Action

C.A.M. Decision

C.A.M. Emotion

ACTIVE MODE