COMPLETE TRIP

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Heart of Iowa Regional Transit Agency (HIRTA)
Phase 1 Concept of Operations Webinar

July 21, 2021

Agenda

- ## Purpose of this Webinar
  - To share the Concept Development Activities from *(HIRTA)* with the stakeholders of the project.

- ## Webinar Content
  - Complete Trip – ITS4US Deployment Program Overview (*Fred Bowers*)
  - Site Orientation & Key Challenges (*Brooke Ramsey*)
  - Stakeholder Engagement Efforts (*Steve Wilks*)
  - Deployment Concept Overview (*Santosh Mishra*)
  - Stakeholder Q&A
  - How to Stay Connected (*Fred Bowers)*

- ## Webinar Protocol
  - Please mute your phone during the entire webinar
  - You are welcome to ask questions via chatbox at the Q&A Section
  - The webinar recording and the presentation material will be posted on the ITS4US website

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U.S. Department of Transportation
ITS Joint Program Office

Brief Program Overview

Fred Bowers, FHWA

U.S. Department of Transportation
ITS Joint Program Office

Complete Trip - ITS4US Deployment Program

- A USDOT Multimodal Deployment effort, led by ITSJPO and supported by OST, FHWA and FTA

- Supports multiple large-scale replicable deployments to address the challenges of planning and executing all segments of a complete trip

TRIP PLANNING

INTERSECTION CROSSING

VEHICLES & MODE TRANSFERS/PAYMENT STOPS & STATIONS

INDOOR NAVIGATION

OUTDOOR NAVIGATION

INDOOR/OUTDOOR TRANSITION

CONNECTING & COMPLETING TRIP SEGMENTS

BOARDING/USING VEHICLES

Source: USDOT

Vision

Innovative and integrated **complete trip deployments** *to support seamless travel for all users across* **all modes**, *regardless of* **location, income, or disability**

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Program Goals

Spur high-impact integrated Complete Trip deployments nationwide

Identify needs and challenges by populations

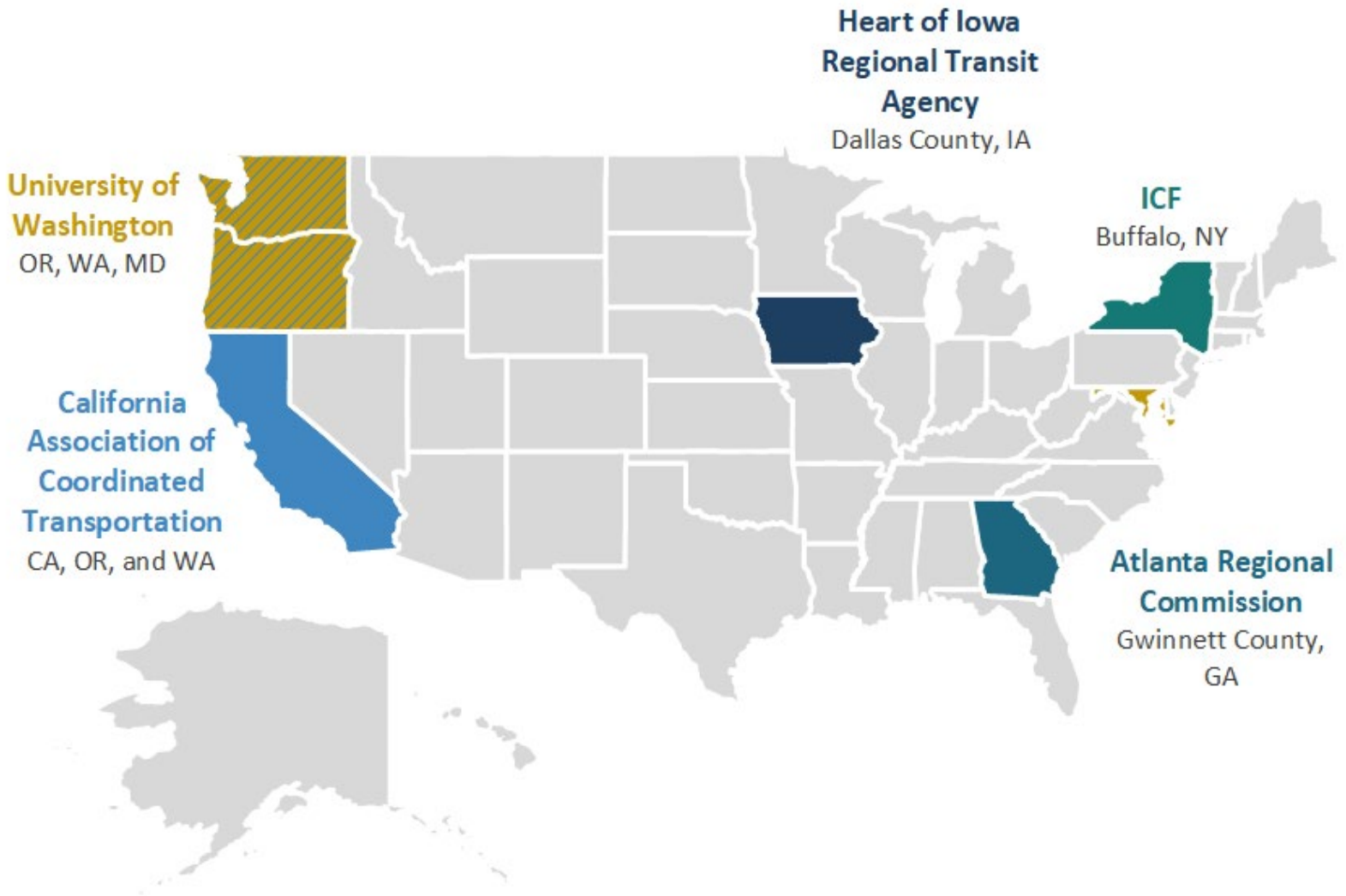Develop and deploy mobility solutions that meet user needs
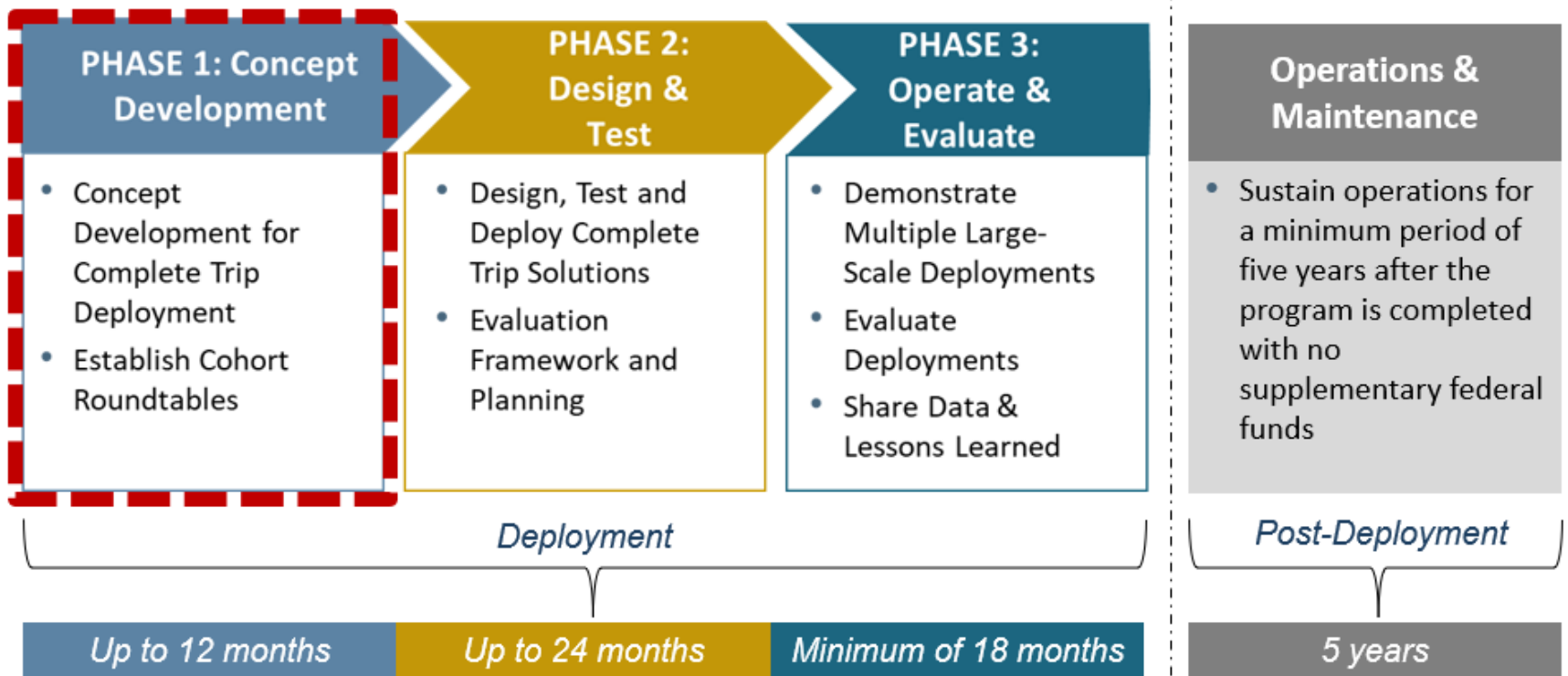
Measure impact of integrated deployments

Identify replicable solutions and disseminate lessons learned

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Complete Trip Phase 1 Awardees

Heart of Iowa Regional Transit Agency
Dallas County, IA

University of Washington
OR, WA, MD

ICF
Buffalo, NY

California Association of Coordinated Transportation
CA, OR, and WA

Atlanta Regional Commission
Gwinnett County, GA

Deployment Phases

PHASE 1: Concept Development	PHASE 2: Design & Test	PHASE 3: Operate & Evaluate	Operations & Maintenance
• Concept Development for Complete Trip Deployment • Establish Cohort Roundtables	• Design, Test and Deploy Complete Trip Solutions • Evaluation Framework and Planning	• Demonstrate Multiple Large-Scale Deployments • Evaluate Deployments • Share Data & Lessons Learned	• Sustain operations for a minimum period of five years after the program is completed with no supplementary federal funds

Deployment

Post-Deployment

Up to 12 months	Up to 24 months	Minimum of 18 months	5 years

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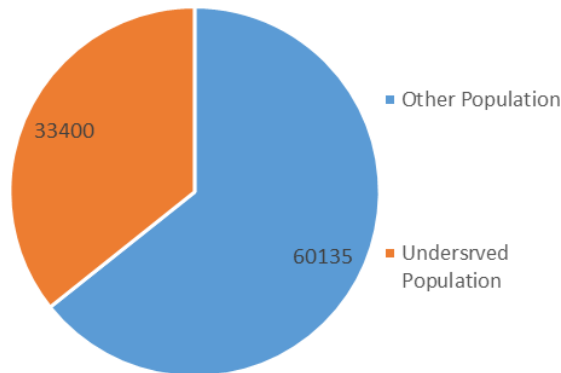**ITS Joint Program Office**
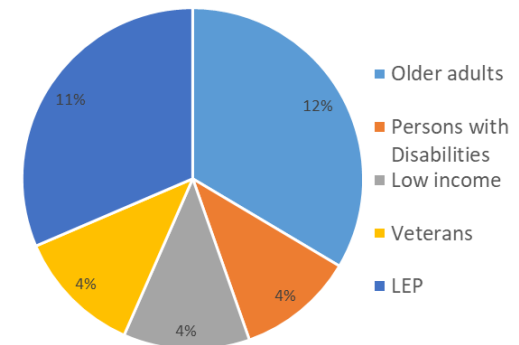
Site Orientation & Key Challenges

Brooke Ramsey, Project Management Lead

HIRTA and Dallas County Overview

- HIRTA provides demand response services to population in 7 county areas, including Dallas County

- Dallas County grew at 36% in the last decade

- Coordination of medical transportation services for underserved a major challenge

Population Breakdown in
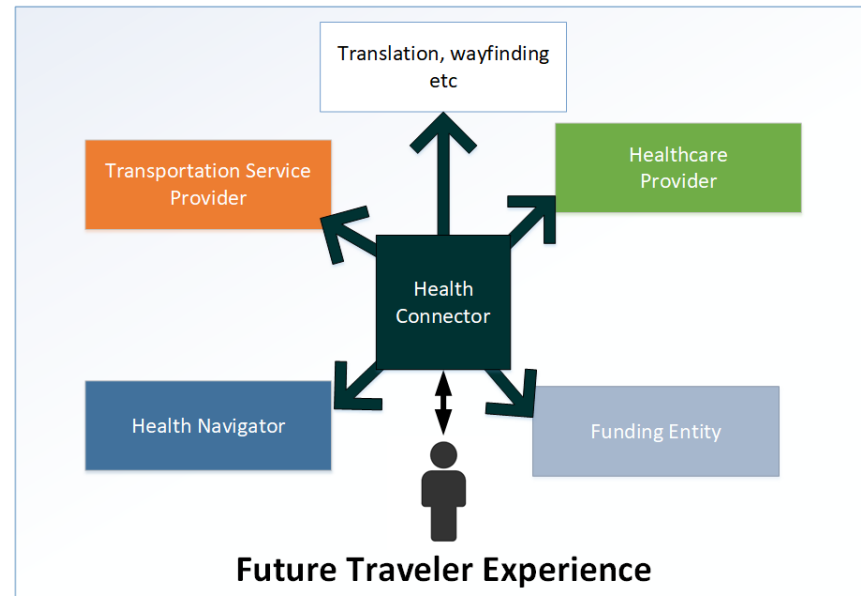Dallas County (Source: Census 2019)
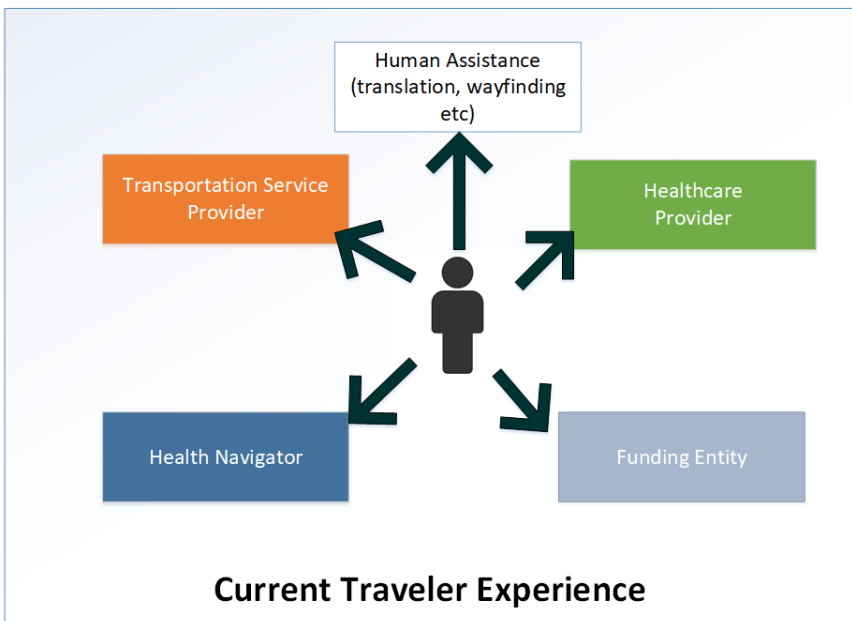
- Other Population
- Undersrved Population
- 33400
- 60135

Underserved Population (Total: 33,500) Share in
Dallas County (Source: Census 2019)

- Older adults — 12%
- Persons with Disabilities — 4%
- Low income — 4%
- Veterans — 4%
- LEP — 11%

Underserved Group Challenges

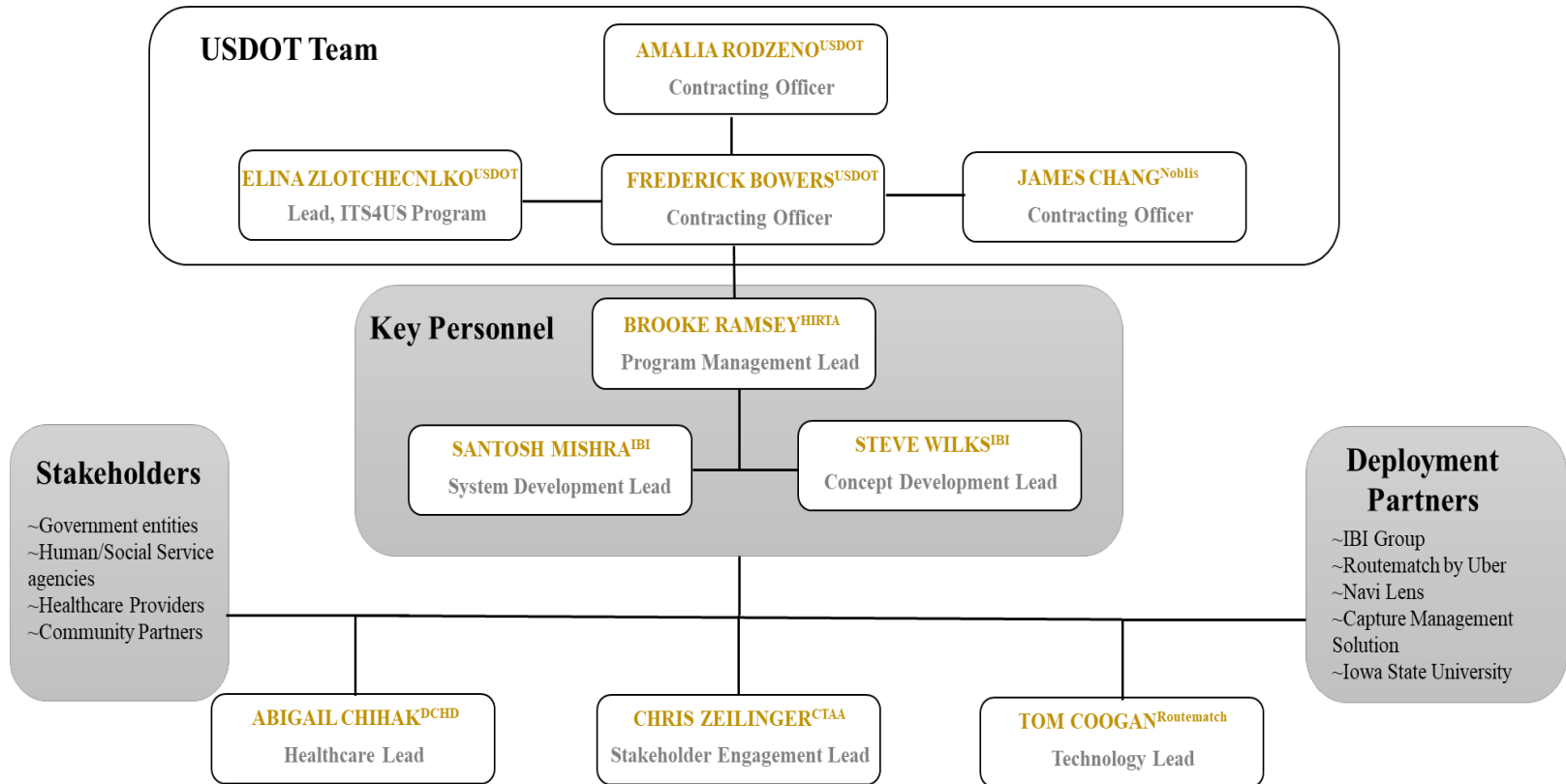| Population Group	Challenges
Persons with Disabilities	(1) Limited wayfinding services to the transit vehicle, into the healthcare facility, and to their specific appointment location; (2) Smart device accommodations for blind and deaf/hard of hearing persons; (3) Smart device – user-based settings for ease of use and services preferences;
Older Adults	(1) Smart device accessibility - larger screen setting; user-based settings for ease of use and services preferences; (2) Telephone number to call for services; (3) Maintaining independence; (4) Solution/service ease of use
Low Income	(1) Contactless payments: for unbanked/underbanked customers; (2) Alternate mobility services only option given limited number of personal vehicles per household.
Rural	(1) Limited access to healthcare appointments due to long distance travel; (2) Challenges in coordinating appointment times with availability of transportation; (3) Cost effective transportation solutions; (4) Maintaining independence; (5) Solution/service ease of use; (6) Long distance travel may present stamina challenges.
Veterans	(1) Access to veterans' hospitals and other veteran support services; (2) Same challenges as all above subgroups.
Persons with LEP	(1) Support for Spanish and other languages; (2) Support to understand all services and technology system developed (e.g., HIRTA travel trainers, DCHD, etc.).

Justification for Change

Current Traveler Experience

Future Traveler Experience

Source: HIRTA Team

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HIRTA Team

USDOT Team

AMALIA RODZENO[USDOT]
Contracting Officer

ELINA ZLOTCHECNLKO[USDOT]
Lead, ITS4US Program

FREDERICK BOWERS[USDOT]
Contracting Officer

JAMES CHANG[Noblis]
Contracting Officer

Key Personnel

BROOKE RAMSEY[HIRTA]
Program Management Lead

SANTOSH MISHRA[IBI]
System Development Lead

STEVE WILKS[IBI]
Concept Development Lead

Stakeholders

~Government entities
~Human/Social Service agencies
~Healthcare Providers
~Community Partners

Deployment Partners

~IBI Group
~Routematch by Uber
~Navi Lens
~Capture Management Solution
~Iowa State University

ABIGAIL CHIHAK[DCHD]
Healthcare Lead

CHRIS ZEILINGER[CTAA]
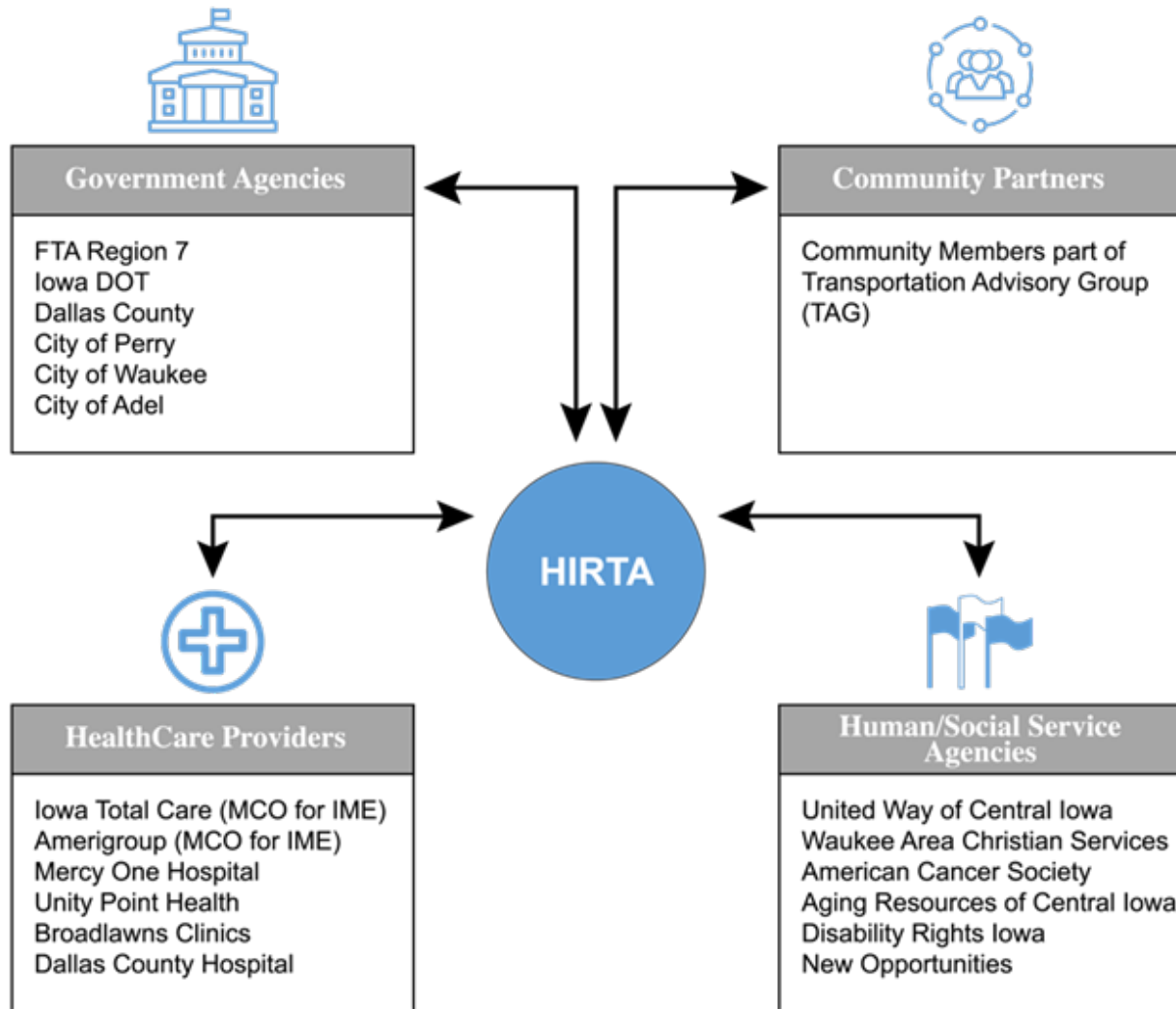Stakeholder Engagement Lead

TOM COOGAN[Routematch]
Technology Lead

Note:
HIRTA: Heart of Iowa Regional Transit Agency
DCHD: Dallas County Health Department
IBI: IBI Group
CTAA: Community Transportation Association of America
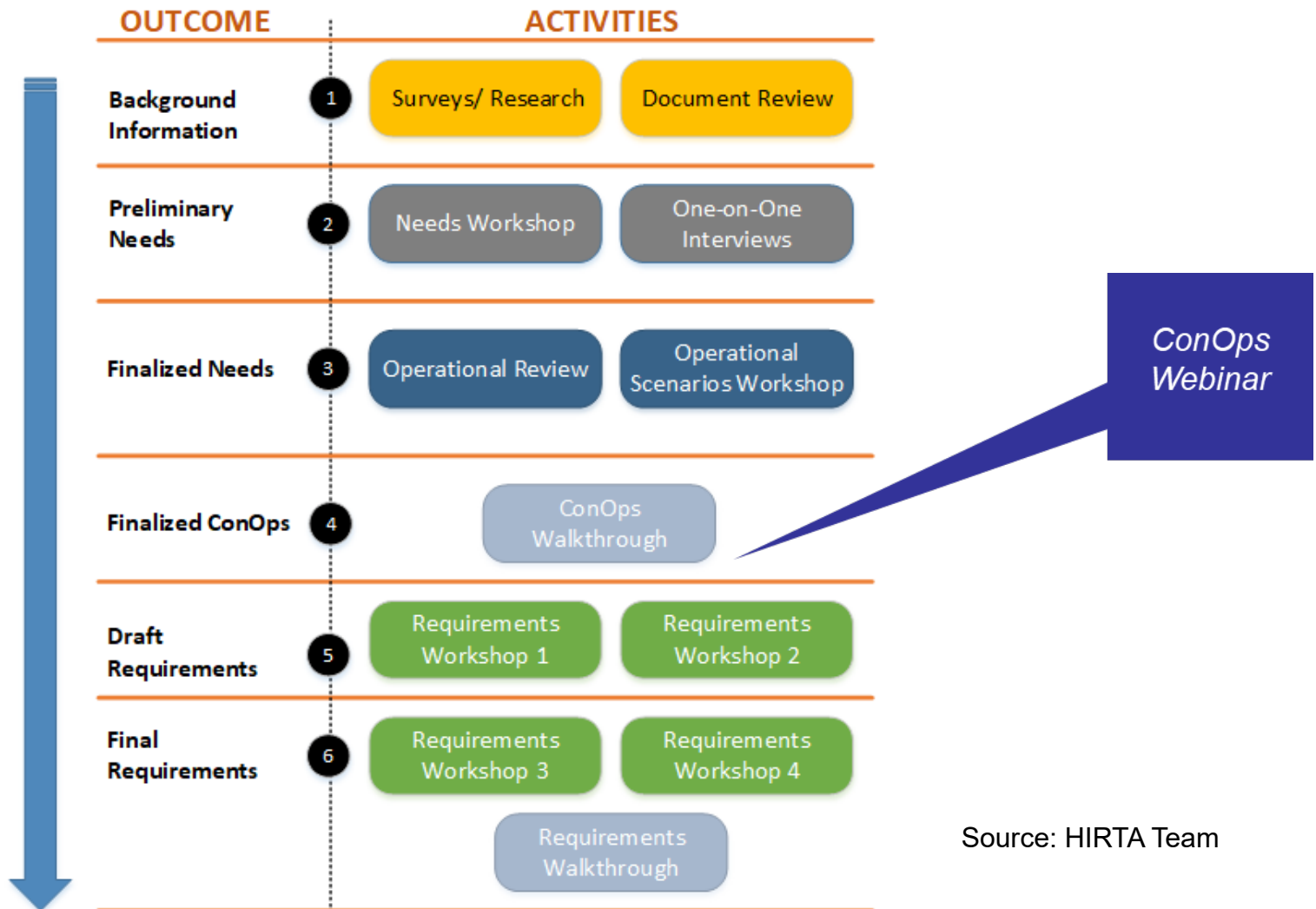Routematch: Routematch by Uber

Source: HIRTA Team

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Stakeholders

Government Agencies
- FTA Region 7
- Iowa DOT
- Dallas County
- City of Perry
- City of Waukee
- City of Adel

Community Partners
- Community Members part of Transportation Advisory Group (TAG)

HIRTA

HealthCare Providers
- Iowa Total Care (MCO for IME)
- Amerigroup (MCO for IME)
- Mercy One Hospital
- Unity Point Health
- Broadlawns Clinics
- Dallas County Hospital

Human/Social Service Agencies
- United Way of Central Iowa
- Waukee Area Christian Services
- American Cancer Society
- Aging Resources of Central Iowa
- Disability Rights Iowa
- New Opportunities

Source: HIRTA Team

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Introduction to Proposed Solution

Concept Video

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Stakeholder Engagement Summary

Steve Wilks, Concept Development Lead

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Phase 1-Stakeholder Engagement

Source: HIRTA Team

Phase 1 -Engagement Timeline

Feb 2021- Kickoff

Apr 2021- Workshop/ Focus Group (non-healthcare)

Apr-May 2021- Interviews (Healthcare)

May 2021- Operational Scenarios

Jun 2021- ConOps Walkthrough

Jul 2021- ConOps Webinar

Jul-Aug 2021- Interviews (Healthcare)

Aug 2021- Requirements Workshop 1

Sep 2021- Requirements Workshop 2

Oct 2021- Requirements Workshop 3 and 4

Jan 2021- Phase 1 Complete

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High-Level Findings from Stakeholders

- Lack of awareness on transportation options

- Lack of integrated booking and trip management experience

- Limited capabilities in current modes to meet the needs of underserved

- Limited wayfinding capabilities

- Service management challenges with return trips

- Same day and after hour service issues

- Limited data sharing and reporting to measure the performance of healthcare transportation

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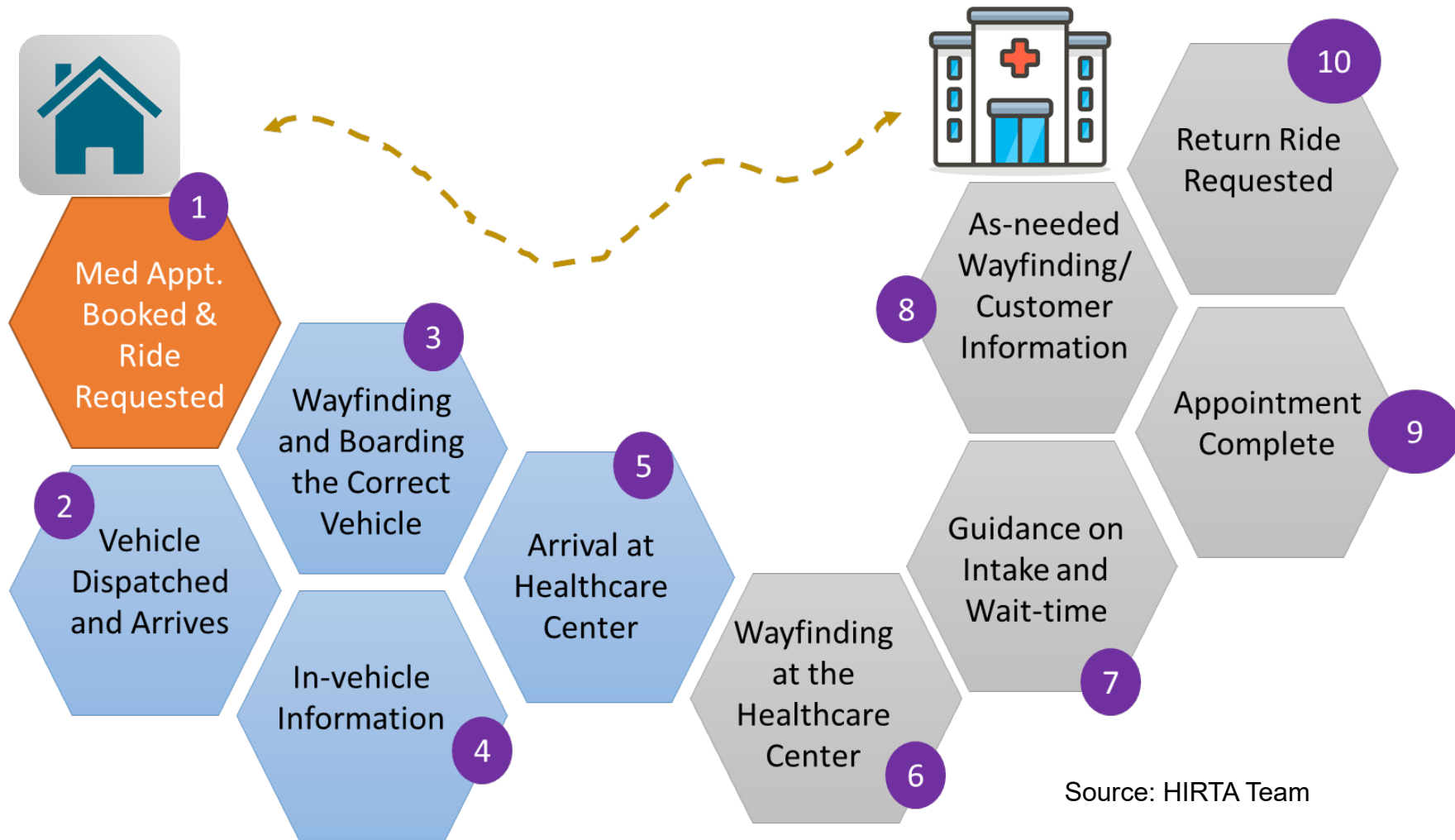
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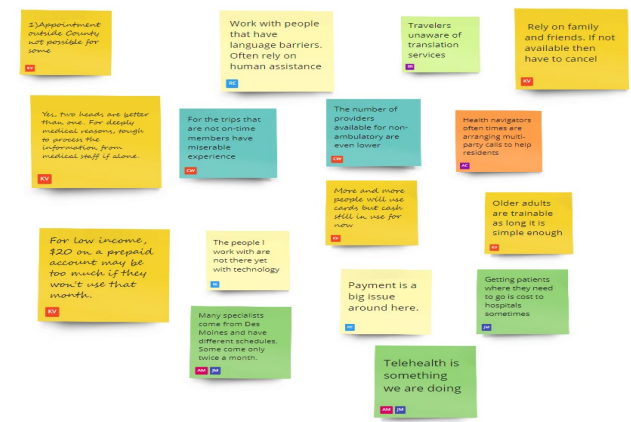
Stakeholder Input and ConOps

- User group definition

- User needs identification

- Prioritization of needs

- Operational scenarios/use cases

- Concept development- *system features, interfaces and data needs*

- Impacts on current operations/systems

- System performance management and measuring outcomes of the project

Deployment Concept Overview
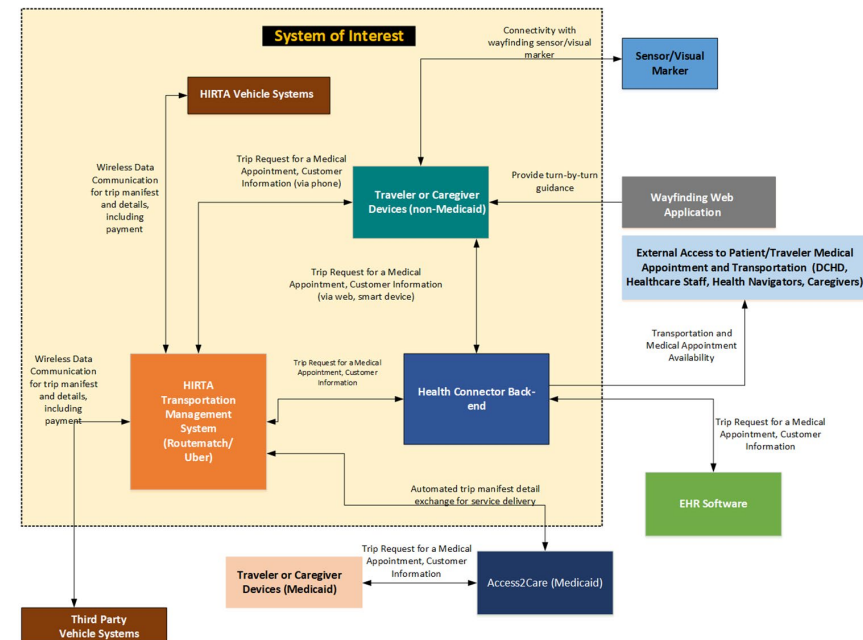
Santosh Mishra, System Development Lead

Health Connector Complete Trip Overview

1. Med Appt. Booked & Ride Requested
2. Vehicle Dispatched and Arrives
3. Wayfinding and Boarding the Correct Vehicle
4. In-vehicle Information
5. Arrival at Healthcare Center
6. Wayfinding at the Healthcare Center
7. Guidance on Intake and Wait-time
8. As-needed Wayfinding/ Customer Information
9. Appointment Complete
10. Return Ride Requested
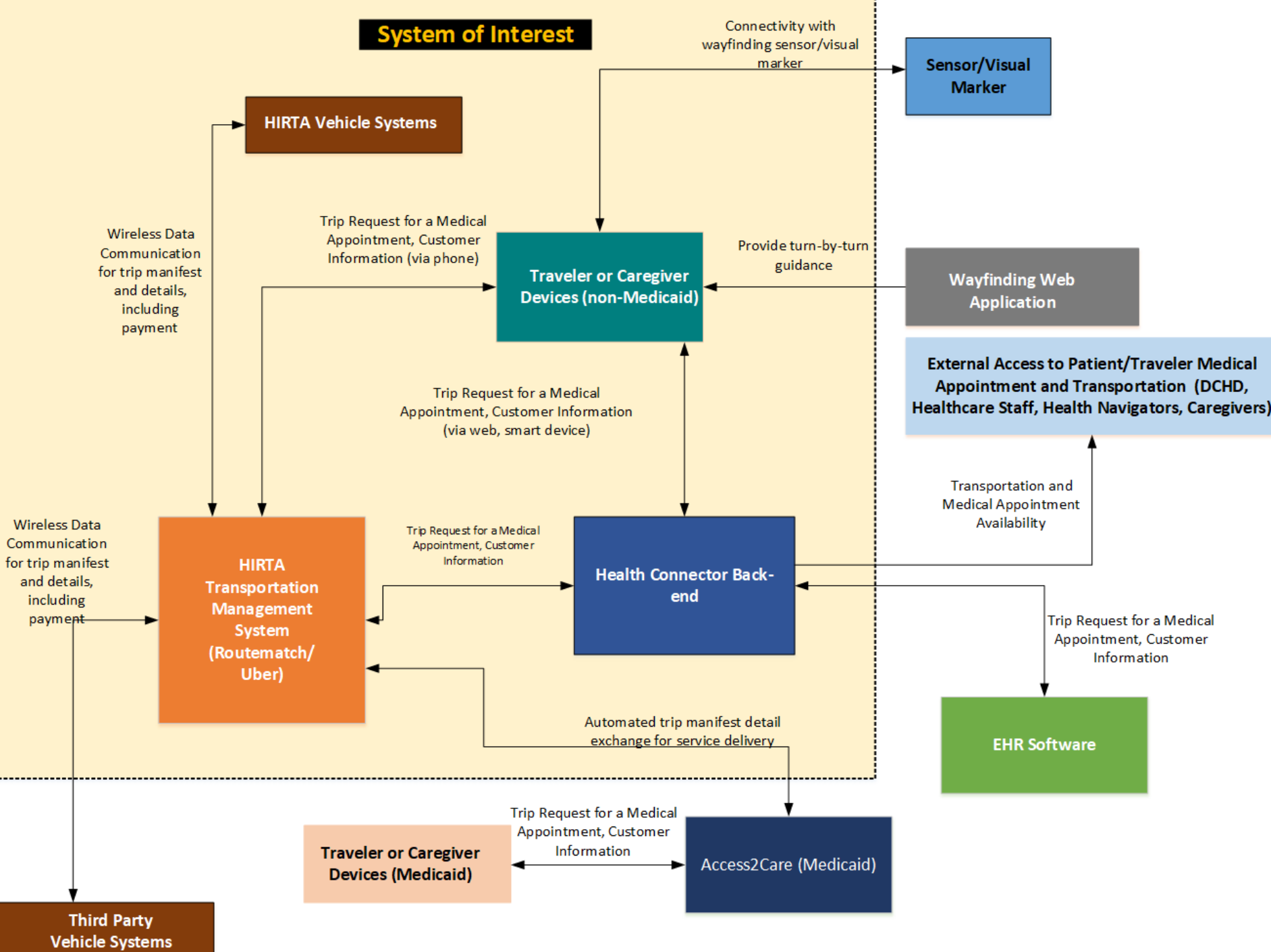
Source: HIRTA Team

System Context Diagram

- Customer-facing tools (web/mobile, phone)

- Central transportation management software, on-board system

- Wayfinding subsystem

- Interfaces

  - Third-party service provider system

  - Hospital Electronic Health Record (EHR)

  - Access2Care Medicaid System

  - Access to authorized DCHD and information & referral personnel

Source: HIRTA Team (see next slide for larger image)

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System of Interest

HIRTA Vehicle Systems

Connectivity with wayfinding sensor/visual marker

Sensor/Visual Marker

Trip Request for a Medical Appointment, Customer Information (via phone)

Traveler or Caregiver Devices (non-Medicaid)

Provide turn-by-turn guidance

Wayfinding Web Application

Wireless Data Communication for trip manifest and details, including payment

External Access to Patient/Traveler Medical Appointment and Transportation (DCHD, Healthcare Staff, Health Navigators, Caregivers)

Trip Request for a Medical Appointment, Customer Information (via web, smart device)

Wireless Data Communication for trip manifest and details, including payment

HIRTA Transportation Management System (Routematch/ Uber)

Trip Request for a Medical Appointment, Customer Information

Health Connector Back-end

Transportation and Medical Appointment Availability

Trip Request for a Medical Appointment, Customer Information

EHR Software

Automated trip manifest detail exchange for service delivery

Trip Request for a Medical Appointment, Customer Information

Traveler or Caregiver Devices (Medicaid)

Access2Care (Medicaid)

Third Party Vehicle Systems

Sample Use Cases

- **Scenario 1**: Person with disability looking for transportation for a recurring appointment.

- **Scenario 2**: Person with LEP looking for a prenatal appointment and will need transportation. It is recurring but not on a fixed schedule.

- **Scenario 3**: Traveler, a veteran, looking for preventative care appointment.

- **Scenario 4**: An older adult is approved to take Medicaid eligible trip but they would like family to accompany them so can be helped

- **Scenario 5:** A Traveler in rural area is looking for after hours appointment and third party service to be used

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Use Case: Fixed Recurring Appointment
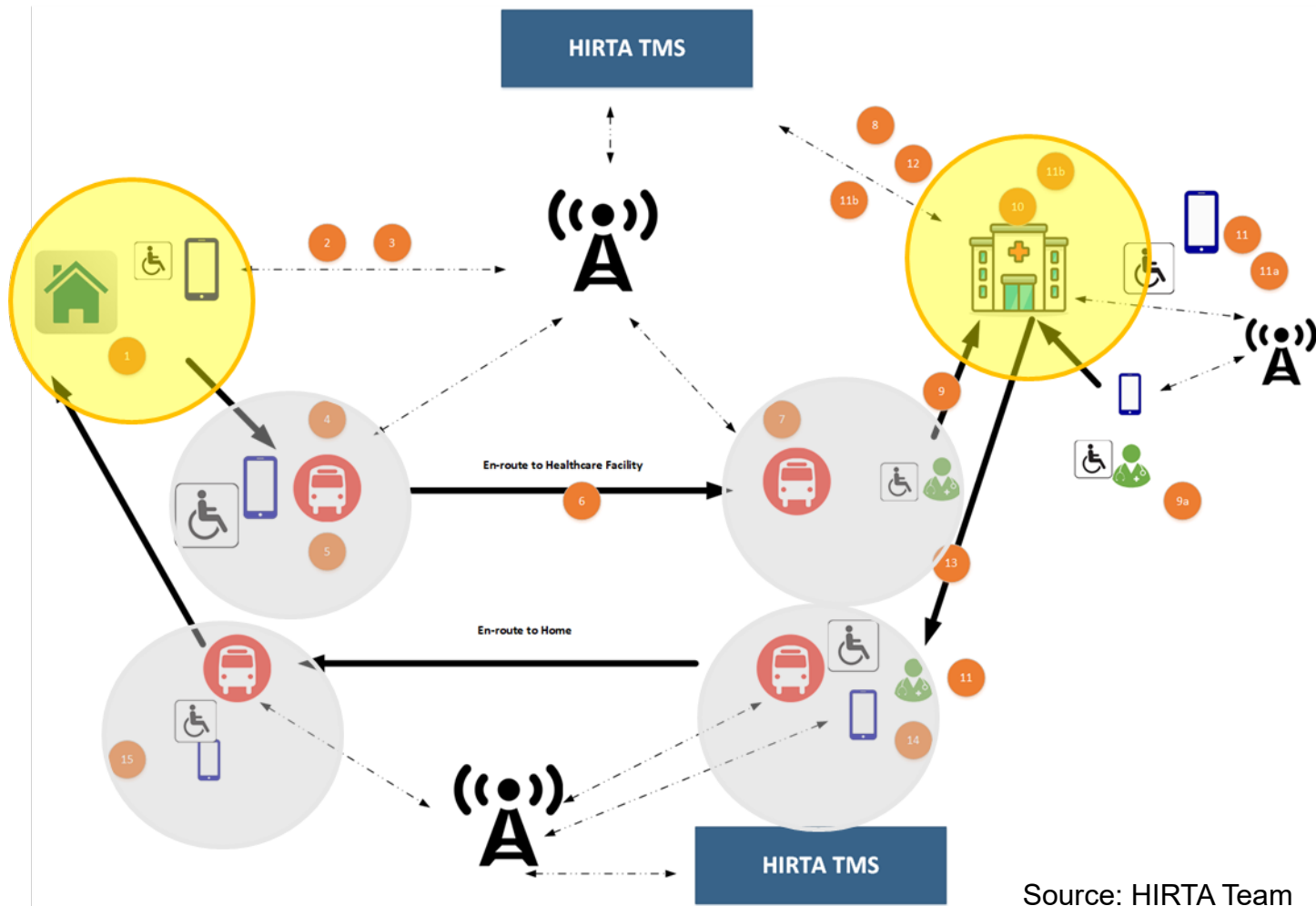
Source: HIRTA Team

Use Case: Irregular Recurring Appointment
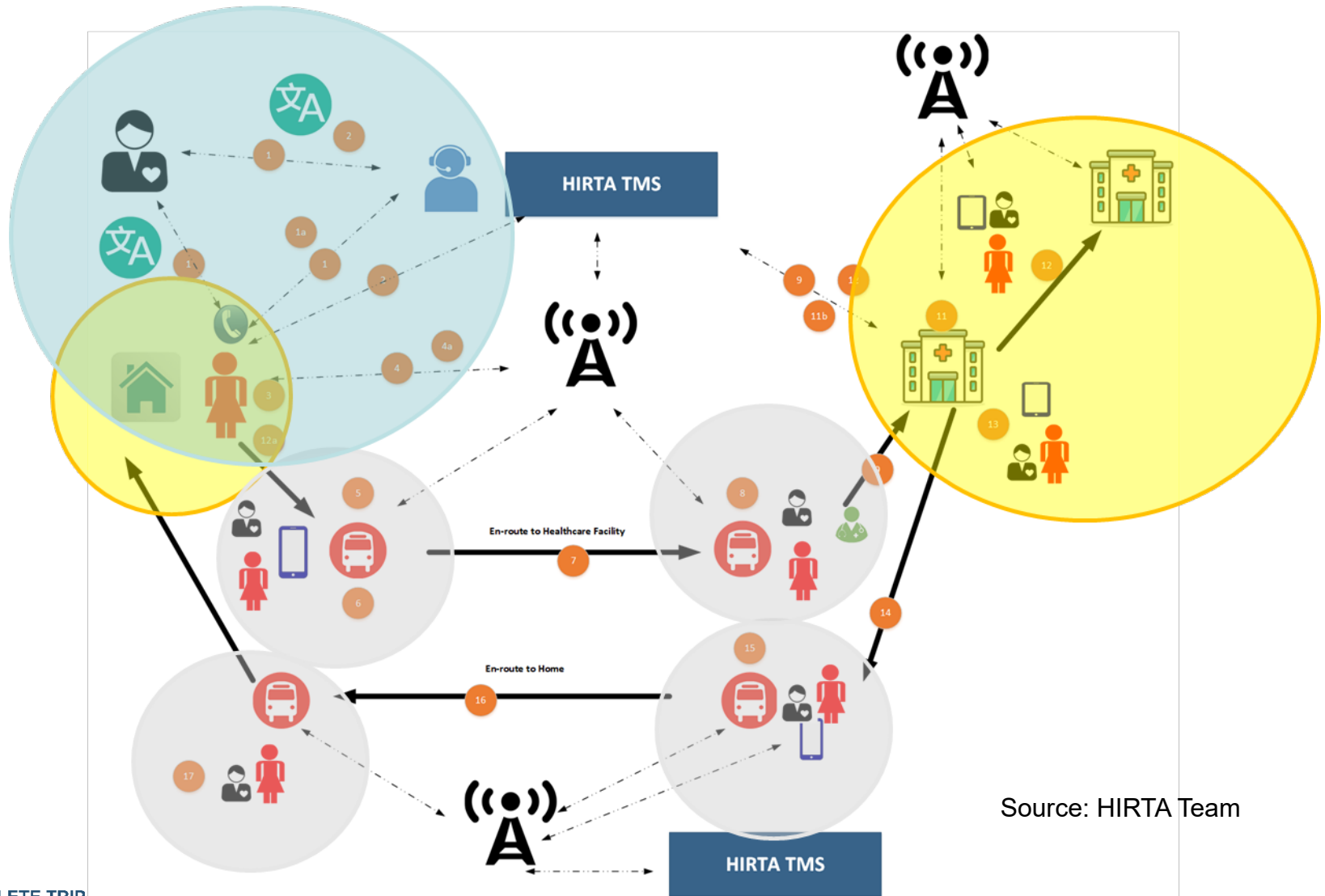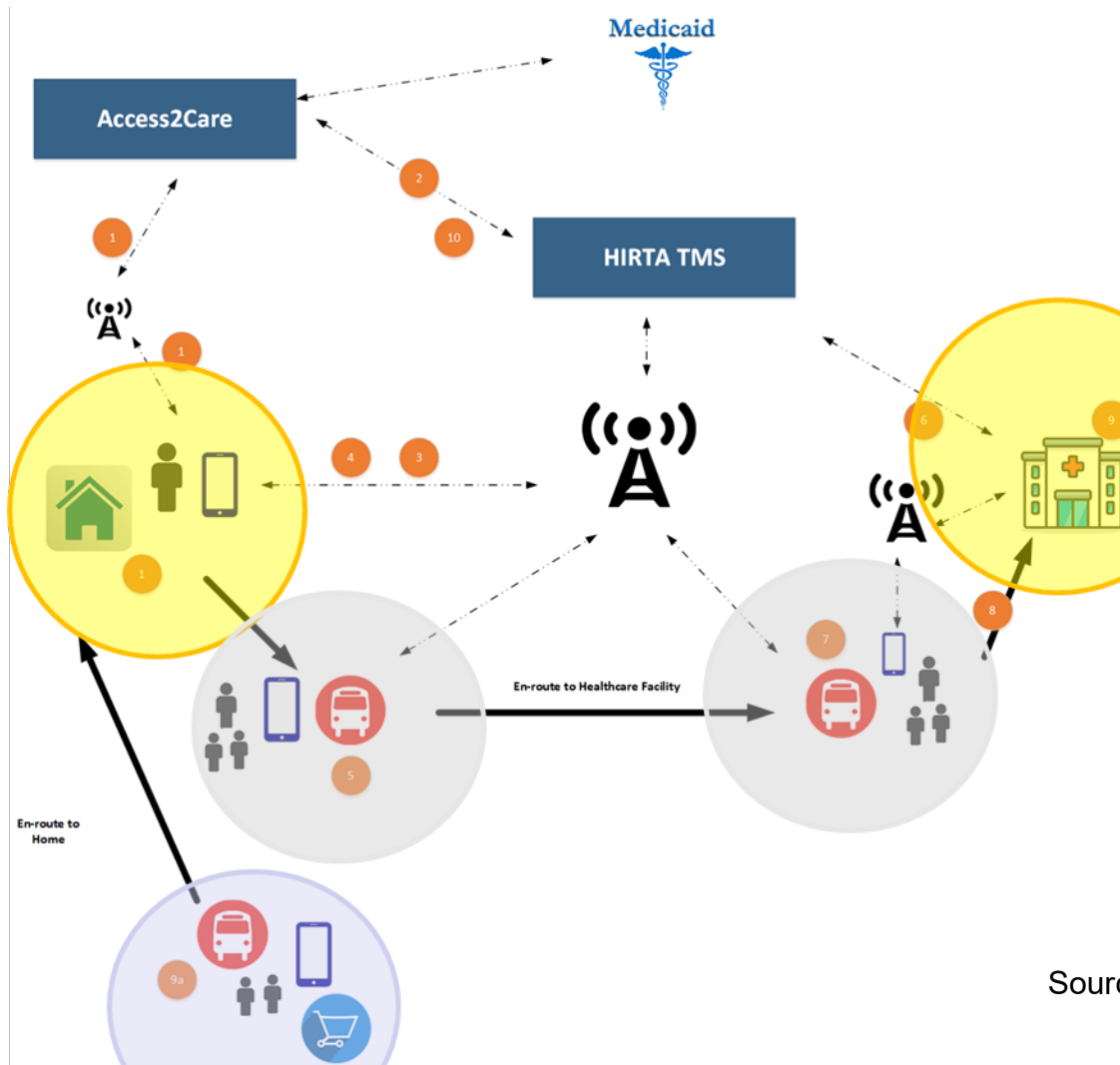

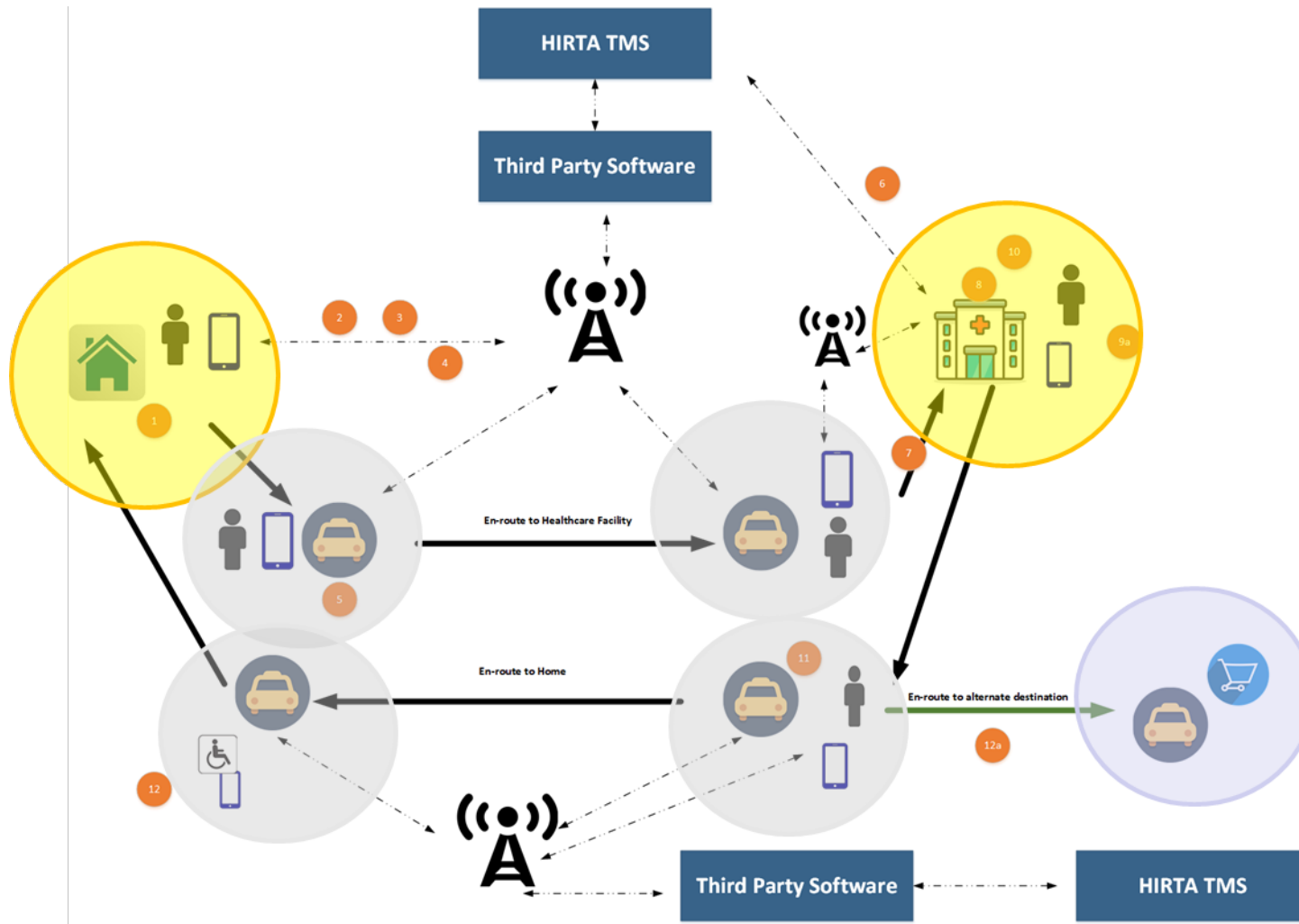Source: HIRTA Team

Use Case: Preventive Care
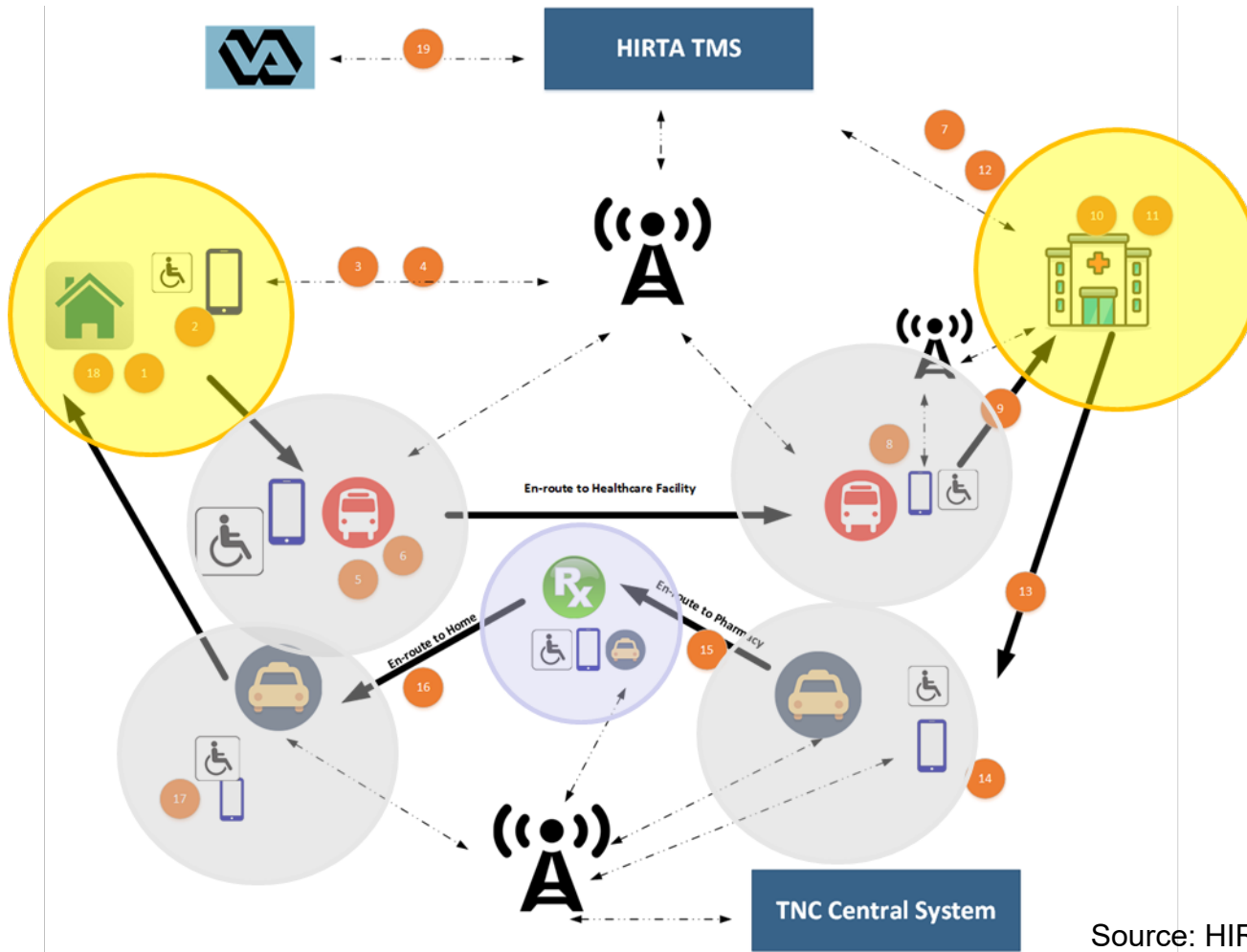
Source: HIRTA Team

Use Case: Medicaid Trip

Source: HIRTA Team

Use Case: After Hours Trips (HIRTA| NDSP)

Source: HIRTA Team

Stakeholder Q&A

- Please keep your phone muted

- Please use chatbox to ask questions

- Questions will be answered in the order in which they were received

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Visit the Complete Trip - ITS4US Deployment Program Website and FAQs:

https://its.dot.gov/its4us/

https://www.its.dot.gov/its4us/its4us_faq.htm