Technical Awareness Group (TAG) Meeting 1 — Minutes

A Decision-Support Simulation Platform for Evaluating Construction and Demolition Debris Recycling Policies in Florida Counties

Sponsored and funded by the William W. "Bill" Hinkley Center for Solid and Hazardous Waste Management

Date: Thursday, September 10, 2026

Time: 1:00 p.m. – 2:00 p.m. Eastern

Format: Online (Zoom); the meeting was video recorded

Recording: https://youtu.be/eEtXcCHlQ94

Minutes prepared from: the meeting recording and transcript

1. Attendance

Name	Role	Organization
Navid Nickdoost, Ph.D.	Principal Investigator	University of North Florida
Vrunda Rajesh Laddha	Graduate Research Assistant	University of North Florida
Derek Wohlfiel	Chief Executive Officer (TAG)	PAW Demo (demolition and recycling)
Rick Wohlfiel	Co-founder (TAG)	PAW Demo (demolition and recycling)
Chris Kepple	Project Manager (TAG)	Champion Demolition Services of Florida
Timothy Lamontagne	Deputy Director of Operations (TAG); Chairman, Recycle Florida Today	Lee County Solid Waste
Timothy Townsend, Ph.D.	Executive Director; Professor	Hinkley Center for Solid and Hazardous Waste Management / University of Florida
Steven Laux	Professor of Practice	Hinkley Center / University of Florida
Hannah Sackles	Ph.D. student, supporting the Hinkley Center	University of Florida
William (Bill) Turley	Founder and former Executive Director (guest)	Construction & Demolition Recycling Association

TAG member unable to attend: Rachelle G. Dobbs, Recycling Manager, Pasco County (notified the PI in advance).

Co-principal investigators Florentino B. De la Cruz, Dan Koo, John Kim, and Vamsi Sai Kalasapudi (University of North Florida) were introduced by the PI but did not attend.

2. Agenda

- Introductions
- Remarks from the Hinkley Center on the role of the TAG
- Research overview: problem, objectives, modeled actors, phases, policy scenarios, and validation
- Progress to date
- Next steps
- Discussion and TAG input

3. Remarks from the Hinkley Center

Dr. Timothy Townsend described the Hinkley Center as a Type 1 center funded by the Florida Legislature and administered through the University of Florida, supporting applied solid and hazardous waste research across the state. He explained that TAG meetings are a requirement of Hinkley Center projects: stakeholders and subject-matter experts guide the work at the start, during the project, and on the final deliverables, so that results are useful to Florida practitioners. He thanked members for participating and encouraged them to share feedback directly with the PI and with the Center, and noted that funded projects are listed at hinkleycenter.org.

Dr. Townsend also asked that a representative of the Florida Department of Environmental Protection be added to the TAG, noting that FDEP administers the funding for the Hinkley Center and that DEP participation is important.

4. Research overview (presented by the PI)

Background.

- C&D debris accounts for up to about 25 percent of Florida's solid waste stream, roughly 20 million tons a year.
- Several districts, particularly in South Florida, are expected to exhaust their C&D landfill capacity within the next 3 to 10 years.
- Diversion performance varies widely among counties, driven largely by local conditions and local policy.

Objective.

The project will deliver a county-configurable simulation platform. County staff enter local parameters (tipping fees, facility locations, population, waste volumes, hauling distances, current diversion rates), select or design a policy scenario, and see the projected outcomes: diversion rate, cost per ton, recycling facility utilization, illegal dumping risk, and the costs and benefits of the policy, before it is adopted in the real world.

Modeled actors.

- Regulatory and policy system: counties and state agencies.
- Waste generation: construction and demolition contractors, whose disposal choices weigh cost, hassle (travel time, paperwork), the value of compliance, and the risk of penalties.
- Processing and disposal: recycling facilities and landfills, with contamination thresholds, gate queues, recovery technology, and investment decisions.
- End-product markets: recycled and virgin material prices, local absorption capacity, procurement mandates, and quality or certification requirements.

Phases and scenarios.

- Four phases: knowledge base, conceptual model, simulation development, and scenario analysis.
- Scenarios discussed: status quo baseline; diversion ordinance (as implemented in Lee County); economic incentives such as differential tipping fees and a deposit-refund system; demand-side market creation through county procurement mandates; a self-financing surcharge; and material-specific landfill bans.

Validation.

- Face validation of the conceptual model by TAG members.
- Calibration against real data from one Florida county; Lee County has indicated willingness to share data.
- Sensitivity analysis to identify the parameters that most influence results.

5. Progress to date

- The team has reviewed publicly available ordinances for 44 Florida counties so far and mapped which counties have a C&D-related ordinance.
- Provisions identified include permit requirements, diversion plan mandates, enforcement and penalties for violations, hazardous materials survey requirements, and commercial recycling separation mandates. Lee County applies several of these.

6. Next steps presented

- Continue data collection and build the knowledge base through November or early December 2026, including direct outreach to counties.
- Complete the conceptual model by early January 2027.
- Hold TAG Meeting 2 in early January 2027 to review the conceptual model and data collection findings.
- Develop and validate the simulation model, then run the policy scenarios.

7. Discussion and TAG input

What the project needs from the TAG (PI).

- Review the conceptual model and confirm that it reflects how each party actually makes decisions.
- Help with data collection and introductions to counties and other officials.
- Advise on which policy scenarios are worth testing.

Access to data is the industry's biggest gap (R. Wohlfiel).

- Contractors bidding across the state have no single source for tipping fees, accepted materials, or facility locations and hours, and must call scale houses and counties one at a time.
- A central hub would let contractors price disposal correctly at bid time rather than absorb it as risk, help field crews route loads to permitted facilities, and likely reduce illegal dumping.
- It would also inform private investment decisions, such as where a new recovery facility is needed. Contractors would pay a subscription for such a service.

Include recycle-only facilities, not just landfills (C. Kepple).

- Concrete crushers, asphalt recyclers, and site contractors that accept material are difficult to find outside a firm's core market.
- Acceptance criteria vary widely between facilities: some take concrete only with no rebar, while others accept mixed material and separate it themselves.

Regional geology drives recycling economics (R. Wohlfiel).

- Where lime rock is abundant and close to the surface, recycled aggregate competes against a cheap virgin product, which makes recycling less viable and facilities more selective about what they accept.
- A uniform statewide mandate would therefore not fit all counties.

Capture materials that counties cannot recover (T. Lamontagne).

- Data on materials that go unrecycled for lack of end markets, such as roofing shingles and drywall in Southwest Florida, would help the private sector identify opportunities.

Look beyond concrete (W. Turley and R. Wohlfiel).

- Concrete is the most recycled C&D material by weight because it is profitable, but drywall, wood, and shingles matter as much and are harder to handle.
- Demolition drywall is effectively not recycled in the United States because of contaminant concerns, although clean construction drywall can be recovered where markets exist.

- PAW estimates that 70 to 85 percent of new-construction waste could be recovered, and is evaluating drywall and lumber recovery. The capital cost of a recovery facility (on the order of $2 million) and low landfill tipping fees are the main barriers; grant support would help.
- C&D wood used as landscape mulch carries a market stigma among some customers, even when the material is clean.

Advice on how the project runs (W. Turley).

- Send TAG members material in advance of each meeting, especially the conceptual model, so they have time to review it before the discussion.
- If a data hub is built, plan from the start for how it will be kept up to date; keeping such a resource current is harder than launching it.

Framing from the Hinkley Center (T. Townsend).

- The data collection effort, turned into a usable and maintainable hub, may be the most valuable product of this project, even though it was not part of the original scope.
- The PI should consult TAG members on how such a hub should work and consider demonstrating a preliminary concept at TAG Meeting 2.
- Practical note on data collection: tipping fees can be obtained by calling facilities directly as a prospective customer; facilities that want business have an incentive to be listed.

8. Action items

#	Action	Owner	Target
1	Invite a representative of the Florida Department of Environmental Protection to join the TAG, coordinating with the Hinkley Center.	PI	As soon as possible
2	Continue the county ordinance review and data collection, adding the data types the TAG identified: tipping fees, accepted and rejected materials, facility locations and hours, recycle-only facilities (concrete crushers, asphalt recyclers), and materials counties cannot recover for lack of end markets.	PI and GRA	Through November / early December 2026
3	Assess the feasibility of a centralized C&D data hub, including how the data would be kept current, and present a preliminary concept to the TAG.	PI	TAG Meeting 2
4	Develop the conceptual model and circulate it to TAG members in advance of the meeting, with time to review.	PI	Before TAG Meeting 2
5	Coordinate data sharing with Lee County and Pasco County.	PI	Ongoing
6	Post the meeting recording and these minutes on the project website.	PI	With the 1st quarterly report (Nov 15, 2026)
7	Schedule TAG Meeting 2.	PI	Target: early January 2027

9. Next meeting

TAG Meeting 2 is proposed for early January 2027. Planned content: the conceptual model for TAG review, findings from the data collection effort, and a preliminary concept for the data hub. Materials will be

circulated in advance. Under the project subcontract, the second TAG meeting is due no later than April 15, 2027.