

FROM STUDIES TO IMPLEMENTATION

How meta-analysis can strengthen planning practice,
build capacity, and support transit implementation

**I-20 Transit Meta-Analysis +
Georgia Passenger Rail Case Study**

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Fall GPA Conference

01

Start with the room

A short audience pulse before we define the method.



Let's Start With You

QUICK POLL

Which best describes your work?

Planning

Transit / Rail

Consulting

Community / Advocacy

Transportation / Engineering

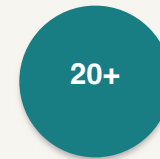
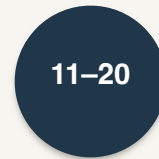
Public Agency

University / Research

Other

Who Is in the Room?

How many years have you worked in planning or transportation?



No right answer — the goal is to see the range of experience in the room.

Two Questions to Keep in Mind

01 “Didn’t someone already study this?”

Most planning projects inherit a long trail of prior reports, plans, corridor studies, engagement records, and recommendations.

02 “Why didn’t the study become the project?”

A completed study is not the same thing as a decision, funding commitment, agreement, right-of-way, design, construction program, or operating service.

These questions are the bridge from existing conditions to institutional learning.

What is meta-analysis?

Here, the term means systematic synthesis — not statistical pooling.



WHAT IS META-ANALYSIS?

Traditional meta-analysis

Combines results from multiple studies — often using statistical methods to estimate an overall effect.

Planning meta-analysis

Systematically synthesizes planning studies and project histories using a common review framework to identify recurring findings, gaps, barriers, and implementation patterns.

FOR THIS PRESENTATION

“Planning meta-analysis” = studying the studies.

Why Study the Studies?

Planning knowledge is often fragmented across documents.

Find

Locate the relevant plans, studies, project histories, engagement records, and comparable cases.

Standardize

Ask the same core questions so different studies can be compared on common dimensions.

Synthesize

Move beyond one-report-at-a-time summaries to recurring findings, contradictions, gaps, and implementation questions.

The point is not to produce another report for its own sake. It is to make existing research more useful.

The Missing Middle: Components of Implementation

Question: Think about a project that was studied but didn't move forward.
Where did the process get stuck?

Decision

Governance

Funding

ROW

Freight coordination

Design

Partnerships

Construction

Operations

These components tend to be where projects encounter troubles.
Understanding the process for why issues happen is key to moving forward.

The Mission: Diagnose, Compare, Demonstrate

1

DIAGNOSE

Identify common roadblocks that have hampered implementation of transit studies and projects across Georgia.

2

COMPARE

Examine factors that have allowed passenger rail systems in other states to advance or expand.

3

DEMONSTRATE

Show how a common framework can synthesize findings across studies and project histories.

**The presentation focuses on the third.
The Georgia Passenger Rail
Meta-Analysis investigates all
three.**

A transferable method matters because the same planning problem appears in many domains.

From Existing Conditions to Institutional Learning

Georgia passenger rail work already includes a substantial research history.

Georgia Rail Passenger Program

Clayton County Commuter Rail

Southeast High-Speed Rail

Nashville–Atlanta

ATLTrains

Georgia Brain Train

Atlanta–Savannah

State Rail Plans

Amtrak Connects US

Other GDOT corridor studies

The opportunity is to preserve and synthesize what these studies already contain — including what happened after each study.

03

Inclusion in action

Participation can include producing knowledge — not only expressing preferences.



From Public Input to Public Knowledge

Traditional engagement often asks:

“What do you want?”

This model also asks:

“What do you know?”

1

**Public
Engagement**

2

**Public
Participation**

3

Public Knowledge

Inclusion + Research

This is not dot-voting with a different name.

It is research-based participation:

Investigate

Interpret

Document

Compare

Contribute

A reviewer does not need to be a transit specialist to contribute useful evidence, perspective, or questions.

How Meta-Analysis Can Extend Planning Capacity

Planning constraints

- Limited staff time
- Competing project demands
- Difficulty maintaining institutional knowledge
- Limited capacity for extensive precedent research

What meta-analysis can add

- Distributed research capacity
- Standardized precedent review
- Broader professional participation
- Institutional memory
- Emerging-professional development

The objective isn't to replace professional planning capacity — it's to extend it.

Not Everyone Has to Be a Transit Expert

Transportation engineer

May focus on infrastructure, operations, right-of-way, capital costs, constructability, and system constraints.

Rider / parent / community member

May notice station access, transfers, safety, family usability, pedestrian experience, or barriers that technical documents understate.

Different perspectives can answer different parts of the same planning question.

Volunteer Research in Practice



MacKenzie Reading

Human Geography / mobility research

Accessibility, spatial evidence, lived experience
[\(1\) MacKenzie Reading | LinkedIn](#)



Breyton Swoboda

Urban & Regional Planning student

GIS, corridor research, emerging-professional perspective
[\(1\) Breylon Swoboda | LinkedIn](#)



Malavika Murali

Senior Planner

Practitioner perspective and professional review
[\(1\) Malavika Murali, AICP | LinkedIn](#)

The point is not the individual volunteer. It is the range of knowledge a distributed network can bring to a common framework.

Additional Volunteer Profiles



Charmaine Bell

Family / education perspective

Reviewed Metro Orange BRT as a parent / commuter
(1) [Charmaine Bell | LinkedIn](#)



Rebecca Hillegeist

Health / performance / well-being perspective

Reviewed Amtrak Piedmont
(1) [Rebecca D Hillegeist | LinkedIn](#)



Tristen Altime

Aspiring transportation planner

Reviewed CTA Blue Line twice
(1) [Tristen Altime | LinkedIn](#)

A Way of “Moving Beyond the Dots”

The engagement philosophy:

**Instead of only asking:
“Do you support this?”**

**Also ask:
“What can you teach us about this?”**

The “dots” idea is an engagement philosophy — the research method is the common review framework and synthesis.

That distinction matters: participation can produce substantive knowledge without pretending every participant is a subject-matter expert.

TSW planners have discussed this for their community engagement initiatives:
<https://www.planning.org/planning/2026/may/can-a-year-without-dots-lead-to-better-community-engagement/>

The I-20 proof of concept

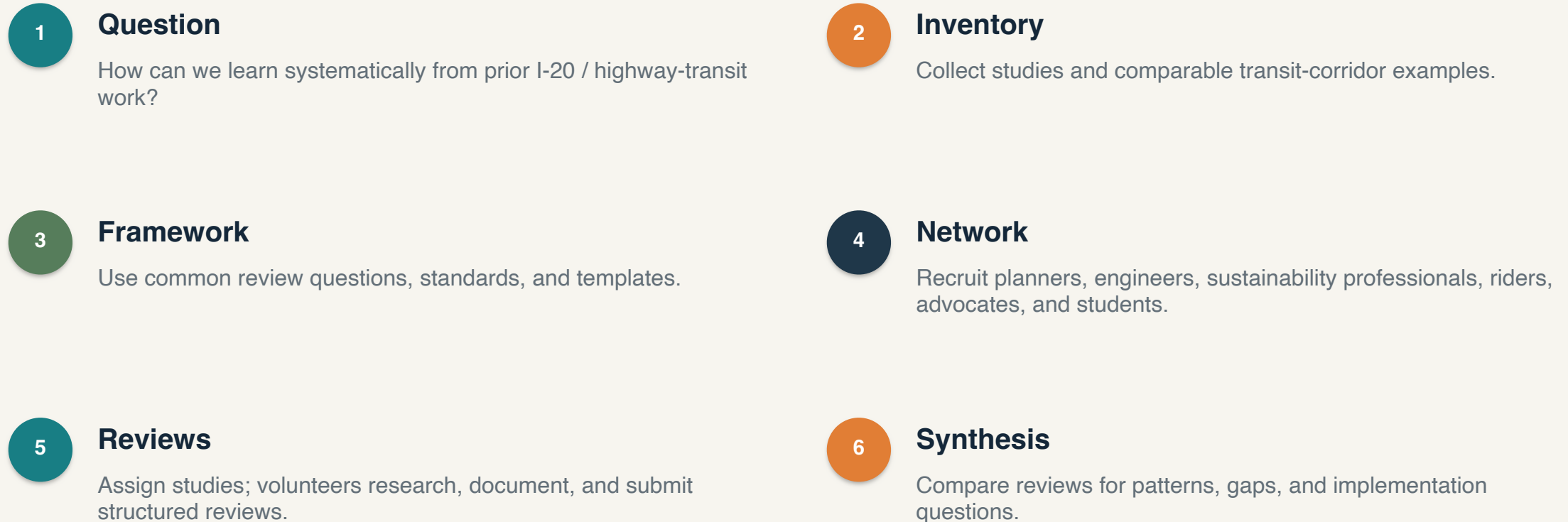
A small civic research project became a repeatable workflow.

Introductory Scenario: Imagine you have been asked to evaluate transit options along a major highway corridor.

Question: What would you want to know before starting a new study?



How the I-20 Meta-Analysis Developed



The project grew from a research question into a repeatable workflow.

I-20: Eight Months of Volunteer Research

100+

professionals expressed
interest

50+

completed reviews

20+

corridors / studies
represented

8 months

of volunteer research

No MARTA funding or formal sponsorship.

The value is the growing comparable research body — not a single report.

Reviews focus on I-20 corridor studies and public-transit corridors along highways.

Group Exercise: Diagnosing a Project

Case Study

Working themes from the review process — not final findings of the Georgia Passenger Rail study.

01

A regional passenger rail study was completed

02

The study identified a viable corridor and recommended additional planning.

03

Five years later, no service exists.

04

What would you investigate?

05

Take 5 minutes in your group to answer this question

Georgia Passenger Rail Meta-Analysis

Two research tracks

TRACK A — Previous Georgia passenger rail studies

TRACK B — Existing passenger rail systems and services in other states

Current status

Recently started with Bakari Height, Co-Founder of MARTA Army.

4 reviews completed so far.

20+ systems to study.

Designed to identify lessons for developing and expanding passenger rail.

Goal: identify lessons for developing a passenger rail system and roadblocks Georgia has faced.

Two Case Studies — One Method

I-20 TRANSIT META-ANALYSIS

Question: Can a distributed volunteer research network systematically review transportation studies using a common framework?

ROLE: PROOF OF CONCEPT

GEORGIA PASSENGER RAIL META-ANALYSIS

Question: What can Georgia learn by comparing prior studies with passenger rail systems that advanced elsewhere?

ROLE: NEXT APPLICATION

I-20 tests the method. Passenger rail expands the implementation question. The methodology is the transferable product.

Sources of Inspiration for This Project

Inspiration ≠ methodology

Ryan Gravel
Transportation + land use vision

Caleb Stubbs / ATLTrains
Regional passenger rail vision

Academic research
Studying transportation systems and research

City of Atlanta Sustainability Ambassadors
Turning research into a civic project

I-20 Meta-Analysis
Proof of concept

Georgia Passenger Rail Meta-Analysis
Next application

Ideas build on ideas. The formal method is the review matrix + synthesis framework.

04

Question About Study Matrix:

If you were comparing 20 passenger rail studies, what would you want every study to tell you?



The Review Matrix

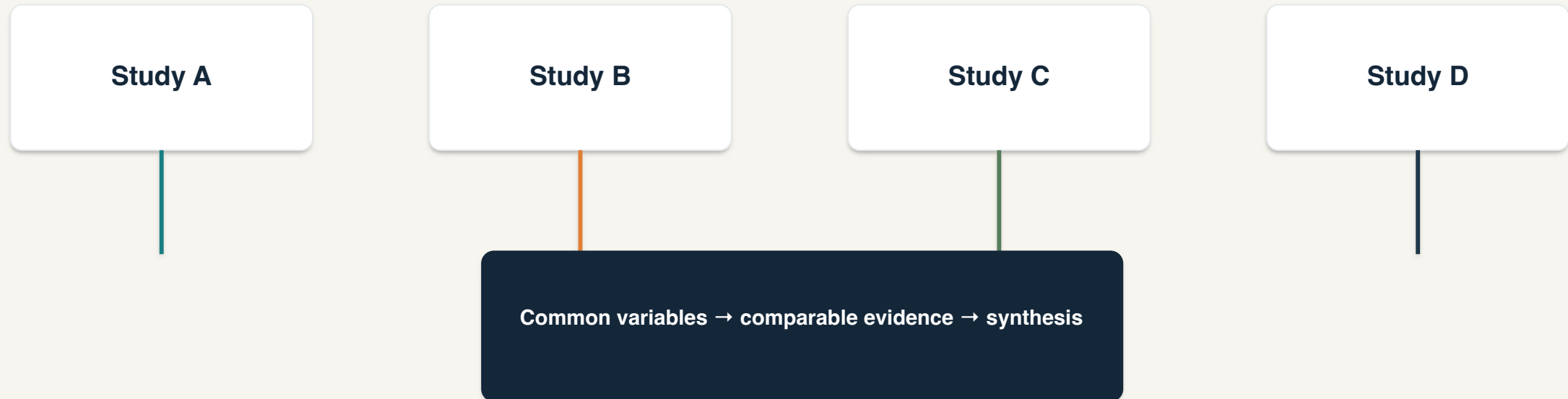
Each review should distinguish documented evidence from reviewer interpretation or practitioner perspective.

Who conducted it — and when?	What was proposed?	How much did it cost?
What did it recommend?	Who participated?	How was the public involved?
What happened afterward?	Why did it advance, stall, or struggle?	What can planners learn?

What Makes It a Meta-Analysis?

Not the number of studies.

The common framework.



Compare the same dimensions across cases, then identify recurring findings, gaps, contradictions, and implementation questions.

How Volunteer Reviews Work



8 months → 50+ reviews

The process turns individual research effort into a standardized, comparable body of work.

Centralized Methodology + Decentralized Relationships

Centralized

- Research question
- Review matrix
- Templates
- Standards
- Coordination

Decentralized

- Professional networks
- Expertise
- Lived experience
- Local knowledge
- Research capacity

Centralized methodology + decentralized relationships = scalable research capacity.

LinkedIn as Research Textbanking

The analogy is about network mechanics — not politics.



A relational organizing principle is being applied to research participation: one relationship expands the next.

That makes LinkedIn outreach a recruiting channel for a distributed research network.

Why Would People Volunteer?

Real project experience

Research + writing

Transportation knowledge

Professional connections

Portfolio development

Mentorship / network exposure

Outside-job opportunities

Interest in transportation

The portfolio doesn't have to start with a job.

How Meta-Analysis Can Improve Community Engagement

DON'T ONLY ASK “WHAT DID PEOPLE SAY?” ASK “WHAT CAN WE LEARN FROM PAST ENGAGEMENT?”

- Who participated — and who was missing?
- What concerns or priorities recurred?
- Which engagement methods produced useful information?
- What happened after engagement?
- Preserve institutional memory.
- Identify recurring questions before a new process.
- Compare engagement approaches.
- Inform better questions for the next study.

Caveat: this does not tell us every resident's motivation. It helps preserve and compare what the engagement process produced.

How Meta-Analysis Builds Internal Capacity

AGENCIES

Institutional memory • precedent • better scopes • faster research

EMERGING PROFESSIONALS

Real project experience • research • writing • data • networks

UNIVERSITIES

Applied assignments • faculty oversight • experiential learning

COMMUNITIES

Lived knowledge • accessible project history • substantive participation

The research product is also a capacity-building product.

What We've Learned So Far

PRELIMINARY

Working themes from the review process — not final findings of the Georgia Passenger Rail study.

01

Studies don't automatically create implementation.

02

Institutional continuity matters.

03

Implementation requires more than technical feasibility.

04

Stakeholder engagement can continue beyond the study.

05

Previous work can become an asset when it is synthesized.

What Are We Seeing So Far?

Separate observations from questions still being tested.

Observed / recurring in reviews

- Difficulty translating studies to implementation
- Institutional and organizational continuity issues
- Funding and coordination questions
- Relationships between public agencies and railroads
- The importance of learning from previous attempts

Questions to test across the full set

- Which barriers recur most often?
- Which implementation mechanisms are associated with progress?
- What role do governance, funding, right-of-way, freight coordination, and partnerships play?
- Which lessons transfer across states — and which do not?

What Does the Spreadsheet Become?

INTERMEDIATE PRODUCT

Study | Year | Cost | Outcome

DECISION-SUPPORT RESOURCE

- Research database
- Comparative synthesis
- Case-study library
- Implementation lessons
- Research gaps
- Future study questions
- Practitioner resource

The spreadsheet is the intermediate product. The synthesis is the durable planning resource.

Who Is This Study For?

Public agencies

GDOT, MARTA, MPOs, local governments, transit agencies | Institutional knowledge

Planning / engineering firms

Existing conditions, precedent research, study scoping | Faster precedent review

Universities

Teaching, applied research, experiential learning | Real project opportunities

Students / emerging professionals

Research, writing, data, transportation knowledge | Portfolio + networks

Communities / advocates

Accessible transportation knowledge | Substantive participation

Planning organizations

Professional education + knowledge sharing | Reusable practitioner resource

The Agency Application

DON'T SAY

“Agencies should fund standalone meta-analyses.”

INSTEAD

“Build meta-analysis into the work you’re already doing.”

Example:

Existing conditions → “Review previous plans”

Existing conditions → “Systematically synthesize previous plans”

A meta-analysis is not another study planners have to complete. It is a way to make the studies, engagement, and institutional knowledge they already have more useful.

What This Looks Like in a Planner's Workflow

BEFORE

Review previous plans
↓
Summarize each
↓
Move forward

WITH META-ANALYSIS

Review
↓
Standardize
↓
Compare
↓
Identify recurring findings / gaps / barriers
↓
Carry lessons into scope + alternatives

AFTER

Preserve the synthesis
↓
Next project starts with institutional memory

The goal is not fewer studies. The goal is better-informed studies.

Hypothesis Test:

Based on what you've seen so far, which of these do you think is most likely to recur across multiple projects?

Funding constraints

Lack of continuity between studies

Failure of support from elected officials

Governance / institutional responsibility

Stakeholder Capacity Issues

Lack of Institutional Experience

Freight/Railroad Coordination

Lack of Public Support

Something else

"Importantly, I'm not presenting that audience response as a finding. It's a hypothesis. That's the distinction between practitioner discussion and the actual research synthesis."

A Meta-Analysis Doesn't Have to Be a Separate Project

Comprehensive plans

Transit studies

Corridor studies

TOD studies

State rail plans

Transportation master plans

Sustainability plans

Existing conditions

Alternatives analysis

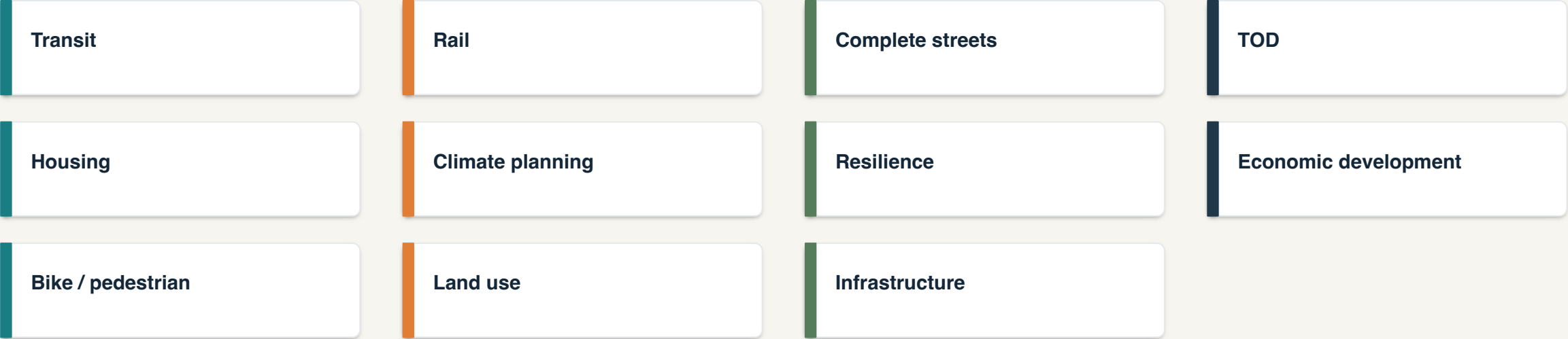
It can be embedded in work agencies and firms are already doing.

The objective is to get more value from research already commissioned, funded, documented, and experienced.

Take 30 seconds:

How do people here see meta-analyses as being potentially helpful to their work as professionals?

Beyond Passenger Rail



How the Georgia Passenger Rail Meta-Analysis Is Being Built

TRACK A — Previous Georgia studies

- What was proposed?
- What happened afterward?
- Why did it advance, stall, or stop?
- What implementation lessons remain?

TRACK B — Existing passenger rail systems

- How did the service develop?
- What preceded implementation?
- What role did governance, funding, right-of-way, freight coordination, partnerships, and operations play?
- What can Georgia learn?

What We Compare Across Passenger Rail Cases

Governance

Who owned / coordinated the work?

Funding

Where did capital and operating support come from?

Right-of-way

Who controlled the corridor?

Freight coordination

How were shared corridors managed?

Partnerships

Which agencies / organizations had to align?

Implementation

What happened between study and service?

The purpose is comparison — not assuming every state or project follows the same path.

A Model for Public Agencies



What was studied? How can it be compared? What patterns recur? What remains unanswered?

How does the synthesis affect the current project? How will the knowledge be retained for the next one?

A Model for Building Capacity

Agencies

Need knowledge

Universities

Need real projects

Students

Need experience

Professionals

Have expertise

Communities

Have lived knowledge

Meta-analysis connects these forms of capacity through a common research framework.

Universities: Turning Research Into Experiential Learning

FACULTY / PROGRAM

Identify a course, capstone, independent study, internship, or research assignment that fits the project.

STUDENT

Researches a case using the matrix; builds writing, analysis, GIS, data, and transportation knowledge.

AGENCY / PROJECT

Provides a real question, sources, context, and practitioner feedback.

Potential result: student work becomes part of a reviewed, standardized knowledge base.

School credit remains subject to the institution's academic requirements.

Key Takeaways

-  **Study the studies.** Prior work is an asset when it is systematically synthesized.
-  **Expand who can contribute.** Inclusion can mean producing research, not only expressing preferences.
-  **Build the method into planning practice.** Meta-analysis can strengthen existing-conditions work without becoming a separate project.
-  **Build capacity while building knowledge.** Agencies, universities, professionals, students, and communities can contribute different forms of capacity.

THE QUESTION I WANT
TO LEAVE YOU WITH

What if we stopped starting from zero?

Every new planning project can inherit the knowledge of previous studies, the lessons of previous projects, the experience of previous practitioners, the perspective of communities, and the capacity of emerging professionals.



What Can a Planner Do With This?

CONTRIBUTE

Review a study or case using a common framework.

CONNECT

Introduce students, practitioners, agencies, universities, or community experts.

APPLY

Build systematic synthesis into work you already do.

SHARE

Preserve and circulate useful lessons so the next project does not start from zero.

SIMPLIFY THE KNOWLEDGE. EXPAND THE CAPACITY. ADVANCE THE PROJECTS.

Supporting material

Use these slides if discussion runs deep or the audience asks for additional detail.



Discussion Prompts

01 Where in your current planning workflow do you repeatedly encounter prior studies?

02 What information from past projects is hardest to preserve?

03 Where could a common review framework reduce duplicated research effort?

04 What kinds of expertise could broaden a precedent review?

05 Which implementation dimensions should be compared across passenger rail cases?

How Can This Effort Grow?

Institutional connections

- Connect with GDOT, MARTA, ARC, MPOs, universities, and planning organizations
- Identify practitioners who can provide context and feedback
- Host events and seminars on this type of project

Research participation

- Recruit additional reviewers
- Develop university/course partnerships
- Expand the case-study inventory

Knowledge sharing

- Share the methodology
- Preserve completed reviews
- Build a reusable planning resource

Project is very much modeled like a GOTV campaign in terms of outreach strategies.

Useful for helping spread the message in a cost and time-efficient manner.

Keeping In Touch

01 Email: zstarbuckcsc@gmail.com

02 LinkedIn Profile: [\(1\) Zachary Starbuck | LinkedIn](#)

03 Personal websites: [Zachary Starbuck](#) [Passenger Rail Locomotives of North America](#)

04 Article of Interest: [Turning plans for transit into action on I-20 — ThreadATL](#)

05 Sign Up to Hear More About This:

Appendix of LinkedIn Posts

01 https://www.linkedin.com/posts/zachary-starbuck-74a112113_ive-mentioned-in-earlier-posts-that-i-am-ugcPost-7492241075013726208-pMH-/

02 https://www.linkedin.com/posts/zachary-starbuck-74a112113_im-incredibly-passionate-about-my-capstone-activity-7399550860223205376-pgjX?utm_source=share&utm_medium=member_android&rcm=ACoAABxQnqoBFGtdyiY2D3bc4Yk9SZB42XnX0aQ

03 <https://lnkd.in/p/ebD9XTFi>

04 <https://lnkd.in/p/eKu6kP-k>

05 https://lnkd.in/p/es_Rw99Y