Preliminary Design
From Zero to 30% Submittal

Scoping & Engagement
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Scoping & Design
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How much Engagement is Enough?

Communication: More, Earlier and Better! (Is probably not always the answer)

- What are we trying to build together by communicating?
- How do we direct input to the places and times that it can be productive?
- Can we obtain feedback closer to when we will implement it (this actually builds trust!)
- Have we secured *lasting* buy in to help us across the finish line?
What do you want people to say about our work?

“Now facing these challenges it makes us fear, makes us think about if it has been worth it.”
~IndyStar

"The first thing we want them to do is just listen and hear us out,“
~IBJ

OR

"You’re asking local residents to sit down and shut up to accommodate the desires of people who live far away to get somewhere a couple minutes faster. It’s about time we local residents have a say … and if you want to have a shorter commute, maybe move closer."
~IndyStar
Initial Condition (46th and Binford)

- 2 through lanes
- Right Turn Lane
- Left turn lane
- Accommodates large motor vehicles
Next Condition (46th and Binford)

- 2 through lanes
- Right Turn Lane
- Left turn lane
- Accommodates large motor vehicles
- BIKE LANES!

Within the constraints of the project, public input would have very little effect on the design, just verify the condition with trusted advocates and celebrating the installation.
Capital Ave Connector Trail (INIP)

Why the random bump out locations

- Moved bike lane
- Accommodating 2-way bike
- New enhanced crossings
- Enforce and add some parking restrictions
- Added landscaping

- INIP Funding from Community
- Monthly communication through design phases
- Check ins during construction (they can help too!)
- Location of elements a reflection of input
- Thanked community for their influence on the design
Questions to Ask, Tools available

Residential Street

- Do we have evidence of speeding
  - MAC Requests / speed bump requests
  - Cut through street
  - Desire or opportunity for Traffic Calming
  - Can it accommodate new users easily/inexpensively

- Tactical Urbanism / Art in the Right of way to test out solutions and engagement
- Neighborhood Meetings that already exist
- Human comforts to help meetings be more inviting to more people: Food, Childcare, online option
Questions to Ask, Tools available
Collector, or more intense development

- Focus on intersections (including trails!)
- Can we Accommodate Vulnerable users more comfortably while still permitting larger vehicles as necessary?
- Print out very large roll plots of the entire project
- Have a more detailed design for a representative part of the project (generally intersection and rendered cross section)
- Use cards to collect questions
- Provide post it notes for comments ON the roll plots
- Visual references, ideally local so that folks can visit
Questions to Ask, Tools available
Larger Arterial, Made to Move People

• Have we checked our approved plans?
• IndyMoves, Thoroughfare plan, Quality of Life, Tif, Stormwater Improvement.
• What groups are interested, Reconnecting in our Waterways, KIB, Local Business Associations
• Do we have the resources to provide separation of users
• Or availability to find a parallel path

• Same as previous
• Visit public events (farmer's markets, celebrations, fairs etc.)
• Walk the corridor and visit local businesses
• Landing page for excitement, progress and complaints
• Pre-record presentations and distribute to help questions be more productive
Scoping & Preliminary Design
Overview

• Traffic Analysis
• Complete Streets
• Maximizing Value
• Self-Enforcing Design
• Prioritizing 24-Hour Safety for All
Traffic Analysis

• Replace in Kind = Be Prepared to Defend your Decision

• Not Necessary For
  – Spot improvements (new culvert, patching…)
  – 2-lane (1/1) Streets

• Grey Area
  – Dual Thru Lane in either direction
  – Bridge Rehab

• Definitely Include If
  – 1+ RT Lane
  – 2+ LT Lanes
  – 3+ Thru Lanes
  – Protected Only Turn Phasing
  – Channelized RT
  – Pedestrian Crossing Times Constrain
  – Lane Balance Mismatches or Lane Traps
  – Long Range Trail or Bike Lane Needs
What are “Complete Streets?”

- Complete Streets is a *process*, NOT a specific design
- Consideration and *prioritization* of the most vulnerable street users, but accommodates all
  - Pedestrians
  - Persons on bicycles
  - Transit riders
  - Motorists
- **Consultation process**
  - Long-Range Transportation Plan and Supporting Plans
    - Plan Indy Portal
  - Development context area
    - Metro vs. Compact
  - Complete Streets Checklist
Complete Streets Policy…

It shall be the policy of the City to develop a safe, reliable, efficient, integrated and connected multimodal transportation system that will promote access, mobility and health for all users, and will ensure that the safety and convenience of all users of the transportation system are accommodated, including pedestrians, users of personal mobility devices, transit riders, bicyclists, and operators of vehicles, motorcycles, and motor vehicles of all ages, abilities, disabilities, races, genders, gender identities, incomes and socioeconomic status, as well as authorized emergency vehicles, buses, commercial vehicles, trucks, trailers and tractors, freight providers and adjacent land users, while enabling access to destinations such as home, school, work, recreation and retail destinations.
CS: Give it to me straight, Doc

- **Every Project Gets Reviewed, Not Every Project Is Impacted**
- **Long Range Plans**
  - IndyMoves
  - [https://maps.indy.gov/PlanIndy/](https://maps.indy.gov/PlanIndy/)
  - MPO Plans
- **Opportunistic Implementation**
  - Transit Oriented Development
  - Schools/Parks/Place of Worship/Community Centers/Museums
    - 8-to-80
    - Higher likelihood of kids/families?
    - Would YOU like to walk or bike there?
    - Would you let your KIDS or elderly family members walk or bike there?
CS: Give it to me straight, Doc…

• **Opportunistic Implementation (continued…)**
  – IndyMoves is only Version 1.0
    • Good starting point; but apply the SPIRIT everywhere
  – Underutilized Parking – How & Why to Consolidate
    • Scope a parking study: Weekday/Weekend, DT/NT
    • Routine parking utilization = Predictable = Safer
    • Does street have off-street parking access
      – alleys, houses w/ driveways and/or garages…
    • Reallocation of space to VRU Mobility
  – Reconstructing a 5-6’ concrete sidewalk?
    • Swap it for a 10’ HMA trail if R/W permits
    • Cost neutral; be considerate of driveways & intersections
      – Look at NACTO
      – Talk to Gretchen, Jamey, or myself for pointers…
Maximizing Value

• **Cost Savings are Good**

• **Maximizing Value is GREAT**
  – If you have an idea to add value, just ASK!
    • Worst we can say is “No”…
    • “Yes” more likely if it’s pre-30%
    • Scope limits should address the needs of approaches to our project
      – Varies based on magnitude of project and magnitude of request
      – Same Mob/Demob… “while we’re here…”
      – *“Did your former employer ever accuse you of scope creep?” – Ericka 😊

  – Many High ROI Opportunities to ask about pre-30%…
    • Replacing or extending sidewalk panels if it makes the network more comprehensive
    • Tweaking a curb configuration to connect sidewalk or bike lane
    • 1-side Trail vs. 2-sides Sidewalk
    • Connect to a school or museum, lets talk w/ them, they might help out
    • Considering signalized intersection geometry at the same time as program/timing
Self-Enforcing Design

• 4-to-3 Lane Conversions
  – Generally Same Operations, Enhances Safety
  – Eliminates split phase signals, removes LT traffic from Thru
  – Define LT locations, avoid continuous TWLTL

• Reduce curb radii
  – Lots of Trucks? Truck aprons
  – Effective Radius versus Actual Radius (can sometimes be zero)

• Separate modes

• Narrower TL’s (10-11’ almost always)

• Ped Refuge Islands
  – If substantial, 2-stage crossing
Self-Enforcing Design

• **LT Lane Offsets**
  – Making Permissive an Option

• **Paired Perpendicular Curb Ramps (see design memos)**

• **Curb Extensions = Manages parking at Int’s & Bus Stops**
  – Floating if Drainage requires, Attached if Drainage OK

• **Spec. 4-section FYA instead of 5-section Doghouse**
  – Flexibility to run PM Only, PM+PT, or PT-Only based on time of day

• **Access Management/Conflict Points**
  – RIRO or RIROLI on 4+ Lane typicals (No STROAD’s, plz 😊)
  – Engagement: Easier to Modify Medians than Restricting Drives
  – Double Drives on Corners, request to close the main, keep the minor
24 Hours of Safety for All

• #1: Safety for All Modes
  – Define your geometrics such that all modes can get from A to B safely
  – Don’t shove a round peg in a square hole:
    • Leverage Quiet Parallels!
    • May need spot enhancements, so Ask!

• #2: Evaluation Times
  – Establish Geometry, then Optimize
  – Peak Hour vs. Peak Period vs. Off Peak
  – Consider Special Events

• Pretend It’s Your House: Make Your Neighbors The Priority
  – Free-Flow Speed ≤ Speed LIMIT during Off Peak