

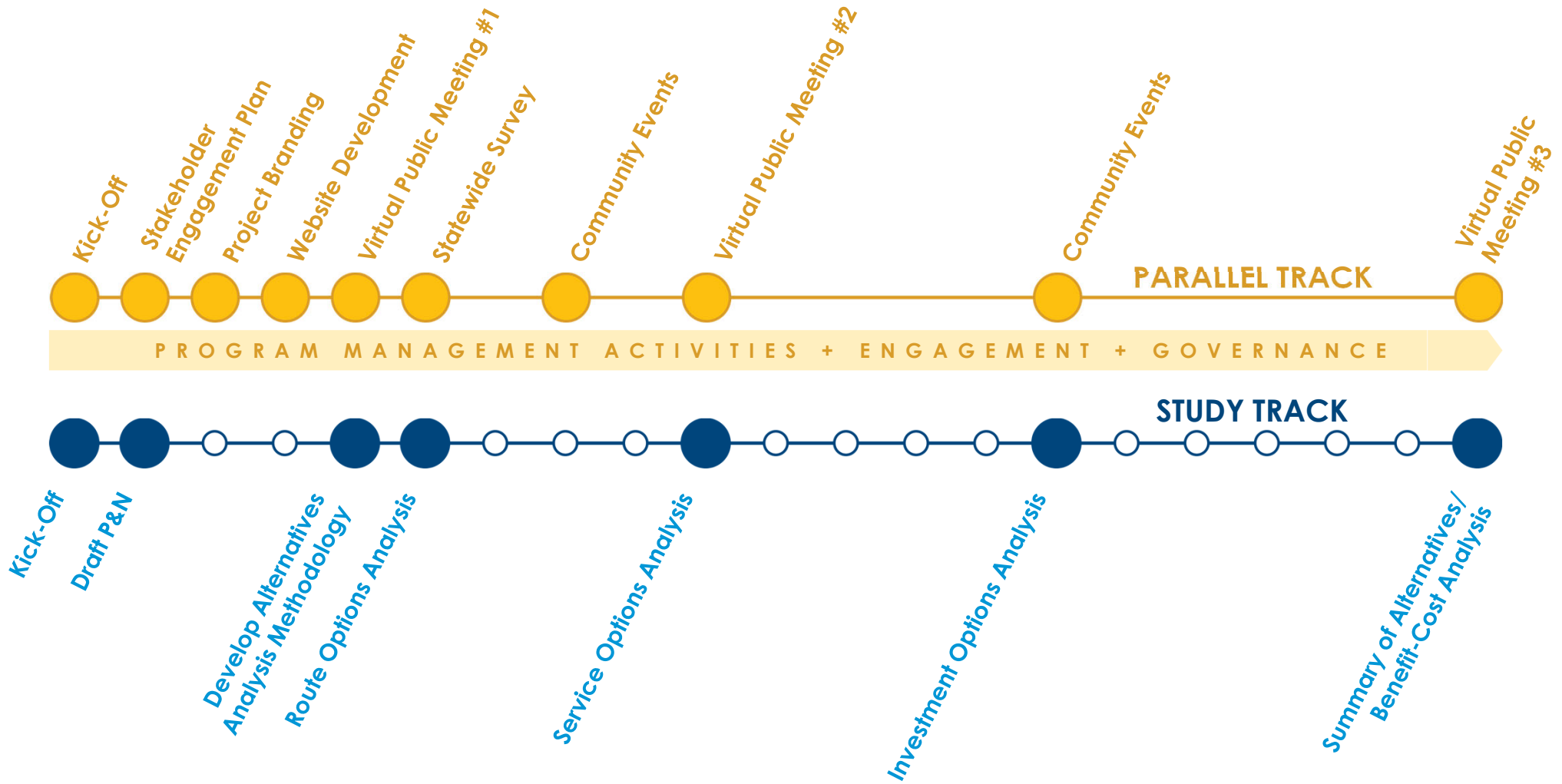


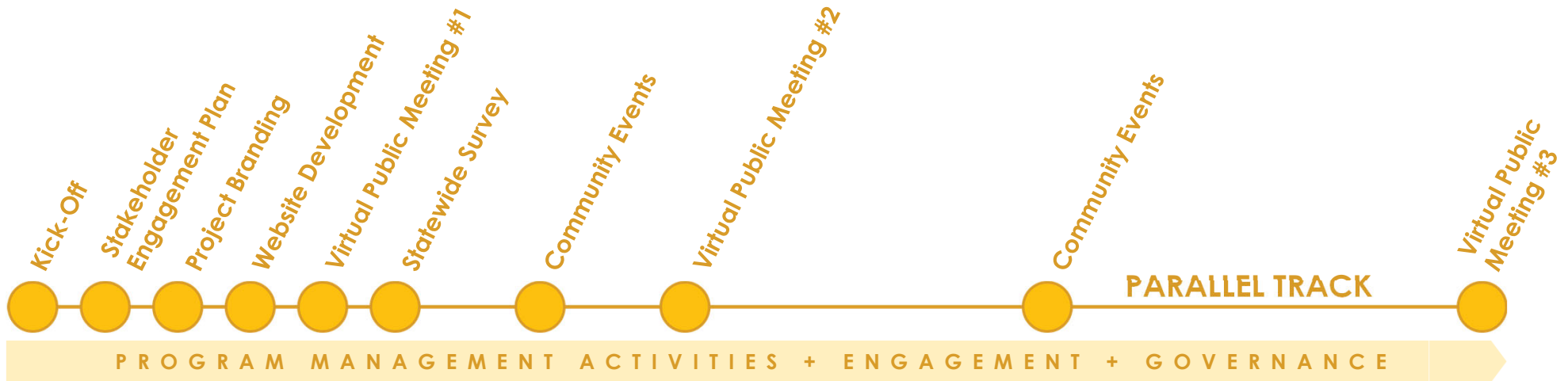
**ILLINOIS
HIGH-SPEED RAIL**
COMMISSION



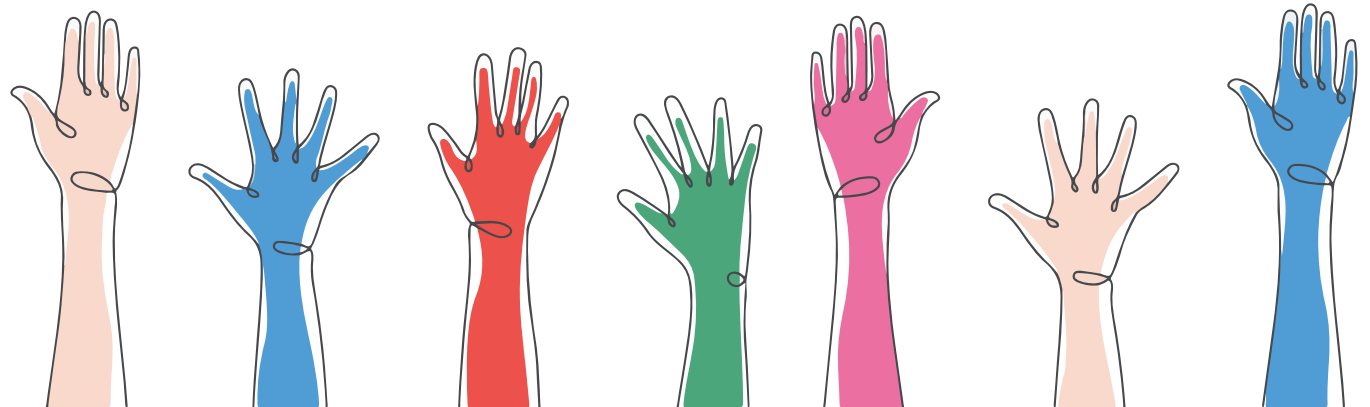
IL HSR Commission Meeting

May 30, 2024





Engagement





Market
Analysis

Draft Purpose & Need

CONDUCT MARKET RESEARCH

- Considers existing and projected characteristics of the transportation market to be served
- Corridor-wide data trends (e.g., passenger travel volumes, demographic trends)
- Quantitative data is input to P&N



Review
Previous Studies

Draft Purpose & Need

REVIEW PREVIOUS STUDIES

- Gather previous reports from IDOT, High-Speed Rail Alliance, and other entities
- Review for technical content and relevant information for P&N

DELIVERABLES

- ✓ Draft and Final Technical Memorandum Summarizing Previous Studies
- ✓ Draft and Final Purpose and Need Statement

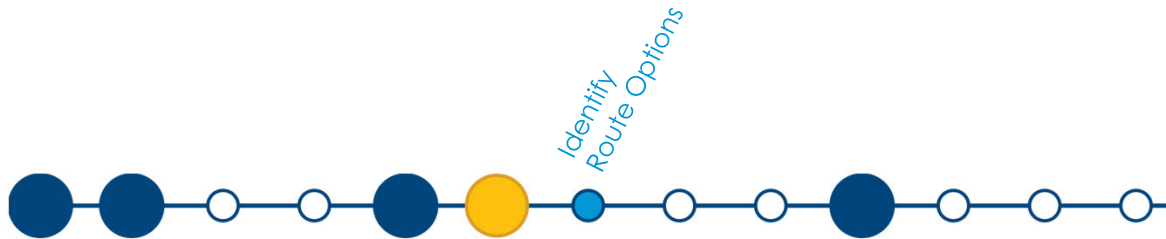
Market
Analysis

Develop Alternatives Analysis Methodology

- Methodology for identifying, defining, and evaluating the route, service, and investment options
- Define qualitative and quantitative metrics to assess options
- Prepare design criteria

DELIVERABLES

- ✓ Design Criteria
Technical Memorandum
- ✓ Draft and Final
Alternatives Analysis
Methodology Technical
Memorandum



Route Options Analysis

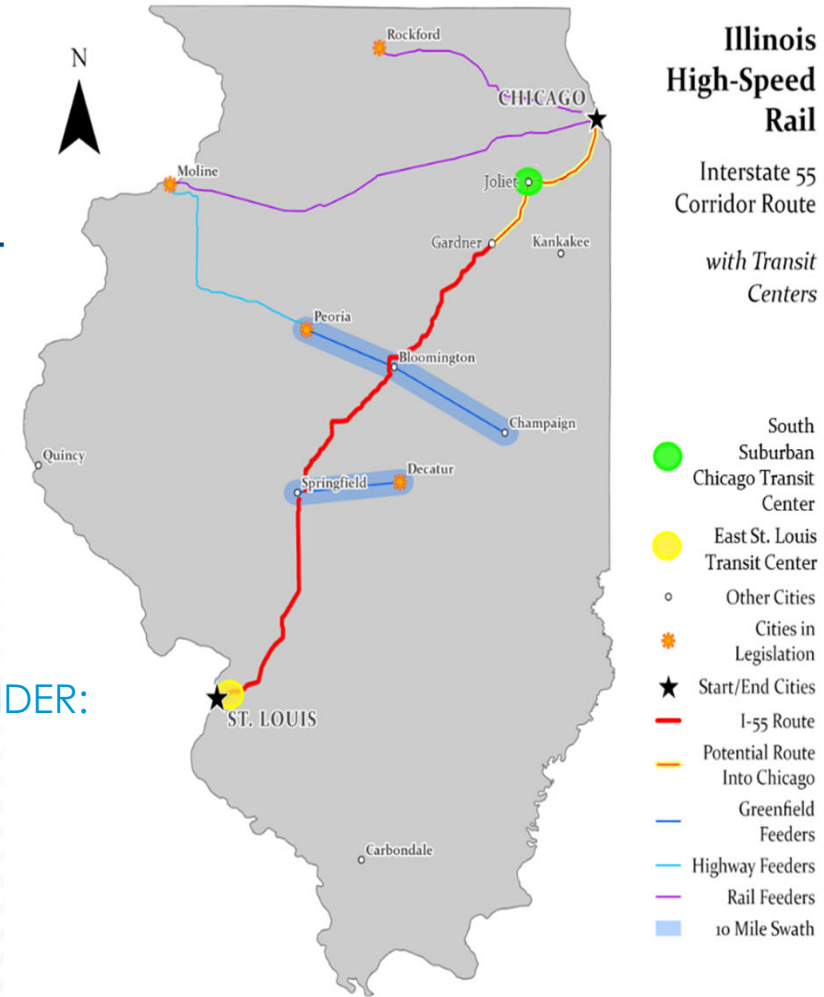
Identify physical routes over which the proposed service could operate

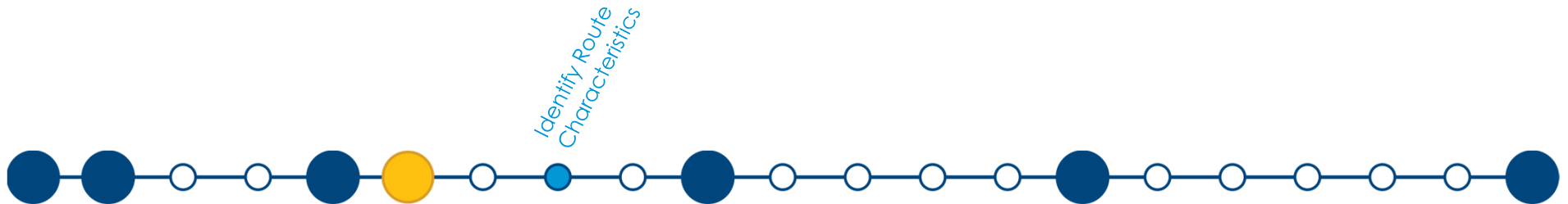
THREE CATEGORIES OF ROUTE OPTIONS:

- HSR mainline
- Chicago terminal access
- St. Louis terminal access

ROUTE OPTIONS MAY CONSIDER:

- Greenfield corridor
- I-57 corridor
- I-55/I-57 corridor
- Existing UP route

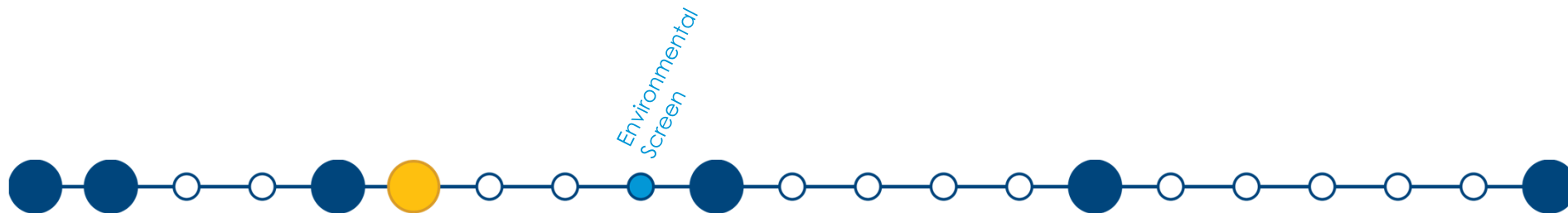




Route Options Analysis

IDENTIFY ROUTE CHARACTERISTICS

- Communities and markets served (population and jobs) by route
- Potential for multimodal connectivity
- Consistency with prior planning efforts
- Operational viability
- Constructability



Route Options Analysis

ENVIRONMENTAL SCREEN

- Identify whether there are any potential significant impacts to environmental resources
- Will result in understanding of order of magnitude impacts in comparison to other route options

DELIVERABLES

- ✓ Draft and Final Route Options Analysis Technical Memorandum

Identify Service
Characteristics

Service Options Analysis

IDENTIFY SERVICE CHARACTERISTICS

- Speed and frequency options
- Stations options
- Terminal station analysis
- Fleet requirements, including, but not limited to, electrification/power needs
- Signal system requirements
- Other operational requirements
- Ridership demand
- Passenger comfort



Prepare
Operating Plans

Service Options Analysis

PREPARE OPERATING PLANS

- Collect terrain, utilities, land use, and transportation network data from available sources
- Determine operating speeds for proposed route options alignments
- Develop fleet utilization plan
- Develop timetables from Train Performance Calculations

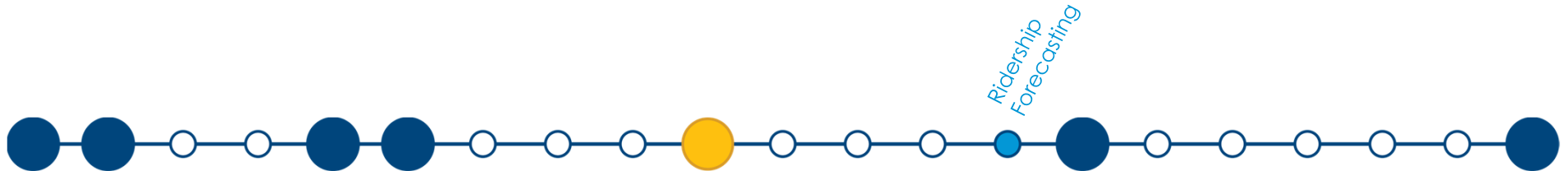


Service Options Analysis

STATION ANALYSIS

- Identify potential station locations
- Identify metropolitan area terminal options
- Evaluate multimodal connection opportunities

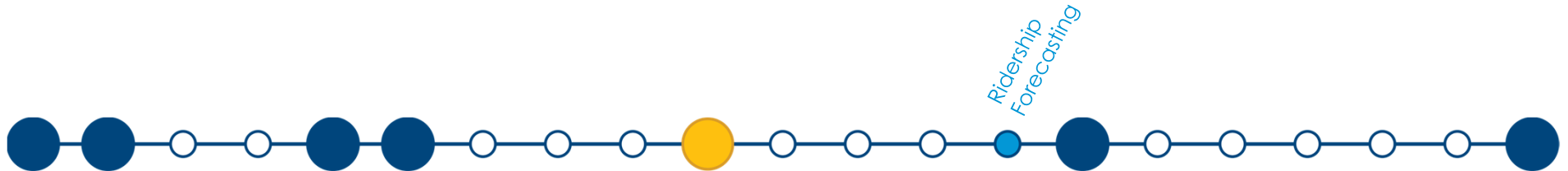




Service Options Analysis

RIDERSHIP FORECASTING

- Detailed forecasting for each combination route and service option
- Based on proposed operating plans
- Will test the following forecast assumptions:
 - ▲ **HSR mainline** (*downtown Chicago to downtown St. Louis*)
 - ▲ **HSR mainline + network feeder system** (*bus, existing Amtrak, existing transit and commuter rail, and proposed intercity passenger rail (e.g., Chicago to Rockford)*)
 - ▲ **HSR mainline + network feeder system + metro transit centers** (*south suburban Chicago and East St. Louis*)



Service Options Analysis

DELIVERABLES

- ✓ Draft and Final Operations Analysis Technical Memorandum
- ✓ Draft Station Area and Access Technical Memorandum
- ✓ Draft and Final Demand Forecasting Technical Memorandum
- ✓ Draft and Final Service Options Analysis Technical Memorandum

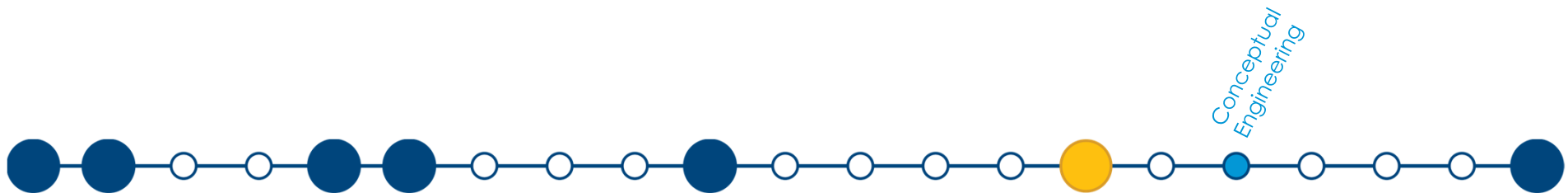
Identify
Investment
Options

Investment Options Analysis

IDENTIFY INVESTMENT OPTIONS

- Investments needed to achieve the desired Service Option/Route Option combination
- Investments include:
 - ✓ Critical connections
 - ✓ Stations
 - ✓ Terminals
 - ✓ Track, structural, and civil elements

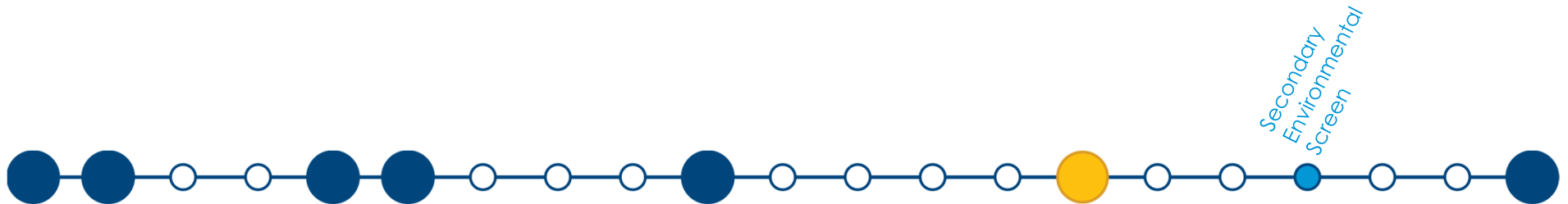




Investment Options Analysis

CONCEPTUAL ENGINEERING

- Conceptual plans on scaled orthophoto imagery and/or track schematics
- Existing infrastructure and proposed investments
- Elements may include:
 - ✓ New main or siding track
 - ✓ Track upgrades (ties, ballast, surfacing)
 - ✓ Bridge, viaduct, and drainage structures
 - ✓ Drainage improvements
 - ✓ Grade crossings
 - ✓ Station footprints
 - ✓ Land acquisition
 - ✓ Highway infrastructure
 - ✓ Electrification infrastructure



Investment Options Analysis

SECONDARY ENVIRONMENTAL SCREEN

- Refine proposed capital investments to minimize environmental impacts

Capital Cost
Estimates

Investment Options Analysis

CAPITAL COST ESTIMATES

- Unit costs based on current intercity passenger rail construction including California High-Speed Rail
- Will follow FRA's standard cost categories

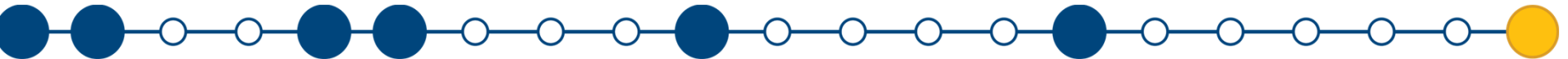
Investment Options Analysis

OPERATING AND MAINTENANCE COSTS

- Estimates will be based on annual train-miles, ridership, and train crew hours

DELIVERABLES

- ✓ Conceptual Engineering Plans
- ✓ Draft and Final Preliminary Capital Cost Estimates
- ✓ Draft and Final Operating and Maintenance Cost Estimates



Summary of Alternatives

PREPARE BENEFIT-COST ANALYSIS

- Alternatives matrix will summarize the characteristics of each Route/Service/Investment option:
 - ✓ Route length
 - ✓ Travel time
 - ✓ Ridership forecast
 - ✓ Capital cost
 - ✓ Operating and maintenance cost
 - ✓ Benefit-Cost Ratio



**ILLINOIS
HIGH-SPEED RAIL**
COMMISSION



Thank You!

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