

# WICHE's MLDE Expansion

State Longitudinal Data Systems:  
*Driving Educational and Workforce Decision Making*  
New England Board of Higher Education  
October 16, 2014 ~ Weston, MA

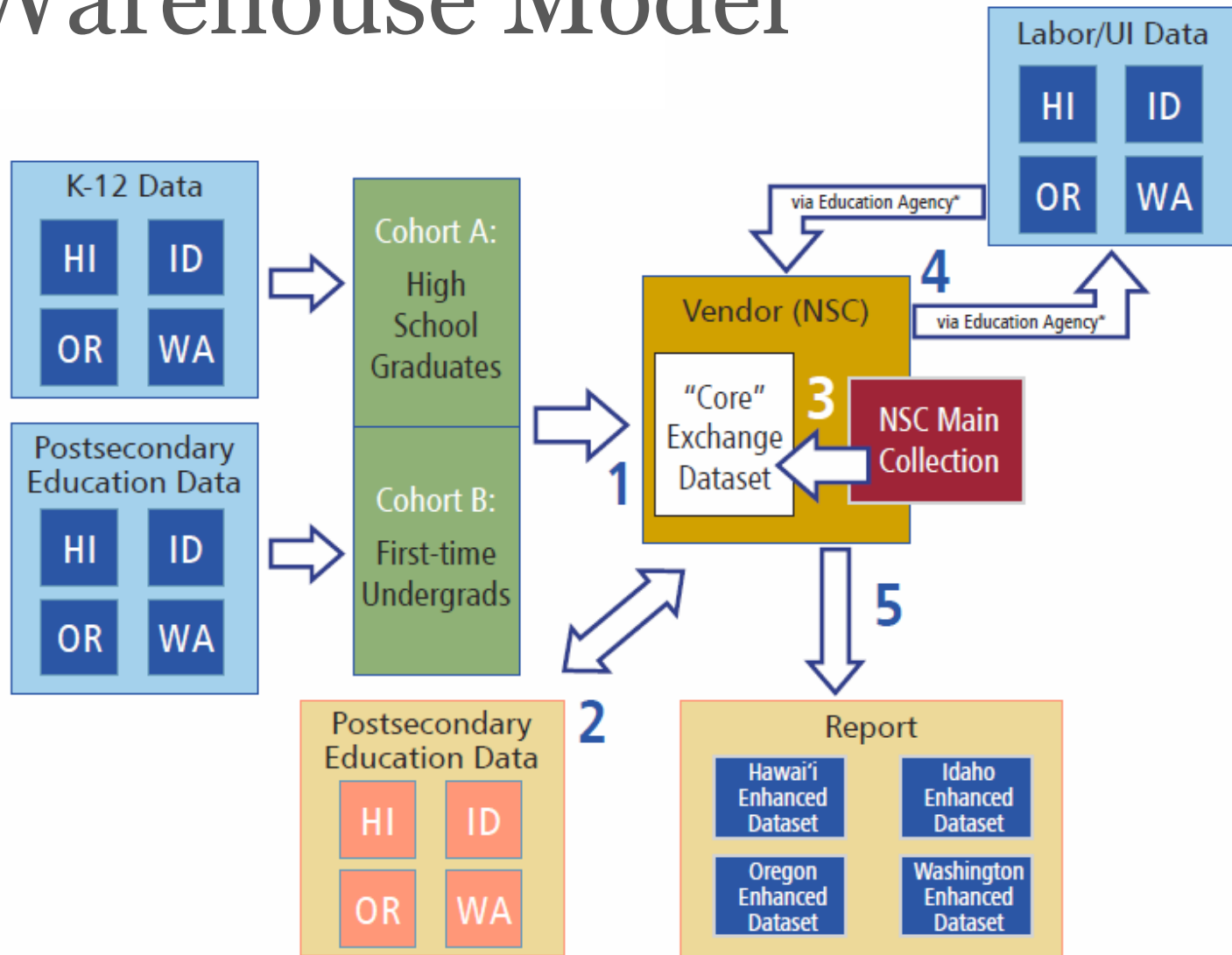
# Overview

- Explaining the new grant
- Addressing state questions
- Assessment of state interest and capacity to participate

# The New Grant

- Overall goal: Build sustainable longitudinal education and workforce data exchange with at least 10 states' participating.
- Long-term vision: Sustainable resource available to all states. (Note: “available” may not mean “free”)
- Key milestones:
  - July 2015: 10 states engaged in conversations
  - July 2016: Exchange is operational and 10 states are participating

# Warehouse Model



Note: "NSC" refers to the National Student Clearinghouse.

\* Except in Oregon, where data went directly to/from the Oregon Employment Department.

# Changes from pilot to current phase

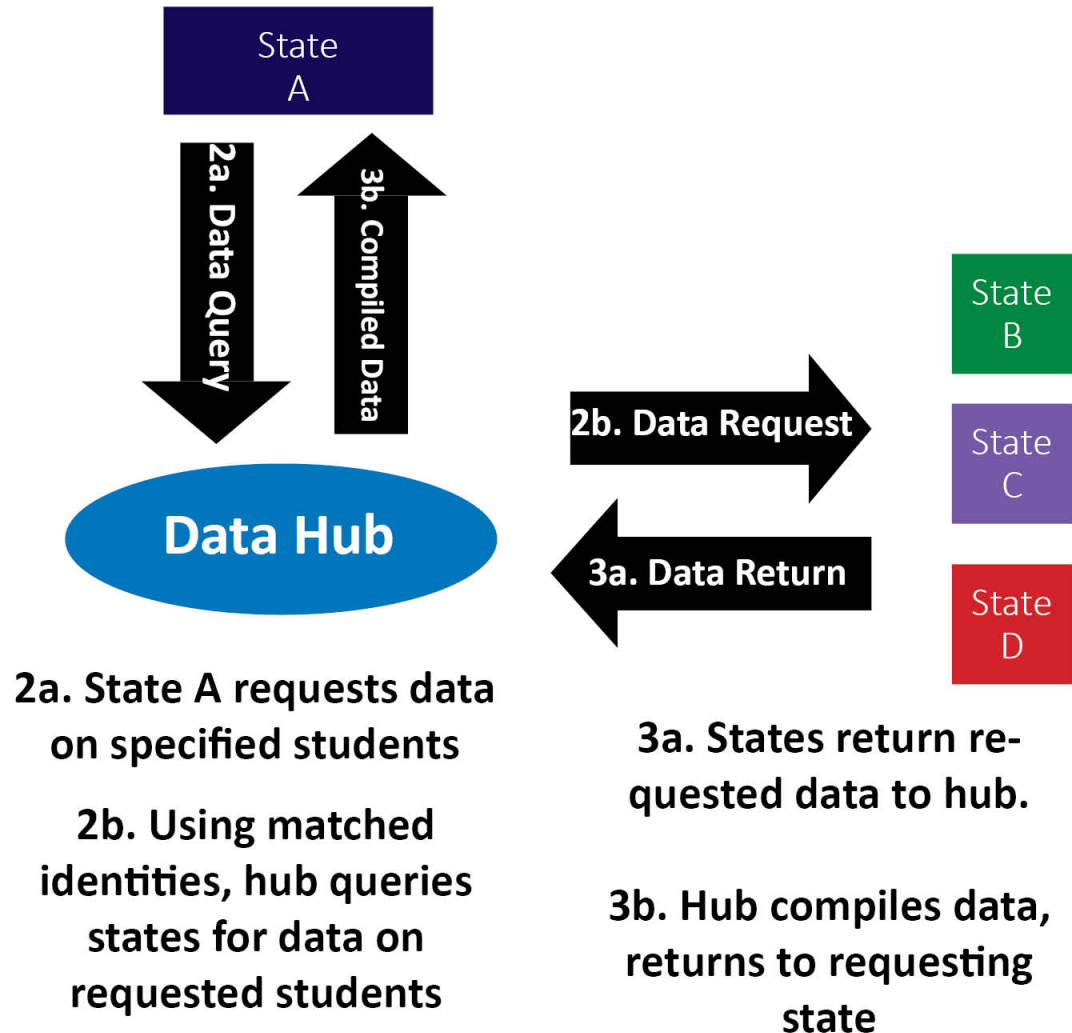
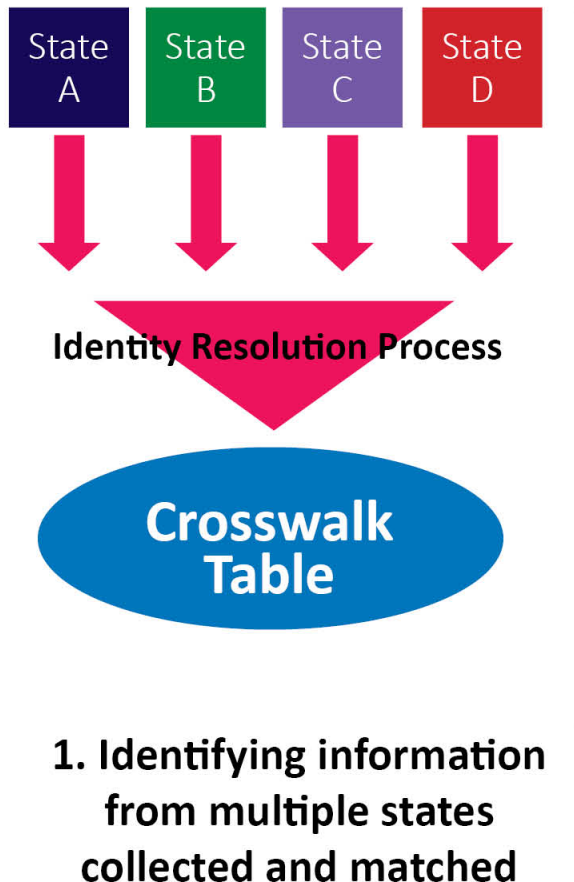
- Adoption of a federated model of data exchange
- Greater focus on usability
- States will be able to query self-defined cohorts

# The federated model

- In use in some states SLDSs
- Provides similar functionality to warehouse model with additional flexibility and security benefits
- Educational and workforce data remain with participating state agencies until queried
- Central crosswalk repository with matching state ID numbers
- Unique dataset constructed on each query

# Federated Exchange Overview

1. Identity resolution
2. Data requests
3. Data aggregation and distribution



# Expansion

- Goal: At least 10 states
- Geographic clusters; shared borders
- Criteria
  - Support for the MLDE among key stakeholders
  - Interest in and capacity for using data enhanced by the MLDE to address key policy issues
  - In- and out-migration numbers that will add value to the exchange and to the state
  - Legal capacity and technological commitment to fully participate in the MLDE



# Next steps: Where do we go from here?

- Discussions with states in each region
- Identifying states that meet criteria
- “Begin conversations” ASAP
- Significant state engagement by mid-2015
- States sign on by early 2016

# Discussion and Questions

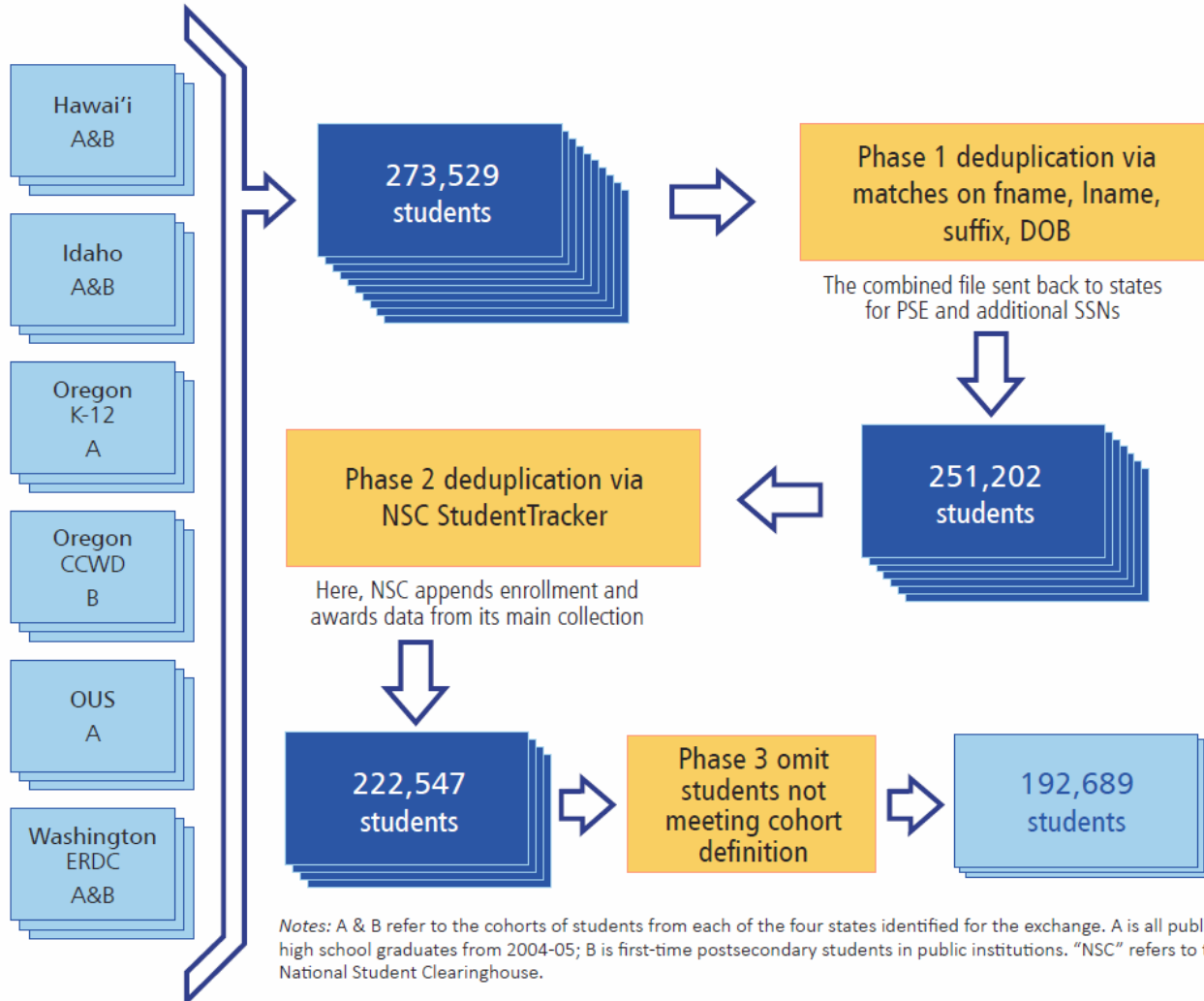
# ADDITIONAL SLIDES

Data architecture

Migration Data

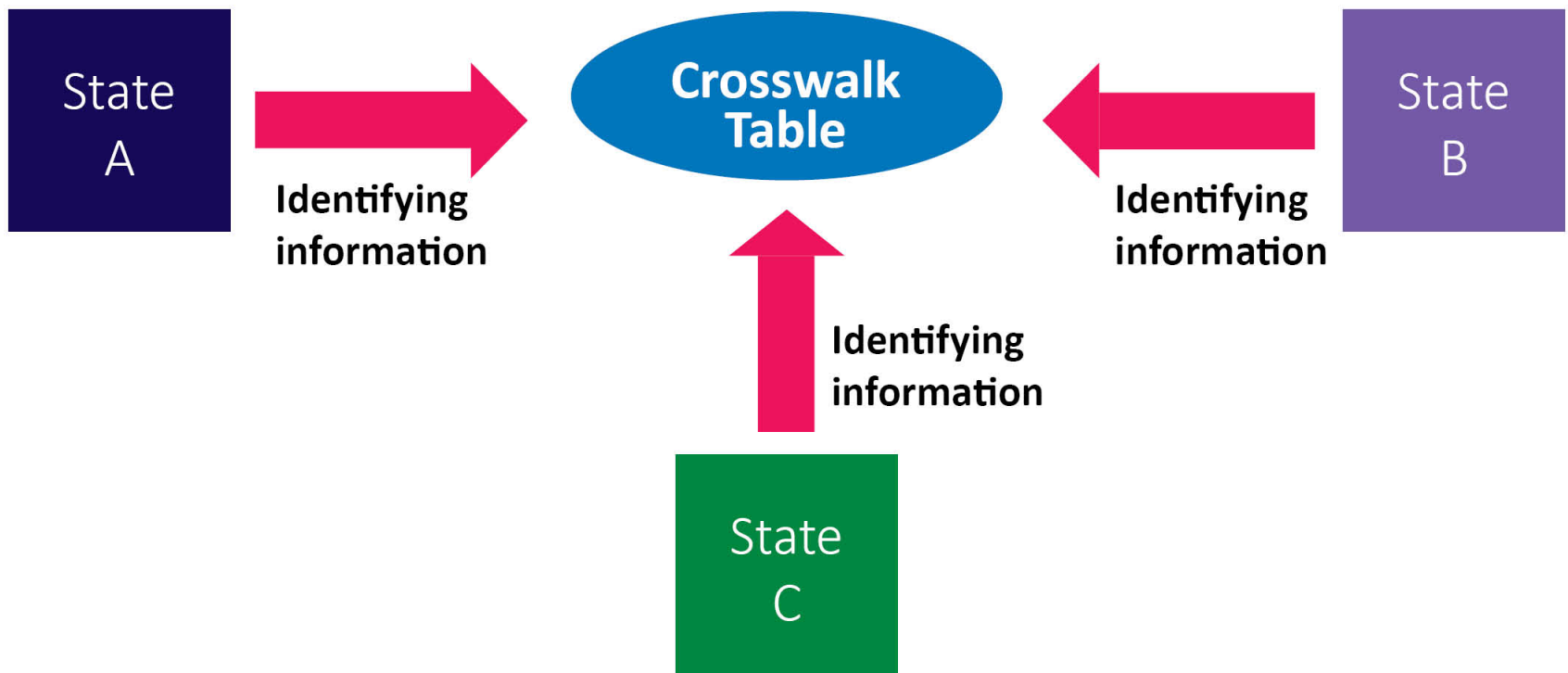
Internal and External Challenges

# Identity Resolution



# Step 1: Identity Matching

1. States send data matching elements to crosswalk host (name, state educational ID#, dob, gender, etc.)
2. Crosswalk host uses algorithm to match identities across states.
3. Crosswalk table consists of matching information and each state identifier.



# Phase 1: Identity Matching

Fname	Lname	Other Name	DOB	M/F	ID#
Patrick	Lane		1/1/71	M	1234567
Jane	Doe		2/2/72	F	7654321

State  
A



Crosswalk  
Table & Hub



State  
B

Fname	Lname	Other Name	DOB	M/F	ID#
Patrick	Lane		1/1/71	M	222222
Jonathan	Doe		3/3/73	M	444444

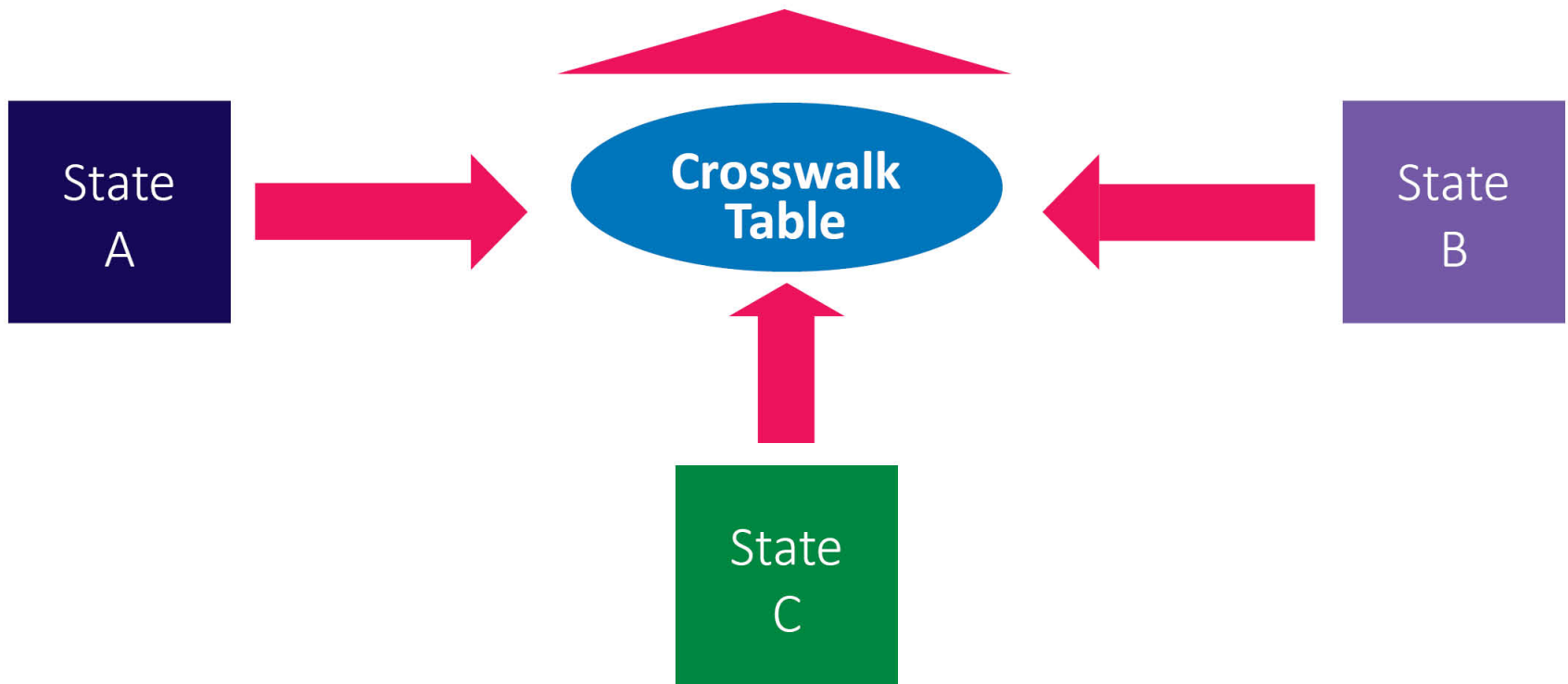
State  
C



Fname	Lname	Other Name	DOB	M/F	ID#
Jane	Smith	Doe	2/2/72	F	777777
John	Doe		3/3/73	M	888888

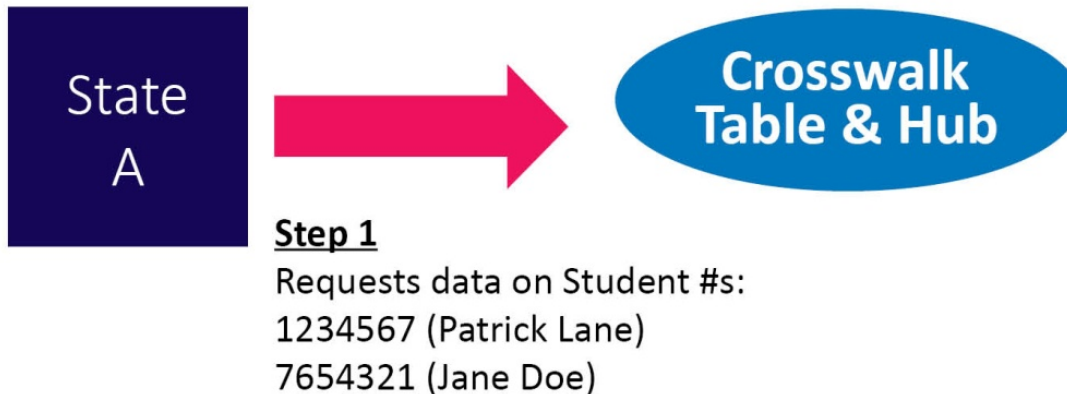
# Step 1: Completed Crosswalk Table

Fname	Lname	Other Name	DOB	Gender	"A" ID	"B" ID	"C" ID	Exchange ID
Patrick	Lane		1/1/71	M	1234567		222222	ABC123
Johnathan	Doe		3/3/73	M		888888	444444	DEF789
Jane	Smith	Doe	2/2/72	F	7654321	777777		XYZ456



## Phase 2: Data Request & Response

1. State A requests data on students of interest by sending their state ID number.
2. Exchange identifies states with data on requested individuals.
3. Hub sends requests to them along with randomly generated exchange ID.
4. States B & C return data to exchange with Exchange ID.
5. Exchange compiles results and returns data to State A.
6. State A merges enhanced data with its own data for further analysis.





## Phase 2: Data Request & Response

Fname	Lname	Other Name	DOB	M/F	"A" ID	"B" ID	"C" ID	Exchange ID
Patrick	Lane		1/1/71	M	1234567		222222	ABC123
Johnathan	Doe		3/3/73	M		888888	444444	DEF789
Jane	Smith	Doe	2/2/72	F	7654321	777777		XYZ456

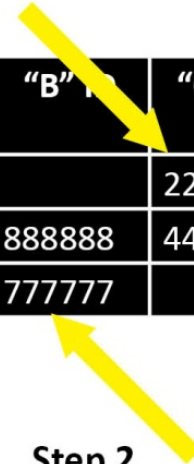
State  
A




**Crosswalk  
Table & Hub**

### Step 2

Crosswalk table determines that  
State C has data on "A" 1234567 &  
State B has data on "A" 7654321



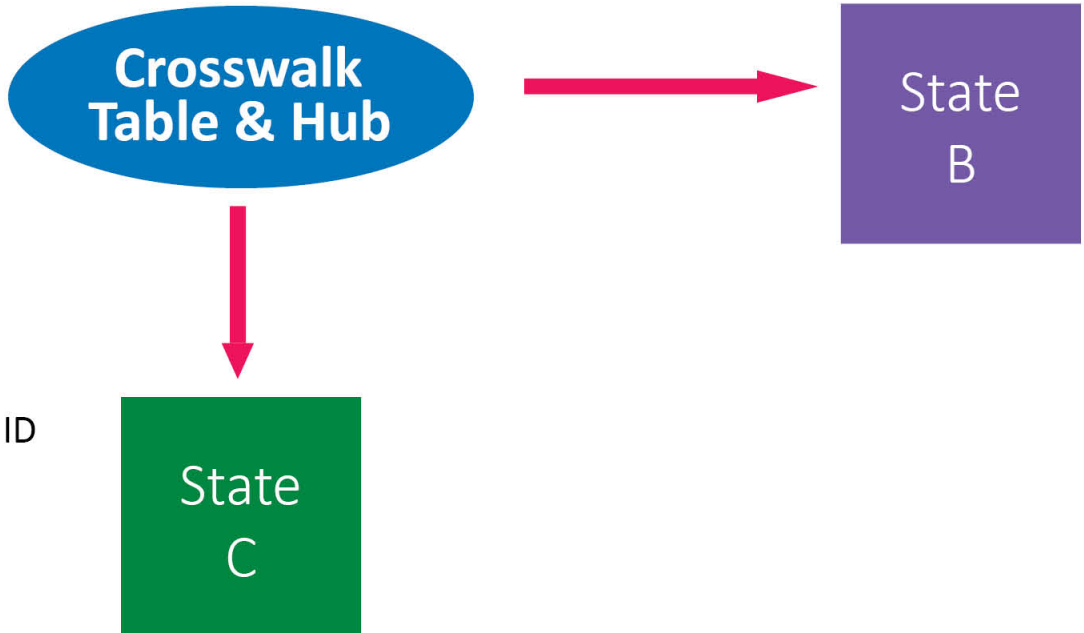
## Phase 2: Data Request & Response



Fname	Lname	Other Name	DOB	M/F	"A" ID	"B" ID	"C" ID	Exchange ID
Patrick	Lane		1/1/71	M	1234567		222222	ABC123
Johnathan	Doe		3/3/73	M		888888	444444	DEF789
Jane	Smith	Doe	2/2/72	F	7654321	777777		XYZ456

### Step 3


Crosswalk sends 777777 & Exchange ID (XYZ456) to State B



### Step 3

Crosswalk sends 222222 & Exchange ID (ABC123) to State C

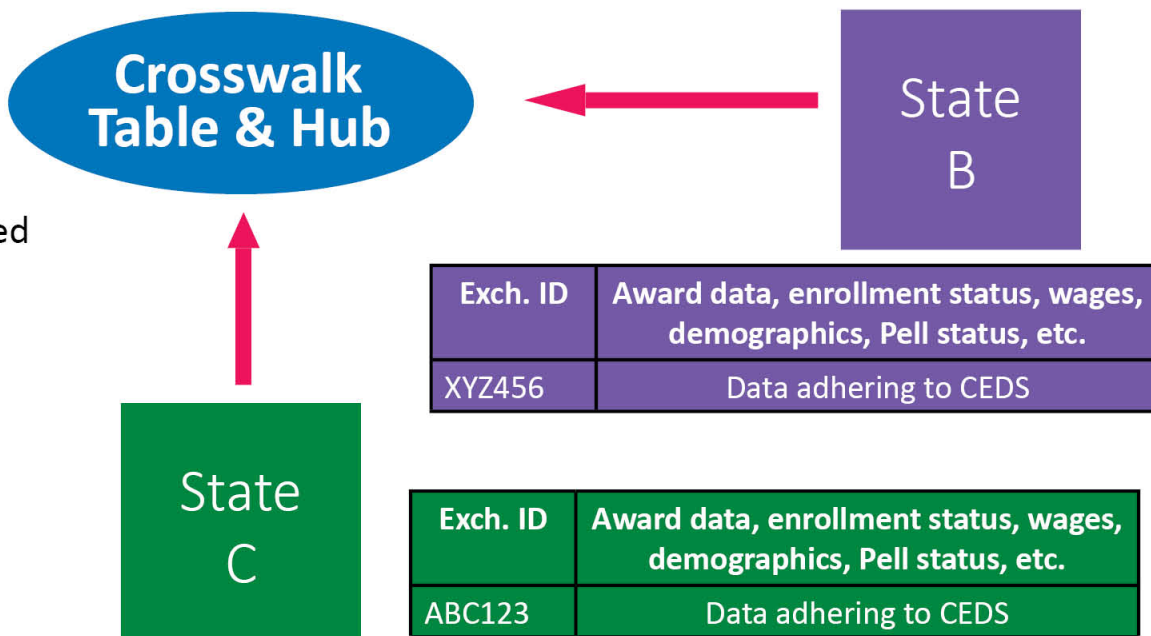
## Phase 2: Data Request & Response




Fname	Lname	Other Name	DOB	M/F	"A" ID	"B" ID	"C" ID	Exchange ID
Patrick	Lane		1/1/71	M	1234567		222222	ABC123
Johnathan	Doe		3/3/73	M		888888	444444	DEF789
Jane	Smith	Doe	2/2/72	F	7654321	777777		XYZ456

### Step 4

States return relevant student data linked to Exchange IDs to hub



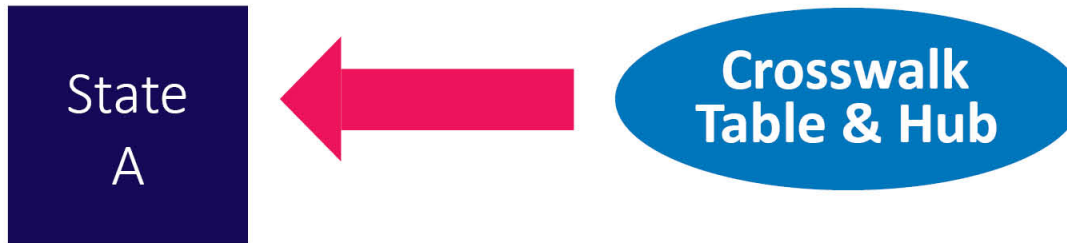
## Phase 2: Data Request & Response



Fname	Lname	Other Name	DOB	M/F	"A" ID	"B" ID	"C" ID	Exchange ID
Patrick	Lane		1/1/71	M	1234567		222222	ABC123
Johnathan	Doe		3/3/73	M		888888	444444	DEF789
Jane	Smith	Doe	2/2/72	F	7654321	777777		XYZ456

### Step 5

Hub returns individual-level data from States B & C linked to State A ID#s.



"A" ID	Award data, enrollment status, wages, demographics, Pell status, etc.
1234567	Data adhering to CEDS
7654321	Data adhering to CEDS

## Phase 2: Data Request & Response

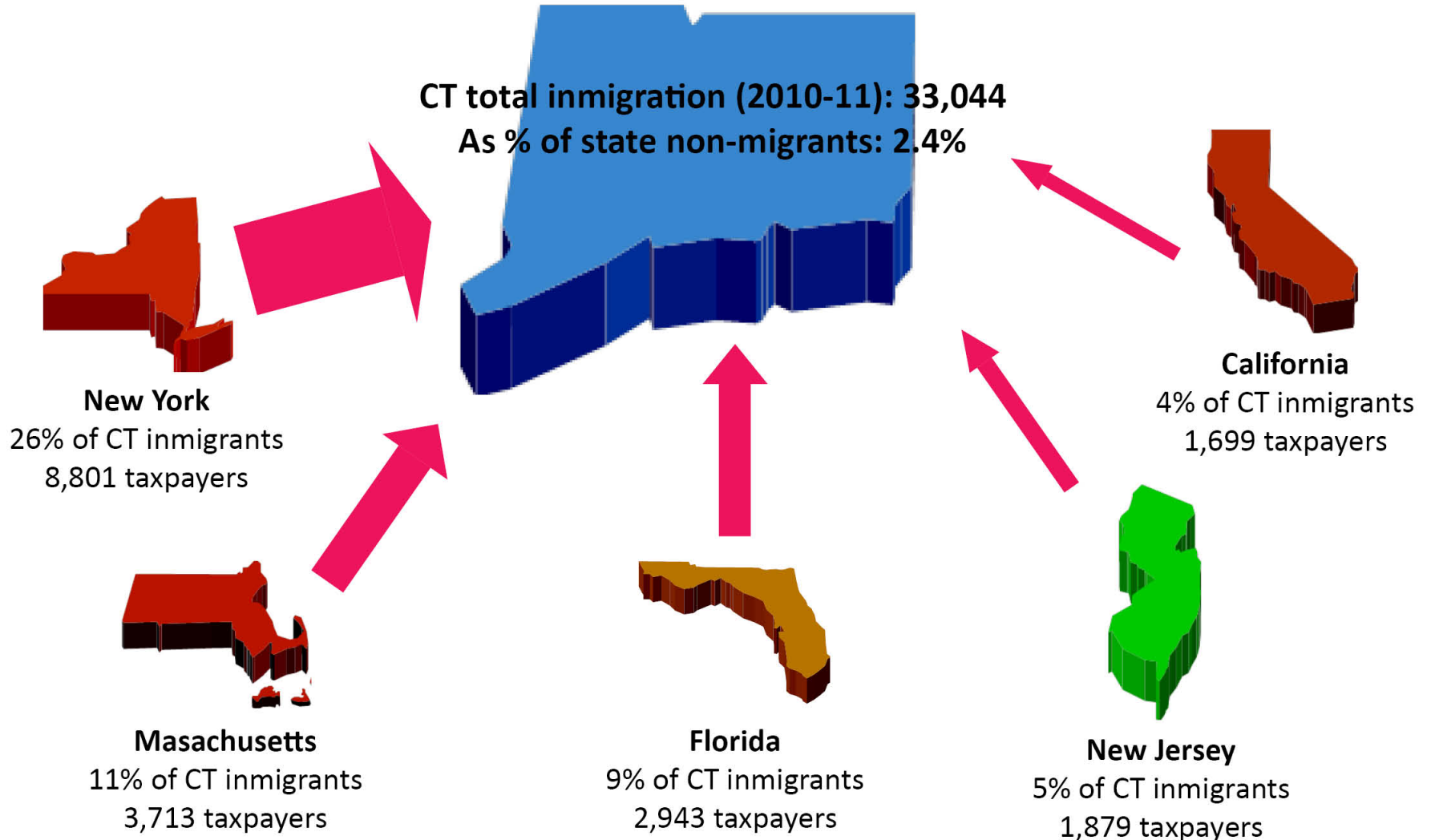
"A" ID	Award data, enrollment status, wages, demographics, Pell status, etc.	Individual Data	Programs and Interventions
1234567	Data adhering to CEDS		
7654321	Data adhering to CEDS		

### Step 6

State A merges enhanced data with own data for further analysis.

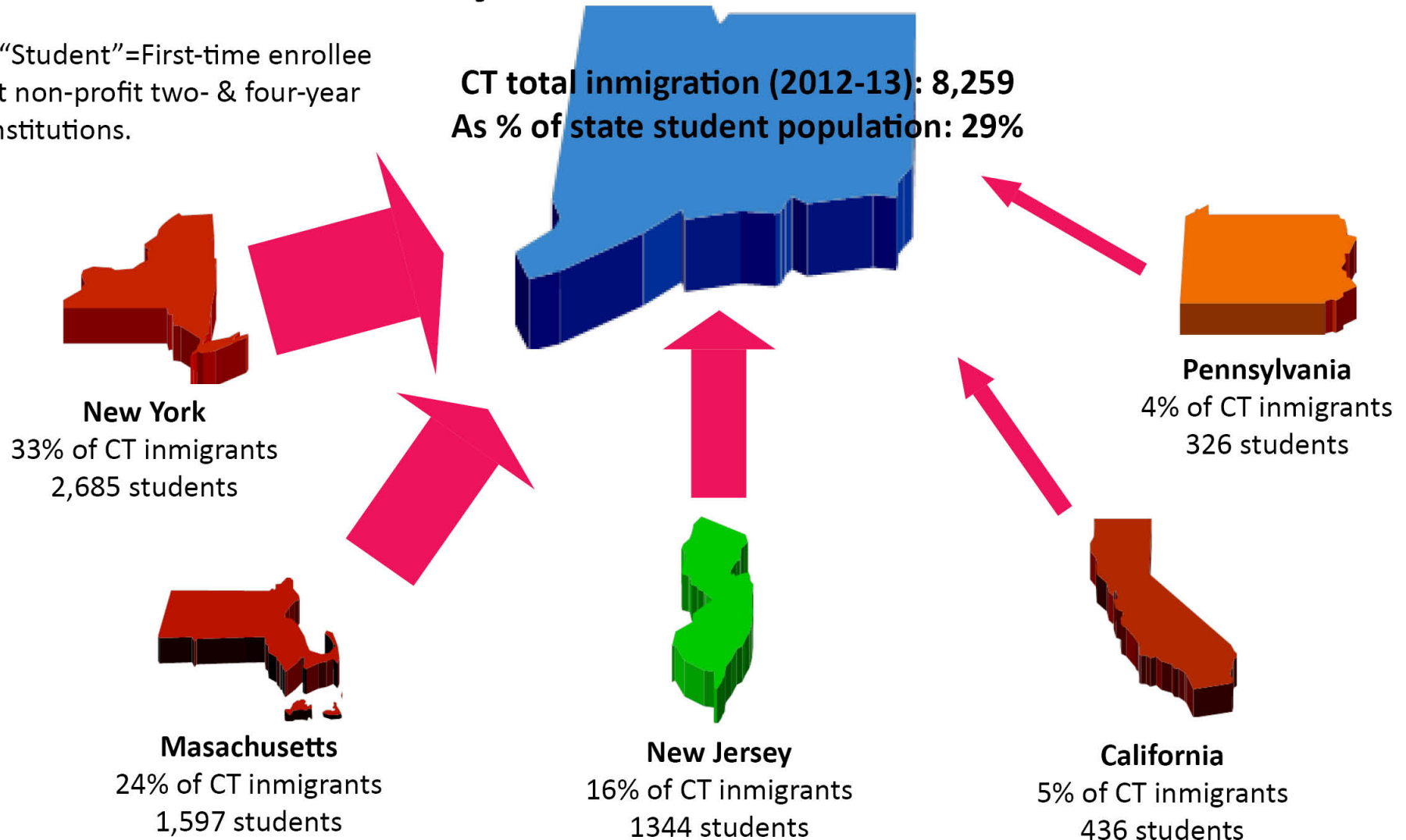


# Where do people come from when they move to Connecticut?



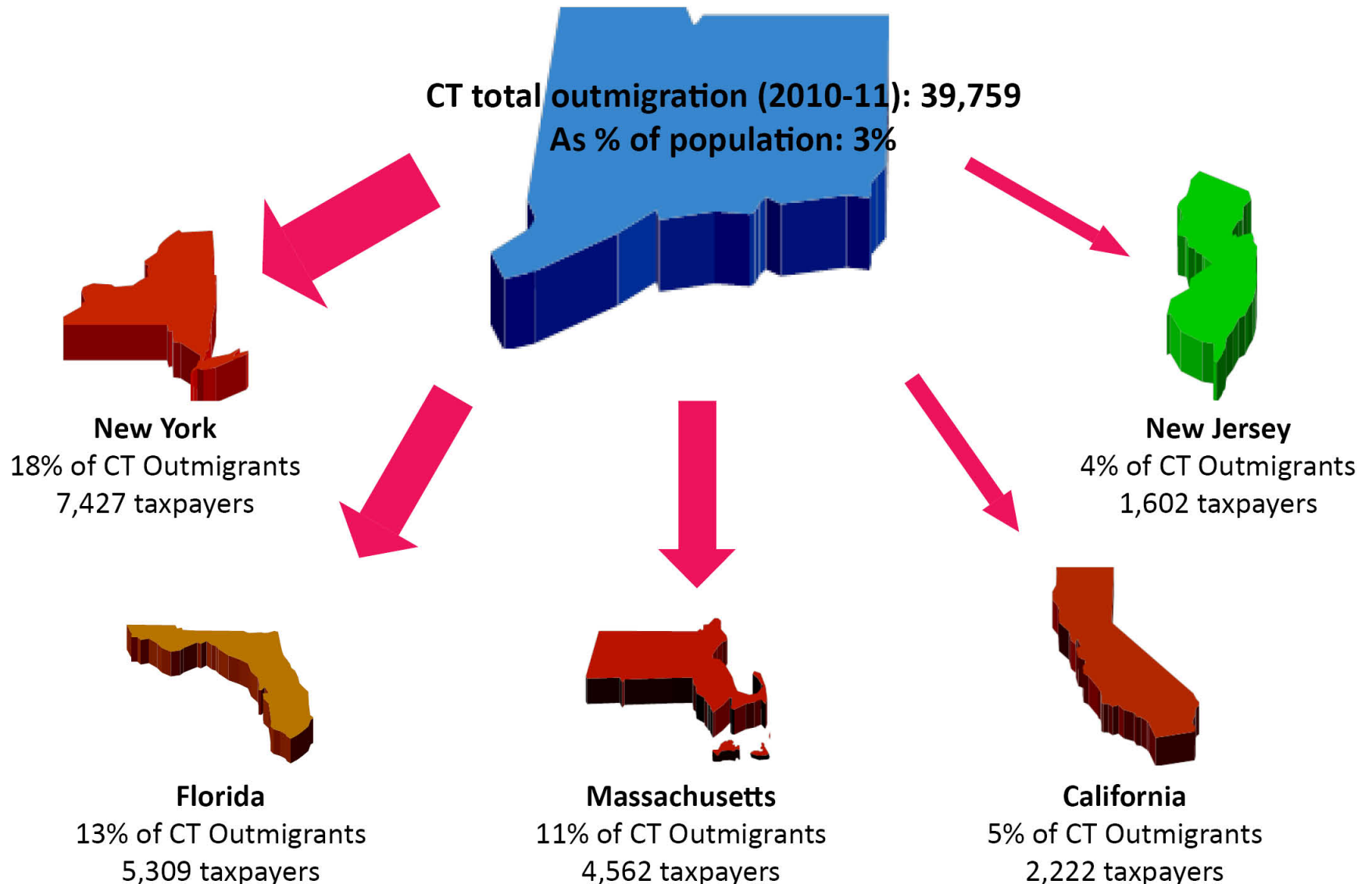
# Where do postsecondary students\* come from when they come to Connecticut?

\*"Student"=First-time enrollee at non-profit two- & four-year institutions.





# Where do people go when they leave Connecticut?



Source: Internal Revenue Service: <http://www.irs.gov/uac/SOI-Tax-Stats-Migration-Data>



# Where do postsecondary students\* go when they leave Connecticut?

\*"Student"=First-time enrollee at non-profit two- & four-year institutions.

**CT total outmigration (2010-11): 14,912**  
**As % of state student population: 41%**

